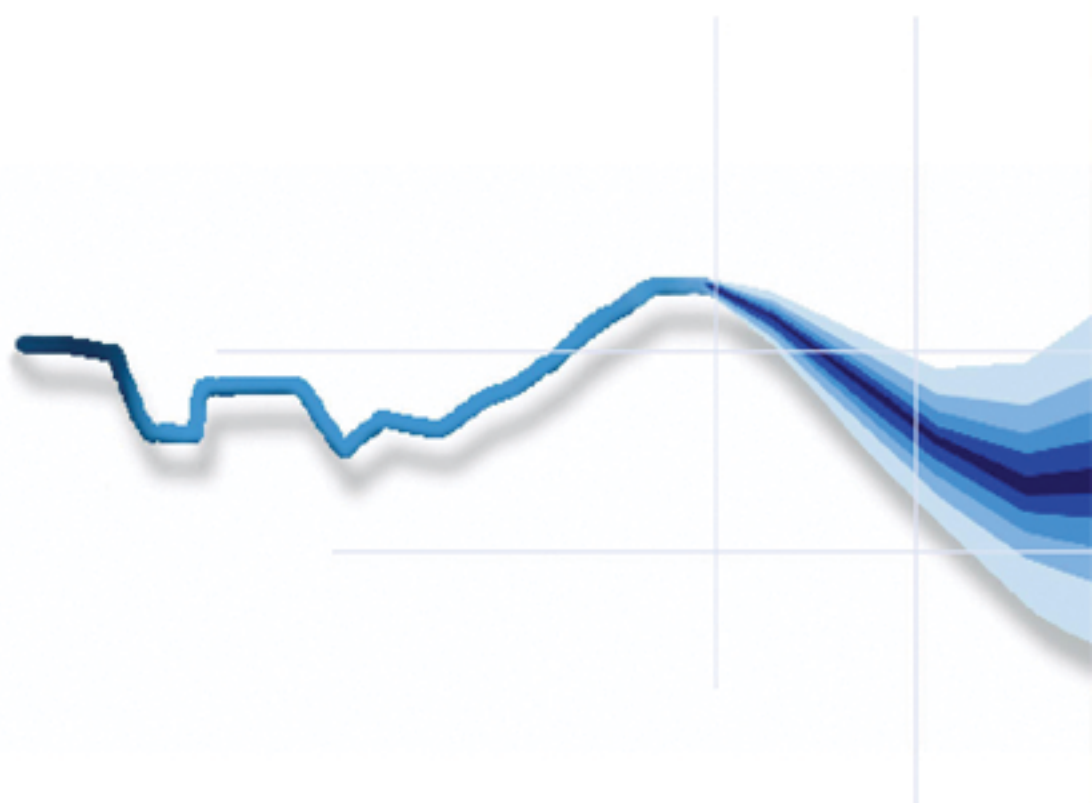


IPoM 2009

2009
JANUARY

Monetary Policy Report



BANCO CENTRAL DE CHILE

Monetary Policy Report*

January 2009



**BANCO CENTRAL
DE CHILE**

*/ 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.

Preface	5
Summary	7
Monetary policy decisions in the past three months	13
I. International scenario	15
II. Financial markets	23
III. Aggregate demand	29
IV. Output and the labor market	35
V. Prices and costs	41
VI. Inflation scenarios	47
Index of tables and figures	53
Glossary and abbreviations	57
Bibliographic references	59
Boxes	
Differentiation of emerging economies in the current scenario	20
Evolution of inflation in emerging and developed economies	21
Changes in domestic lending conditions as a result of external financial shocks	27
Effects of the drop in the copper price	34
Employment outlook	40
New CPI basket	46

^{*/} The statistical closing date of this *Monetary Policy Report* was 7 January 2009, except for the measures of market expectations on the monetary policy rate, which closed on 9 January 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 meeting held on 12 January 2009 for its presentation to the Senate on 14 January 2009.

The Board

Summary

The macroeconomic scenario has continued to show drastic changes in the past few months. Prospects for world growth have deteriorated severely, commodity prices have fallen substantially and lending standards have tightened around the world, as they have in Chile. This, combined with deteriorated agents' expectations resulted in an output slowdown that was worse than forecast in November's projections update. Annual inflation has declined in recent months, although it is still high and significantly above target. Core and trend components still reflect the propagation of past inflationary shocks. The change in macroeconomic conditions will, in the most likely scenario, help inflation to converge quickly to the target, nearing 3% in the second half of this year. The Board started a monetary policy easing cycle in January, with a reduction in the monetary policy interest rate (MPR) of 100 basis points, to 7.25%.

After several months since the episodes of maximum financial stress in September and October, developed interbank markets have seen some relief in their liquidity shortage, but credit risk premiums remain high and substantial capital is flowing out of emerging economies. Preferences for safer instruments have driven U.S. Treasury bond interest rates to record lows and caused large swings in the dollar parities with the main currencies. Essentially, concerns have shifted from safeguarding financial stability in developed economies to preventing the real and credit implications of the unfolding of the world crisis to end up in a protracted world recession over the next several quarters.

The effects on world growth are strongly visible. Market consensus foresees the global economy growing 1.2% this year, its lowest since 1982. Measured at market prices, world GDP will show a contraction, its poorest outcome since World War II. The severe worsening of growth prospects for developed economies has also triggered a slowdown in emerging economies' growth projections. In the baseline scenario, the U.S. economy will be contracting for at least four consecutive quarters. Europe's and Japan's recession will be somewhat more protracted than that in the U.S. Toward 2010, this scenario assumes that global lending conditions will return to normal and the world economy will recover.

Global slowdown has driven down commodity prices. At the statistical closing of this *Report*, the barrel of oil was trading at around US\$45 (US\$110 in September) and the pound of copper at US\$1.40 (US\$3.4 in September). In the baseline scenario, oil will average US\$50 per barrel this year and US\$60 next year, while the pound of copper will sell at US\$1.50 and 1.60, in the same years. World prices of basic foodstuffs, an important source of inflation in Chile and elsewhere, have also receded, although by much less than the other two cases.

The domestic financial market endured stressful moments in late September to early October, when the future availability of external financing was surrounded by extreme uncertainty. The premium between the three-month dollar rate in the domestic market and the libo rate (onshore spread) rose to nearly 500 basis points. The money market in pesos also became stressed, with strong increases in deposit rates and in premiums paid in the stock exchange over time deposits. The Board adopted a set of measures to safeguard the normal provision of liquidity in pesos and in dollars to the financial sector and put an end to its reserve accumulation program. These measures, combined with the reduced stress in foreign markets, have permitted the local monetary market in both pesos and dollars to resume normality. Notwithstanding, internal lending conditions have tightened. Interest rates to the public have risen beyond what the evolution of the monetary policy rate until September could suggest. This may be responding to the higher credit risk perception in a weaker economic environment and to the change in costs and terms of the lending standards faced abroad (box II.1).

International baseline scenario assumptions

	2007	2008 (e)	2009 (f)	2010(f)
Terms of trade	0.8	-11.1	-19.1	-2.0
Trading partners' GDP (*)	4.8	3.2	0.4	2.7
World GDP at PPP (*)	5.0	3.6	1.2	3.3
World GDP at market exchange rate (*)	3.8	2.4	-0.3	2.3
External prices (in US\$)	8.5	12.0	-0.8	5.5
LME copper price (US\$/lb)	323	317	150	160
WTI oil price (US\$/barrel)	72	100	50	60
Parity gasoline price (US\$/m ³) (*)	597	739	315	400
Libor US\$ (nominal, 90 days)	5.3	2.9	1.4	1.2

(*) See glossary for definitions.

(e) Estimate.

(f) Projection.

Source: Central Bank of Chile.

The effects of the change of macroeconomic scenario are already visible in the real sector's figures. Data for the fourth quarter of 2008 reveals a significant slowdown in output and demand. This has reflected in expenditure components being more sensitive to changes in lending conditions, such as durable consumption, particularly of new car sales, expenditure in capital goods, sale of new homes and inventories. By sector, the larger effects are seen in some indicators for retail, manufacturing and construction. Thus, estimations are that GDP growth in 2008 was 3.5%, falling short of November predictions that placed it between 4.0% and 4.5%, thus widening the output gap.

The global scenario will transpire to the Chilean economy through several channels. On one hand, the world financial crisis and its costs in terms of external financing is expected to persist for some quarters, given that the de-leveraging of the global financial system may take a while, as described in our *Financial Stability Report* of the second half of 2008. On the other, the slowdown in world demand will take its toll on Chilean exports. The possible impact on firms and households' spending decisions caused by the uncertain macroeconomic conditions pushes in the same direction.

Lower commodity prices will have mixed effects. The drop in the price of oil and derivatives has hit domestic fuel prices directly, bringing down inflation in recent months, and possibly yielding to a reduction in electricity costs

that will revert part of the increases of past years. The lower copper price will eat into the national income, but it is expected to have a limited impact on GDP, since Chile has remarkably reduced its cyclical dependence on this mineral (box III.1).

The use of a range for growth forecasts reflects the different levels of activity that are consistent with the set of assumptions included in the external and internal scenario, particularly the effect of fiscal policy, as well as the baseline scenario assumption for the MPR that considers a path somewhat below market expectations in the short term, considering the recent reduction of 100 basis points. The Board projects that, in the most likely scenario, the Chilean economy will grow between 2.0 and 3.0% this year. External uncertainty is worse than it was in previous periods, so the probability of economic growth being within the projected one percentage point range is lower than it has been on other occasions. Furthermore, the probability of more negative scenarios is higher, so the balance of risks is downward biased, meaning that risk scenarios where growth is below the range assumed in the baseline scenario are more likely to occur than those where growth is above the range. The materialization of risk scenarios has obvious implications on the actual inflation trajectory and consequently on monetary policy.

The fall in the copper price will result in less export value and will affect public saving through the fiscal rule, so 2009's current account deficit will stand around 4.5% of GDP. The shortage of public saving will be financed to a substantial extent by fiscal resources in the economic and social stabilization fund (*Fondo de estabilización económica y social, FEES*), as has been announced by the Ministry of Finance. The baseline scenario assumes no further stress on external financing to the Chilean economy. There are risks, however, as reported in the latest *Financial Stability Report*, but if they materialize they may be offset by the country's high levels of accumulated external liquidity.

Economic growth and current account

	2006	2007	2008 (e)	2009 (f)
(annual change, percent)				
GDP	4.3	5.1	3.5	2.0 - 3.0
National income	6.7	7.8	3.9	0.0
Domestic demand	6.4	7.8	8.5	0.7
Gross fixed capital formation	2.9	11.9	19.9	-4.5
Total consumption	6.4	7.4	5.0	2.5
Goods and services exports	5.5	7.8	1.8	2.1
Goods and services imports	10.5	14.3	13.4	-1.7
Current account (% of GDP)	4.7	4.4	-2.6	-4.6
(US\$ million)				
Current account	6,838	7,200	-4,500	-6,800
Trade balance	22,587	23,653	10,200	-2,400
Exports	58,485	67,644	67,800	46,400
Imports	-35,899	-43,991	-57,600	-48,800
Services	-628	-1,161	-1,200	-800
Rent	-18,418	-18,265	-16,400	-5,300
Current transfers	3,297	2,974	2,900	1,700

(e) Estimate.

(f) Projection.

Source: Central Bank of Chile.

Growth is projected for 2009 within an environment where several developed and emerging economies, continue in recession. The Board projects that toward 2010, in line with the global economy, Chile will resume higher growth rates, although still below trend. This scenario has many risks, with a primarily negative bias, particularly due to the high uncertainty surrounding the world economy. The global economy could deteriorate beyond projections, prompting a deflation and new financial stress in the world, despite the extremely expansionary monetary policies. Neither can it be ruled out that the substantial stimulus in progress by economic policies around the world can unleash credit markets sooner than foreseen, triggering strong economic expansion with an impact on inflation. Or it may happen that the deteriorated external position of various economies brings back protectionism at the global level. Similarly, one must consider that, although recent developments have helped somewhat to solve them, global imbalances still persist and may call for major adjustments in currency parities, triggering new stressful episodes internationally.

Inflation

(annual change, percent)

	2007	2008	2009 (f)	2010 (f)
Average CPI inflation	4.4	8.8	4.5	2.9
December CPI inflation	7.8	7.1	3.1	
CPI inflation in around 2 years (*)				3.0
Average CPIX inflation	4.0	8.4	6.3	2.6
December CPIX inflation	6.3	8.7	3.0	
CPIX inflation in around 2 years (*)				2.8
Average CPIX1 inflation	4.1	7.8	5.4	2.7
December CPIX1 inflation	6.3	7.9	3.3	
CPIX1 inflation in around 2 years (*)				2.5

(f) Projection.

(*) Corresponds to inflation projection between the fourth quarter of 2010 and the first quarter of 2011.

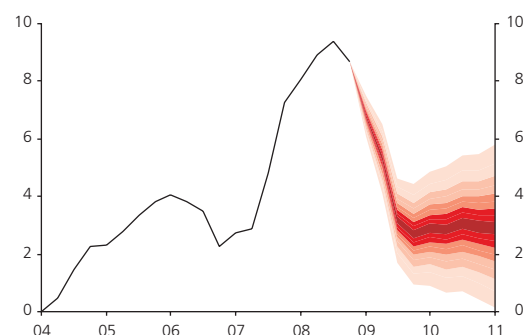
Source: Central Bank of Chile.

Monthly CPI inflation has declined in recent months, owing primarily to the sharp fall in fuel prices. Core and trend measures of monthly inflation are also down, although past inflation continues to propagate. The baseline scenario foresees annual CPI inflation remaining high over the first quarter to quickly descend to 3% in the second half of the year. Then it should hover around 3% until the end of the policy horizon, the midpoint between the last quarter of 2010 and the first quarter of 2011. The Board believes that, after considering all possible alternative scenarios, the balance of risks for inflation is unbiased. During 2009, CPIX1 inflation will decline at a somewhat slower pace than CPI, largely because the propagation of inflation hits the former harder, and the fuel price drop does not reflect directly on it. However, approaching 2010 it will stand below the CPI due to the effect of the foreseen widening of output gaps. This scenario is consistent with market expectations that have shown major falls since last September.

Convergence of inflation is based on a number of assumptions. One is that the aforesaid output gaps will ease inflationary pressures. There is also the working assumption that, over the two-year projection horizon, the real exchange rate (RER) will decline from its current levels, since it is evaluated to be above the levels believed to be consistent with its long-run fundamentals. Another assumption is that unit labor costs will increase at a pace consistent with the inflation target, supported by moderate wage dynamics not fully

Projected CPI inflation (*)

(annual change, percent)

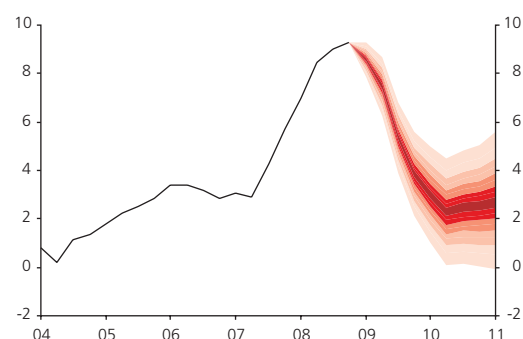


(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These confidence intervals summarize the Board's evaluation on inflation risks. The projection scenario incorporates as a methodological assumption that the monetary policy rate will follow a short-term path that will run somewhat below the one implicit in the financial asset prices after the Board reduced it by 100 basis points.

Source: Central Bank of Chile.

Projected CPIX inflation (*)

(annual change, percent)



(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These confidence intervals summarize the Board's evaluation on inflation risks. The projection scenario incorporates as a methodological assumption that the monetary policy rate will follow a short-term path that will run somewhat below the one implicit in the financial asset prices after the Board reduced it by 100 basis points.

Source: Central Bank of Chile.

reflecting the increase in past inflation, but is rather determined by inflation returning to the target. In addition, there is a methodological assumption that, in the baseline scenario, the monetary policy rate will go through a path that in the short term is somewhat below what is suggested by the prices of financial assets on 9 January 2009, after the Board reduced it by 100 basis points. These private expectations assume that the monetary policy rate (MPR) will stand between 5.0% and 5.5% in the middle of this year.

Annual inflation is high and the risks of the macroeconomic scenario are significant. Doubts about the external conditions and their impact on the Chilean economy compound with the possibility of inflation persisting longer than predicted, or that the fall is faster than foreseen. The nature of risks and shocks hitting the world and Chile call for extraordinary policy responses. The Chilean economy will not be immune to external developments, but the Board is convinced that the country will be able to cushion their impact. Chile has prepared for many years to weather episodes like the present one, and it has created mechanisms to reduce its costs. The Chilean economic policy setting that includes, among others, monetary policy, exchange rate policy, and rule-based fiscal policy is intended—and has the capacity—to be used as a countercyclical tool, especially before a shock as large as the one it is facing now. For policy actions to be effective and lasting, they must be taken while preserving price stability and its medium-term sustainability. The projections contained in this *Report* assume that GDP growth in 2009 will be partly determined by the fiscal stimulus program announced in early January, with effects that are in line with the government's evaluation at the moment of making it known to the public.

The Board estimates that, in the most likely scenario, it will continue with the ongoing monetary easing process, at a pace that will depend on prospects for inflation. Accordingly, it reaffirms its commitment to conducting monetary policy so that projected inflation reaches 3% over the policy horizon.

Monetary policy decisions in the past three months

Background: *Monetary Policy Report*, September 2008

By September, the inflation scenario facing the Chilean economy had deteriorated drastically. The high inflation recorded in the first four months of the year was compounded by new hikes in foodstuff and fuel prices, together with a higher degree of pass-through to other prices; this significantly heightened the risk that inflation would not converge to the target over a horizon of two years. Different measures of inflation expectations showed significant increases, while public concern also rose. The Board reacted strongly, raising the monetary policy rate (MPR) 200 basis points since June, for a total increase of 325 basis points since mid-2007. The future path of the MPR contemplated additional adjustments to ensure the convergence of inflation to the target, and these adjustments would be even greater, in the short term, than the market anticipated in the weeks before the publication of the *Report*. Thus, the baseline scenario at that time assumed that annual CPI inflation would reach the target in 2010. This assumption rested on output becoming less dynamic, growing around one percentage point below trend in the projection horizon as a result of tighter monetary policy.

October meeting

In October, given the dramatic changes in the macroeconomic scenario and the reigning uncertainty, the Board deemed that the most plausible options were either to increase the MPR 25 basis points or to hold it at 8.25%. The main news centered on the difficulties that the world economy was experiencing and the impact this would have on domestic financial variables, in particular the depreciation of the peso and the tightening of credit and liquidity in some market segments. Moreover, the short-term inflation panorama had worsened, mainly as a result of the sudden, sharp depreciation of the peso. However, it was determined that the changes in the macroeconomic scenario would probably reduce inflationary pressures in the medium term, thereby favoring the convergence of inflation to the target within the policy horizon. This had already been partially incorporated into inflation expectations, which had been adjusted downward for the medium term. In this context, and given the high degree of uncertainty about developments in the macroeconomic scenario, the option

of keeping the rate flat gained support. Opting for a respite would contribute to reinforcing confidence in a market that showed signs of stress from world events. The possible alternative scenarios, which combined lower world growth—and the associated credit conditions relevant for aggregate demand—with the recently observed tightening, even with imperfections, showed that an increase in the MPR was not necessary to achieve the inflation objective. Another factor was the assessment of the costs of being wrong: in this case, the risks associated with maintaining the rate were considered to be lower than the risks of increasing it. The Board therefore decided to hold the MPR at 8.25%. With regard to the future monetary policy bias, the MPR path implicit in the baseline scenario of the September *Report* was likely to be adjusted, mainly because the scenario of that *Report*, in which the MPR would probably rise, was unlikely to materialize.

November projection update

After the publication of the September *Report*, the external scenario changed drastically, with significant adjustments in financial asset prices and substantial reductions in commodity prices and in the outlook for world growth, among other factors. All this had direct implications for the Chilean economy and, therefore, for the Board's assessment of the factors that would determine the MPR path consistent with meeting the inflation target. Consequently, an Update of the Recent Projection Scenario was published in November to summarize the changes in the main variables in the external scenario that are relevant for Chile, relative to the last *Report*. The new scenario broadly considers that inflation will converge to the target more quickly than anticipated in September, because the worsening of the external scenario should result in more excess domestic capacity than foreseen. This would not be triggered by monetary policy action, in contrast to expectations in September.

November and December Meetings

For November, based on the Projection Update, the Board considered that the most plausible option was to keep the MPR at 8.25%. The external scenario had changed drastically, with different indicators all pointing in the same direction: worsening expectations, toughening financial conditions, a slowdown in real

output (especially in the developed economies), the appreciation of the dollar, the slump in commodity prices, and the range of extremely pessimistic alternative scenarios. On the domestic front, although the tightening liquidity conditions were alleviated by the monetary and fiscal authority's actions in late September and October, the perception of risk remained high, leading to an increase in lending rates to the public. This change was deemed likely to have an impact on domestic demand, which would probably intensify over the next year and persist for several quarters—in part because domestic credit had been growing rapidly for several years and would now enter a contractionary phase, which would necessarily take time to complete.

The high inflation recorded in October confirmed that inflation was still a problem. Projections for the coming months, however, suggested that the monthly indicators would be lower, especially for fuel prices. The worsening of the international scenario would affect domestic output and inflation and thus would have first-order consequences for monetary policy. Nevertheless, it was still too early to assess either its magnitude or its effect on the inflation trend. Inflation expectations had fallen significantly, but they remained above the target in the two-year horizon. Based on the information available at that time, it was difficult to justify any decision other than keeping the MPR unchanged. As long as there was any uncertainty about whether the process of inflationary convergence to the target was unequivocal, the correct action was to maintain a stable MPR and not deviate from the monetary policy path. This was especially true given the high risk—and even higher costs—of inflation remaining high. The exchange rate dynamics were complex and volatile, and the outlook at that moment was not favorable for inflationary pressures easing as a result of the wider output gap or the decline in commodity prices. An additional risk was the high degree of indexation in the Chilean economy. While it was difficult to measure or to sum up in a coefficient, inflation records for the last few months and general observation suggested that the economy could be facing a stickier inflationary dynamic than the models implied. The option of raising the MPR was therefore rejected at this meeting.

At the same time, the severity of the hit to expectations caused by the crisis, the changes in risk preferences, and, in particular, the tighter credit conditions required or would soon require a more decisive policy action. Given the perception of higher credit risk, the fact that the effective rate to clients had risen several percentage points could create space for shaving the MPR level. However, this diagnosis was very preliminary and would need to be confirmed and refined before it could serve as the basis for policy action. Consequently, the Board decided to keep the MPR at 8.25%. With regard to its future evolution, the new baseline scenario assumed that the rate would be maintained for several months before converging to a lower level. This meant that the MPR was positioned below the path contemplated in the September *Report*, such that the decision to keep it stable implied a reduction from that level in real terms.

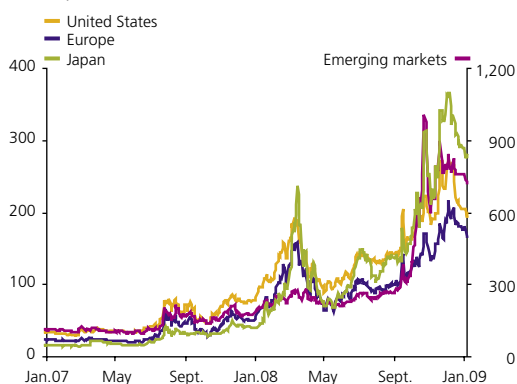
In December, the Board found that the most plausible options were either reducing the MPR or holding it at 8.25%. The external scenario began to show signs of a significant slowdown in the emerging economies, while inflationary pressures and expectations had dropped notably. Domestically, the money market was tending toward normal, but credit conditions continued to be tight. This reflected not only the banks' concern for the cost of financing and their access to it, but also their perception of increased risk among their clients, stemming from the big slowdown of activity and the employment forecast for the coming quarters. The available indicators pointed to an economic deceleration and greater excess capacity than anticipated. Although evidence was lacking, the existing data pointed to a sharp change in domestic demand, which provided a clear signal that inflationary pressures had eased. November inflation marked a break from previous months, largely driven by fuel prices. Some degree of inertia persisted, however, as a result of fairly well-rooted indexation mechanisms. This suggested that trend inflation measures would remain high for several months. Inflation expectations had dropped significantly, with a clear change in trend. The exchange rate had depreciated, preventing a faster, more continuous drop in inflation. It had not, at that point, prevented the steep drop in fuel prices from passing through to the domestic market. Maintaining the MPR was justified because the preparation of a new *Report* would provide a more accurate assessment of the impact of the international crisis on the real sector and projected inflation, and it would then be possible to more precisely calibrate the monetary stimulus necessary for meeting the inflation target.

On the other hand, the change in the scenario had led to a tightening of monetary policy; for a given level of the nominal MPR. The real rate and, in particular, the rate faced by agents had risen considerably, while macroeconomic conditions had worsened and the neutral short-term interest rate could well be feeling the effects of the adverse economic cycle. Thus, a reduction of 25 basis points would indicate that the macroeconomic environment continued to be complex and that monetary policy would be revised only after a careful evaluation of new events. Given the risks, it would make room for a monetary stimulus that would avoid the development of excessive output gaps that could interfere with achieving the inflation target in the policy horizon. All told, the Board decided to hold the MPR at 8.25% and thereby signal that, in the most likely scenario, it would begin to loosen monetary policy at a pace determined by the inflation outlook. These events confirmed that the cycle of rate hikes had ended, and that it was probably time to initiate a process of substantial monetary loosening in the coming months. The timing and speed of the adjustment would depend on the evaluation of the inflation trend and the impact of international and domestic financial conditions on that trend. The rate of the adjustment could even perhaps be similar to the hike that was implemented a few months earlier, when the Bank was surprised by high inflation indicators.

I. International scenario

Figure I.1

Risk premiums on credit default swaps (*)
(basis points)



(*) See glossary for definitions.

Source: Bloomberg.

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.

Financial markets

The world economic scenario has changed drastically in the past few months. What was originally considered to be a limited problem, primarily associated with the subprime mortgage sector in the United States, escalated into a world financial crisis, characterized by severe tensions, especially in the developed markets, and a global recession, with the lowest world growth rates since 1982.

Several events—including the bankruptcy of major financial institutions, the purchase and/or bailout of others, and the initial rejection by the U.S. Congress of a support package for the financial system—heightened the tension in the world financial markets, most notably through the lack of confidence in counterparties in the interbank markets. A feeling of fear descended on the markets with regard to the stability of the developed economies' financial systems. This caused interbank credit conditions to worsen further, paralyzing some operations and exacerbating the tight global financing.

Figure I.2

Stock market volatility
(percent)



(1) VIX volatility index. See glossary for definition.

(2) Estimated historical volatility of the MSCI index, denominated in dollars.

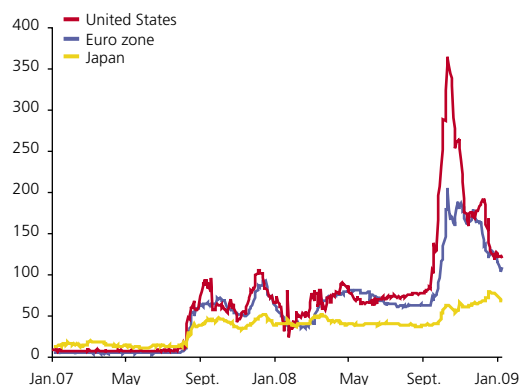
Sources: Bloomberg and Morgan Stanley Capital International.

The responses of the economic authorities in the developed world were unprecedented, both in their magnitude and in the high degree of coordination across countries. Existing liquidity provision mechanisms were extended and new ones designed; interest rates were cut aggressively and in coordination with other economies; and governments used substantial resources to capitalize different financial institutions. Credit conditions remain tight, although the adopted measures have moderated the liquidity problems in the developed financial markets and the financial situation has become somewhat less stressful in recent weeks. In particular, stock volatility and bank risk premiums have fallen below the peaks recorded in October (figures I.1, I.2, and I.3).

The environment of uncertainty and losses in the stock markets increased the preference for safer assets. Together with the plunge in output, this led to historic lows in the interest rates on government bonds, mainly from the United States. A comparison of the average for the last ten days before the statistical closing of this *Report* and the average for September reveals that long-term interest rates in the United States and the euro zone have fallen around 150 and 110 basis points, respectively (figure I.4). The significant

Figure I.3

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

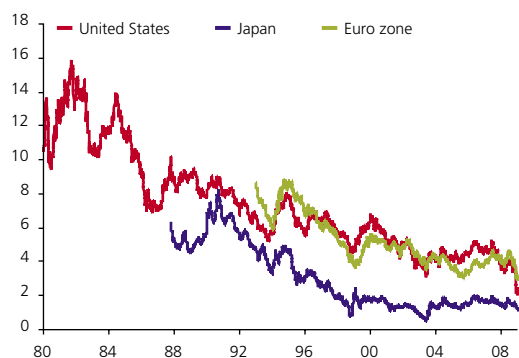


(*) Spread between the Libor and the overnight index swap rate. See glossary for definition.

Source: Bloomberg.

Figure I.4

Long-term interest rate (*)
(percent)

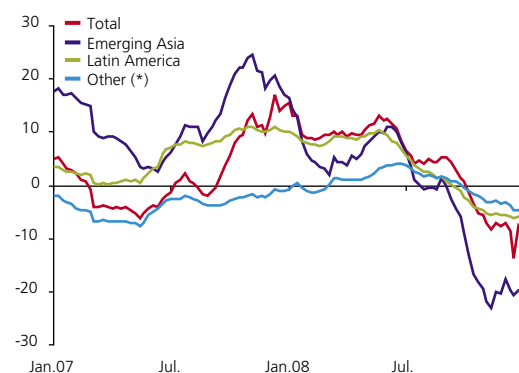


(*) Nominal ten-year government bonds.

Source: Bloomberg.

Figure I.5

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



(*) Emerging Europe, Middle East, and Africa.

Source: Emerging Portfolio Fund Research.

flattening of the yield curve in the United States was solidified after the Federal Reserve reduced its monetary policy interest rate to a range of 0 to 25 basis points and announced its willingness to buy Treasury bonds directly, among other measures.

In contrast to events through September, in the past few months the emerging economies have witnessed significant increases in risk premiums, stock market drops, and outflows of investment funds (figure I.5). While the majority of the emerging economies have not felt a lot of pressure on liquidity in local currency, some have experienced problems in their exchange markets, which are reflected in large spreads in onshore and offshore dollar rates. This led Brazil, South Korea, Mexico, and Singapore to establish foreign exchange swap agreements with the Federal Reserve in October, for US\$30 billion each, available through April 2009. However, there are important degrees of differentiation among economies. In countries where the initial conditions were more vulnerable (substantial credit expansion, current account deficit, a more appreciated real exchange rate), the impact and magnitude of the adjustment have been significant, in many cases requiring the financial support of multilateral organizations^{1/}. In contrast, in a few economies (including Chile), the markets anticipated a greater capacity of monetary and fiscal policy to provide a countercyclical response, with expectations of interest rate cuts and, in general, lower inflationary prospects (figure I.6) (box I.1).

International parities have oscillated strongly. Early on, the U.S. dollar and the Japanese yen appreciated markedly, in line with the demand for secure assets. The dollar then weakened in response to the alleviation of the liquidity pressures in the developed interbank markets, the Federal Reserve's strong signal of monetary expansion, and the prospects of a significant fiscal deficit in the United States (figure I.7).

World growth

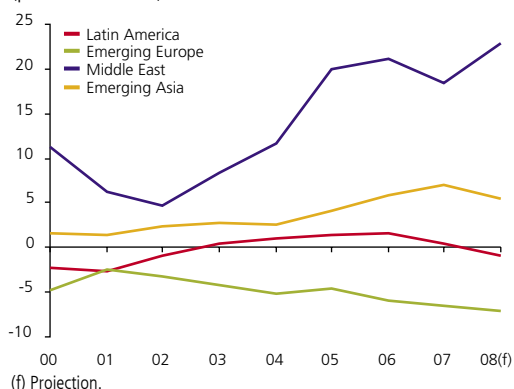
The magnitude of the financial turbulence has severely affected the outlook for world growth. Growth projections for 2009 assume that the recession will continue in many developed and emerging economies. Moving into 2010, the baseline scenario considers that the global credit situation will tend to normalize and the world economy will begin to recover. This scenario is subject to a wide range of mostly negative risks (figure I.8) (table I.1).

The United States is in the midst of the deepest, most extensive recession in decades as a result of the tighter credit conditions, the ongoing adjustment of home prices, and the marked deterioration in expectations and in the labor market. In the euro zone, growth fell in the third quarter of 2008 for the second consecutive quarter, and current indicators—including manufacturing output and business confidence surveys—point to an even greater decline in the last quarter of 2008. In Japan, economic activity contracted again in the third quarter of 2008. This country has been extremely hard hit, despite the fact that its local financial institutions are

^{1/} The IMF gave emergency loans of US\$2 to 26 billion to Iceland, Lithuania, Pakistan, Ukraine, and Hungary.

Figure I.6

Current account balance
(percent of GDP)



(f) Projection.

Source: International Monetary Fund (IMF).

Figure I.7

Exchange rate parities (1)
(indices 01 January 2007 = 100)



(1) Parity against the dollar. An increase indicates depreciation.

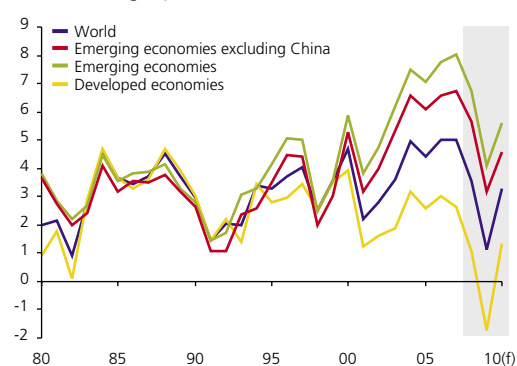
(2) Weighted average of the following countries' currencies, at PPP: Argentina, Brazil, Chile, China, South Korea, Hong Kong, Hungary, Indonesia, Malaysia, Mexico, Poland, Czech Republic, Russia, and Thailand.

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

Source: Bloomberg.

Figure I.8

World growth at PPP (*)
(annual change, percent)



(f) Projection.

(*) Regional classifications follow IMF definitions.

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

not in critical condition. The drop in world demand and the appreciation of the yen are having very serious effects on the external sector, accentuating the impact on expectations and on investment plans and contracts in the manufacturing sector. In addition, Japan has limited room for maneuver in terms of monetary and fiscal policy responses.

Table I.1

World growth (*)
(annual change, percent)

	Ave. 90-99	Ave. 00-05	2007	2008 (e)	2009 (f)	2010 (f)
World	2.9	3.8	5.0	3.6	1.2	3.3
World at market growth rate	2.4	2.9	3.8	2.4	-0.3	2.3
United States	3.1	2.5	2.0	1.2	-1.8	2.0
Euro zone	2.2	1.9	2.6	0.9	-1.9	1.0
Japan	1.5	1.6	2.4	-0.1	-2.4	1.2
China	10.0	9.4	11.9	9.2	7.5	8.0
Rest of Asia	5.5	4.8	5.8	4.0	1.2	3.2
Latin America	2.7	3.0	5.6	4.7	1.2	2.7
Commodity exports	2.7	3.1	3.3	1.2	0.2	1.8
Trading partners	3.1	3.1	4.8	3.2	0.4	2.7

(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.

Economic activity in the emerging economies is being affected through several channels. The most direct is the deterioration of external demand, which has the biggest impact in the smallest, most open economies. Moreover, the effect on local banking and financial systems could exacerbate the response of domestic demand and output. Economies that have more capitalized financial systems, are less dependent on external financing, and are in a better macroeconomic position have been less affected.

The slowdown of activity in China has curbed growth in emerging Asia. It is estimated that China will grow far below its level of previous years as a result of the weaker performance of the external sector, and the possibility of a deeper recession cannot be discarded.

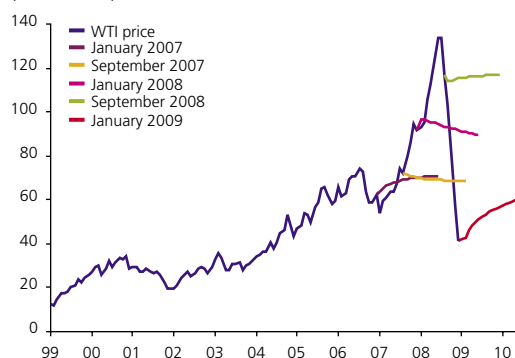
In Latin America, the main economies began to slow in the third quarter of 2008, as a result of the outbreak of the global financial crisis. The impact is again differentiated among the economies, depending on the weight of commodities in the import and export basket and their importance in corporate and government income.

Commodity prices

The severe deterioration in world growth has been reflected in a steep drop in commodity prices. Initially, the strengthening of the dollar accompanied the decline in prices, but more recently, the drop has continued despite the weakening of the dollar.

Figure I.9

WTI oil prices and futures (*)
(US\$/barrel)

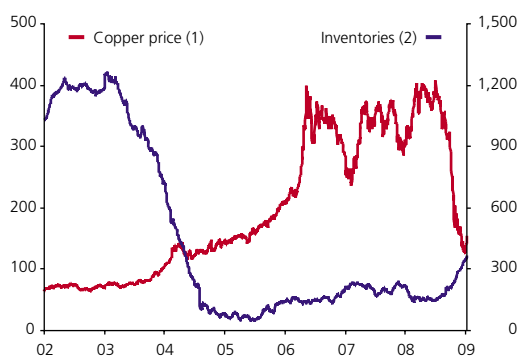


(*) Futures consider the average of the last 10 business days before the statistical closing date of each *Monetary Policy Report*.

Source: Bloomberg.

Figure I.10

Copper market
(US\$/lb; thousands of metric tons)



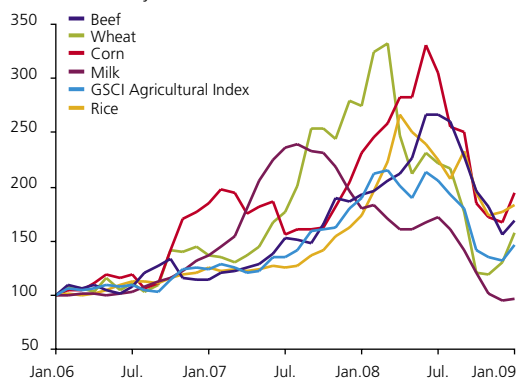
(1) London Metal Exchange (LME) price.

(2) Inventories on the London, New York, and Shanghai metal exchanges.

Source: Bloomberg.

Figure I.11

Food prices (*)
(indices January 2006=100)



(*) The price of corn corresponds to No. 2 yellow corn spot contracts. The price of wheat corresponds to No. 2 red soft winter spot contracts. The price of rice corresponds to No. 2 long-grain rough. The price of beef corresponds to steer futures contracts, Brazil. The GSCI Agricultural Index is calculated by Goldman Sachs.

Source: Bloomberg.

The WTI oil price fell sharply. It currently sits around US\$45 a barrel, which is far below the peak of nearly US\$150 in July 2008. In the days prior to the close of this *Report*, the WTI price rose in response to geopolitical tensions in the Middle East. Analysts expect, however, that the low marginal cost of crude extraction and the noncompliance of OPEC with the announced production cutbacks will keep prices down in the short run. Even so, the medium-term outlook points to a reversal (figure I.9). The most probable scenario assumes, based on futures contracts in the ten days prior to the close of the *Report*, that WTI prices will average US\$50 and \$60 a barrel in 2009 and 2010, respectively.

The copper price also fell significantly. It is currently trading at around US\$1.40 a pound on the London Metal Exchange (LME), after reaching slightly more than US\$4.00 in mid-2008 (figure I.10). The medium-term outlook suggests that it will not fall further than it already has, given that supply has been contracting because of low-grade ore, technical problems, and the closing of small mines. The baseline scenario considers lower prices than forecast in November: US\$1.50 and \$1.60 on average for 2009 and 2010, respectively. All told, copper and oil prices could remain at their current low levels or fall even further.

Basic food prices, which are one of the main sources of the high inflation in Chile and other economies, have also fallen in response to weakening global demand. The magnitude of the decline is smaller than in the cases of oil and copper, however, in part because of the continuing high prices of fertilizers. The international wheat price has fallen around 60% from its peak in early 2008, and it is now comparable to mid-2007 prices. Rice has fallen considerably less (figure I.11). The baseline projection scenario, constructed using futures data and slower world growth, considers that these prices will start to rise again, but less than in the immediate past.

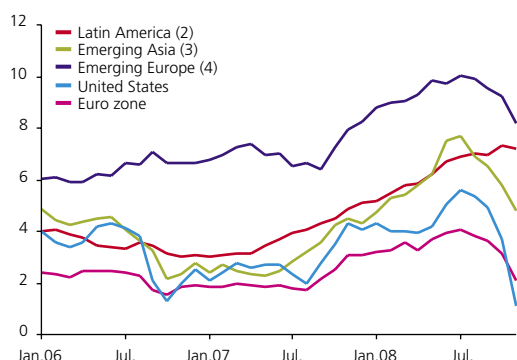
World inflation

Decelerating world growth and declining basic goods prices have radically changed the world inflation outlook in the past few months. In the developed economies, the data already show significant reductions, and some market agents are even discussing the possibility of disinflation. In the United States, annual CPI inflation dropped from a peak of 5.6% in July 2008 to 1.1% in November. CPI inflation fell to 1.6% in the euro zone in December and to 1.0% in Japan in November (figure I.12). In the emerging economies, real data do not show a generalized reduction in inflation, except in China, where annual CPI inflation reached 2.4% in November 2008 (8.7% in February).

In general, consensus expectations have also fallen faster in the developed economies than in the emerging economies (figure I.13). Underlying the behavior of inflation and expectations are factors like the pass-through of international prices to domestic prices (which is very relevant in the case of fuel), the continued food price inflation in all countries, and the potential effects of currency depreciation. In addition, the projected excess capacity in emerging economies is lower than in the developed world (box I.2).

Figure I.12

CPI inflation (1)
(annual change, percent)



(1) Figures correspond to the geometric average of the countries considered for each region.

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

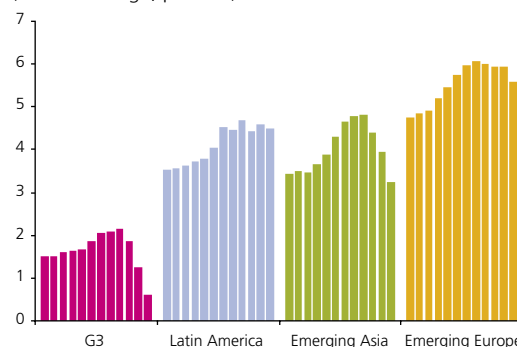
(3) China, South Korea, Indonesia, Malaysia, Singapore, Thailand, and Taiwan.

(4) Hungary, Czech Republic, Russia, and Turkey.

Source: Central Bank of Chile based on CEIC data.

Figure I.13

Inflation expectations for 2009 (*)
(annual change, percent)

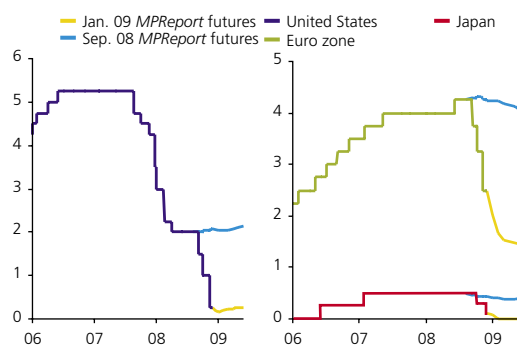


(*) Each bar corresponds to the annual average inflation projection in each month since January 2008. Geometric averages of projected inflation are calculated for the economies in each economic area.

Source: Consensus Forecasts.

Figure I.14

Expected monetary policy rate in developed economies (*)
(percent)



(*) Elaborated on the basis of interest rate futures contracts. Considers the average of the last 10 business days before the statistical closing date of each Monetary Policy Report.

Sources: Central Bank of Chile and Bloomberg.

The external price index (EPI), which measures external inflation relevant for Chile in U.S. dollars, fell significantly in late 2008. The projected annual change for 2009 is -0.8% , which is lower than the November forecast (0.5%). For 2010, the projected depreciation of the dollar and the recovery of world demand will translate into higher inflation, and the EPI is thus expected to rise 5.5% (table I.2).

Table I.2

World inflation
(average annual change in domestic currency, percent)

	Ave. 1990-99	Ave. 2000-05	2007	2008	2009 (f)	2010 (f)
United States	3.0	2.7	2.9	3.9	0.3	1.6
Euro zone	2.3	2.2	2.1	3.3	1.1	1.2
Japan	1.2	-0.5	0.1	1.4	-0.2	0.4
China	7.8	1.2	4.8	6.0	1.3	2.0
Australia	2.5	3.3	2.4	4.6	2.4	1.9
New Zealand	2.1	2.5	2.4	4.3	2.6	1.4
Argentina	253.7	8.8	8.9	8.7	8.1	8.5
Brazil	854.8	8.4	3.6	5.7	5.4	5.0
Mexico	20.4	5.7	4.0	5.1	5.6	5.0
EPI (*)	1.9	3.8	8.5	12.0	-0.8	5.5

(*) See glossary for definition.

(f) Projection.

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

Monetary policy

Confronted with the new scenario, the developed economies' central banks have made unprecedented reductions in their monetary policy rates. In the emerging economies, the upward trend that started in early September has halted and, more recently, begun to drop. In some cases, the reductions have been significant.

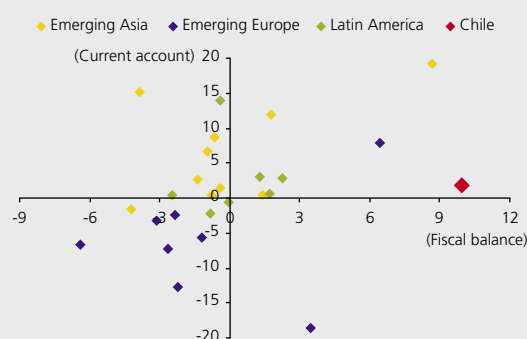
In the past three months, the Bank of England dropped its rate by a total of 300 basis points; Australia, Norway, and Sweden, 275 basis points; Switzerland, 225 basis points; Canada, 150 basis points; and the euro zone and the United States, 175 basis points. Despite the magnitude of the decreases, and although some countries have little room to continue lowering the rate, market expectations suggest that the downward cycle has not yet ended in some cases (figure I.14). Among the emerging economies, India, Israel, and South Korea have posted particularly notable reductions of more than 200 basis points each since October.

Box I.1: Differentiation of emerging economies in the current scenario

For months after the subprime crisis erupted in the developed economies in mid-2007, it was not reflected materially in the emerging financial markets. The situation changed in September 2008, however, as a result of the growing uncertainty, the search for safer assets, and the drastic deterioration in the outlook for world growth. The magnitude of the impact has varied across regions, in line with their external positions. In particular, some emerging economies have achieved a degree of differentiation that will allow them to retain access to credit markets.

Figure I.15

Fiscal and current account balance: average 2005–2008 (*)
(percent of GDP)



(*) Projections for 2008.

Source: JP Morgan Chase.

A first differentiating factor is financing needs, as reflected in the current and future external positions. The economies of emerging Europe stand out as being relatively weak, with a current account deficit exceeding 5% of GDP in recent years. The deterioration of this indicator puts these countries in a more vulnerable position. The majority also have a substantial fiscal deficit. Consequently, many have little room for countercyclical policies, especially those that do not have large international reserves and/or sovereign funds^{2/}. In contrast, several Asian economies and Chile have had a current account surplus in the last few years, together with a solid fiscal position (figure I.15). This position is affected by the sensitivity of exports and, in some cases, fiscal income to the drop in world demand and commodity prices. In Latin America, commodities are among the main export products, and they are primarily shipped to developed economies. Falling prices have a significant impact

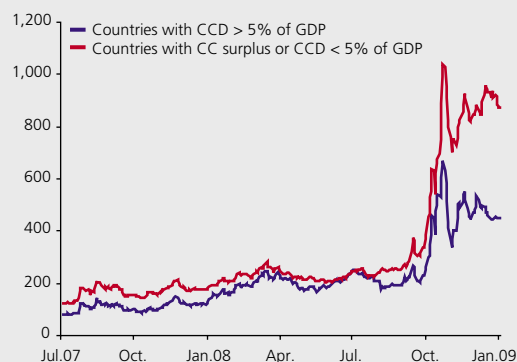
^{2/} The importance of maintaining international reserves for facing a crisis is discussed in box II.1 of the *Financial Stability Report*, first half 2008.

on the current account balance and could limit the Treasury's ability to act.

The more vulnerable economies have seen greater increases in their risk premiums (figure I.16). Stock market changes follow a similar pattern. Chile stands out because it has recorded a smaller drop in its stock exchange and a smaller increase in its country risk premium, and because the banking system's external financing lines have not been affected, beyond the fears that materialized for a few weeks in September and October.

Figure I.16

Country risk premium by size of the current account balance (*)
(basis points)



(*) Risk premium measured through the CDS spread. See glossary for definitions.

Sources: Bloomberg and International Monetary Fund.

Credit growth has also varied by region. The Asian economies, in general, have recorded more moderate increases than some Latin American economies and emerging Europe. The relatively stronger position of the Asian economies and Chile are consistent with the behavior of long-term rates, which have fallen since mid-2008, while increasing in the other regions.

Undoubtedly, the emerging economies are currently better prepared to face the global economic crisis than in previous episodes. Many countries have made advances in terms of implementing a more flexible exchange rate system, adopting inflation-targeting regimes, and diversifying their export baskets. Others, however, still have problem areas. Financial markets were already becoming differentiated among regions and economies in past episodes. Everything indicates that in this crisis, while in general the emerging economies' financial indicators show signs of weakening, the magnitude of the deterioration varies greatly at the country level.

Box I.2: Evolution of inflation in emerging and developed economies

In recent months, the outlook for world inflation has changed radically as a result of the meltdown of the world economy and the significant drop in commodity prices. After high oil and fuel prices generated large increases in inflation in many countries—albeit with varying intensity—the current reversal of commodity prices has translated into a reduction in inflation, with significant differences across countries. Starting in August, the developed economies recorded a marked drop in both real and expected inflation. The emerging economies, with a few exceptions including China, have not yet shown generalized reductions in these components (figures I.12 and I.13).

The uneven behavior of inflation among countries is due to a number of factors. First, the impact of changes in food and energy prices on inflation depends on the composition and weights in the CPI basket of each country. Consequently, for a given event, price changes will be reflected to a different degree in each basket^{3/}. Second, there are differences in the degree of pass-through from external prices to the local market, whether as a result of price-determination mechanisms specific to each economy or because of the effect of the generalized depreciation of most local currencies against the U.S. dollar (figure I.7). In this sense, it is relevant that the plummeting oil price has translated into very substantial reductions in the energy component of the CPI in Chile and the United States (figure I.17), whereas other economies continue to post an annual increase in this item. The latter, however, did not register price increases—as was the case in Chile and the United States—when oil spiked to nearly US\$150 a barrel. This reflects the use of subsidies for domestic prices in some countries, which generated a strong debate when oil peaked because of the fiscal cost. As a result, in those countries there is little room for inflation to give way today.

Another important factor in the evolution of inflation is the effect of higher food prices at the world level. Although the increase was reflected in the majority of countries, economies like Brazil, Chile, and China were also affected by idiosyncratic shocks, resulting in substantial increases in inflation. Other

economies implemented price control policies to keep the external increase from completely passing through to domestic prices. The response of domestic prices to the drop in food prices in the international markets is fairly uneven among economies and, with the exceptions of China and the euro zone, does not display a substantial pass-through^{4/} (figure I.17). Several countries have reduced tariffs or subsidized domestic prices, and now that international prices are falling, the decline is not reflected in lower domestic inflation.

Thus in economies where there has been some degree of control over the pass-through from external prices to domestic prices and where foodstuffs are weighted more heavily in the CPI basket, there is less room for a rapid drop in inflation—on one hand, because their fuel prices have not reflected the external market oscillations and, on the other, because their inflation is strongly linked to food prices, which similarly have not fallen substantially. In contrast, economies that had a higher pass-through of the price hikes, especially oil, have experienced a substantial decrease in inflation.

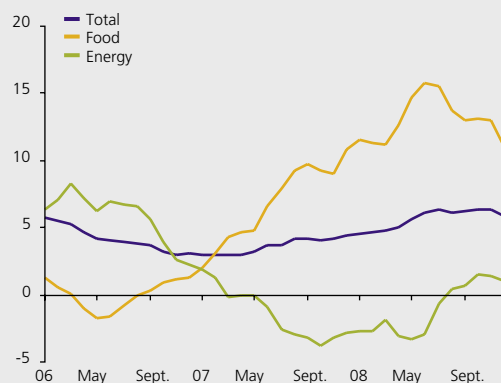
With regard to inflation expectations, the dominant factor in their evolution is the deterioration in growth prospects and the implications for the excess capacity in each economy. In this sense, the recession facing the developed economies has translated into substantial reductions in inflation expectations. In the emerging economies, while growth prospects have also worsened and economic activity is expected to slow considerably, the slowdown will not reach the depths seen in the developed world. Together with the strong depreciation of most currencies against the dollar, this explains why inflation expectations have not fallen as sharply in the emerging economies. The greater excess capacity projected for developed economies has also been consistent with the monetary policy actions carried out by each country's authorities, who reacted by aggressively cutting back their policy rate, while the emerging economies have only recently begun to reduce their policy rates.

^{3/} In general, fuels have a larger weight in inflation in developed countries than in emerging economies, so changes in these prices have a stronger impact on the CPI in the former.

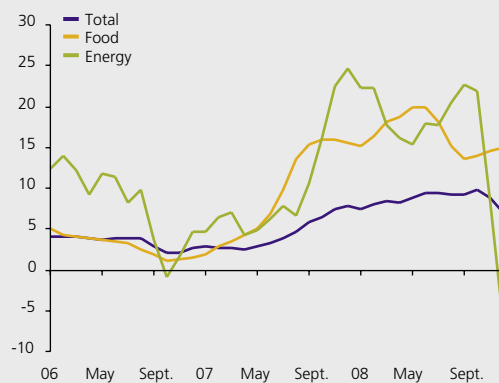
^{4/} Moreover, the decline in agricultural prices has been substantially less than in oil prices. Agricultural prices, measured through the Goldman Sachs Commodity Index (GSCI), have fallen around 40% from their peak in March 2008, while the WTI oil price has dropped around 70% from its peak in July 2008.

Figure I.17

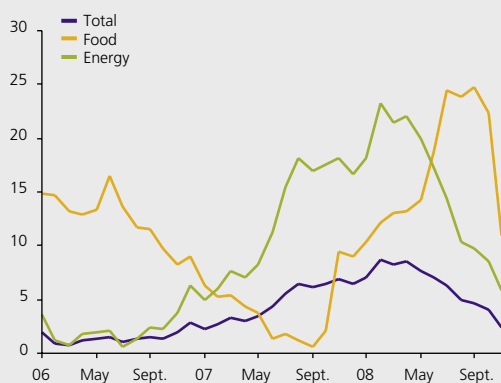
CPI inflation, total and by component
(annual change, percent)



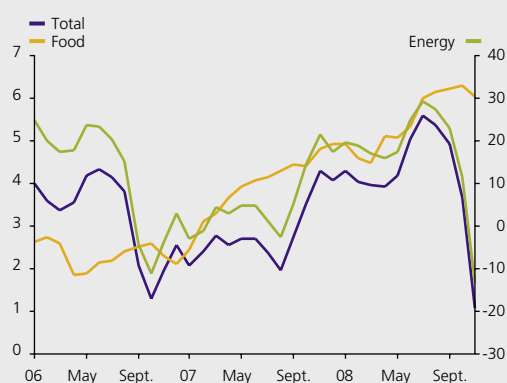
(a) Brazil



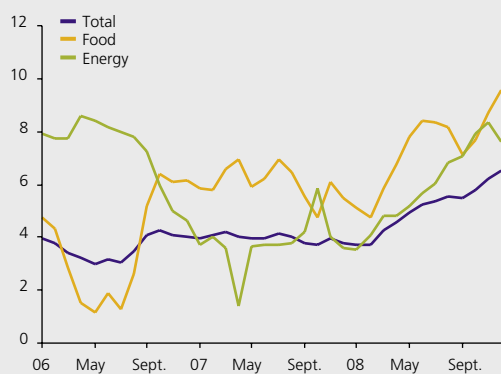
(b) Chile



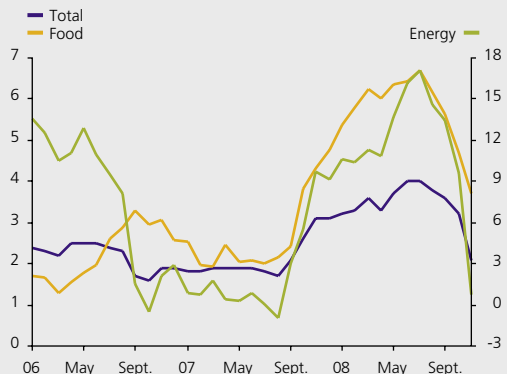
(c) China



(d) United States



(e) Mexico



(f) Euro zone

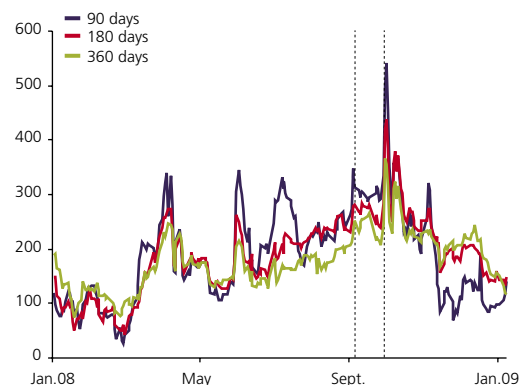
Sources: Central Bank of Chile, CEIC data, and Eurostat.

II. Financial markets

Figure II.1

Spread between onshore dollar interest rates and the Libor (*)

(basis points)



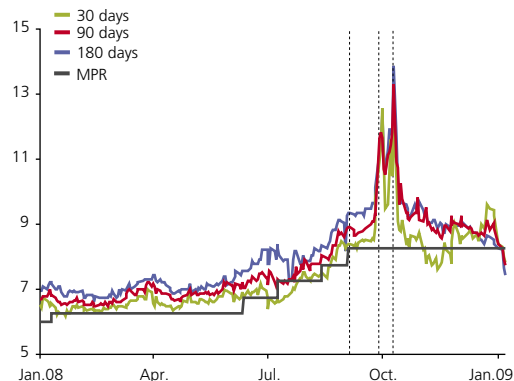
(*) Dotted lines correspond to the statistical closing of the September Monetary Policy Report (05 September 2008) and the suspension of the reserve accumulation program (29 September 2008).

Source: Central Bank of Chile.

Figure II.2

Rates on negotiable time deposits (*)

(percent)



(*) Dotted lines correspond to the statistical closing of the September Monetary Policy Report (05 September 2008), the suspension of the reserve accumulation program (29 September 2008), and the announcement of new liquidity provision measures (10 October 2008).

Source: Central Bank of Chile.

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

Financial conditions

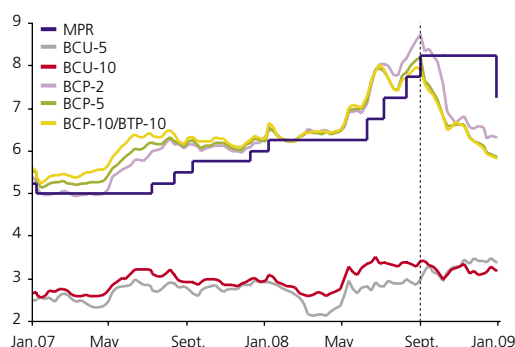
The drastic change in the external scenario that erupted in mid-September had a strong impact on segments of the local financial market. The fear that these events could affect external financing increased local market players' preference for liquidity, as a precautionary measure, which was reflected in sharp interest rate hikes in both pesos and dollars in the domestic money markets and a strong drop in the volumes traded in the interbank market.

Following the events in the United States and Europe beginning in mid-September, the spread between the local dollar interest rate and the Libor (the onshore spread) shot to historic peaks for a brief period (figure II.1). Dollar lending rates increased significantly—the level in early October was nearly 500 basis points over the average for August—and the peso depreciated markedly, although in line with other reference currencies. Peso liquidity was also affected, with increases in bank funding costs. The 30- and 90-day nominal interest rate of the Association of Banks and Financial Institutions rose quickly, from around 0.75% monthly in the first fifteen days of September to around 1% in early October. The rates on 30- and 90-day negotiable time deposits were over 12% at the most intense moments (versus 8.5% in the first half of September) (figure II.2). This phenomenon passed through to the rates banks offer the public, causing peso deposit and lending rates to also rise considerably in the period.

On 29 September, the Central Bank announced the end of its reserve accumulation program, together with the supply of dollar and peso liquidity through scheduled repo and swap operations. On 10 October, the Bank announced that it was expanding the definition of eligible collateral and extending its dollar swap program from one to six months. This was complemented by the Ministry of Finance, which placed time deposits using resources previously deposited overseas and seasonal dollar surpluses in the Treasury bank account. On 3 December, in order to provide liquidity at longer terms and guarantee its availability to the market, the Bank lengthened the terms of its currency swap auctions from 60 and 90 days to 180 days. On 10 December, the Bank issued a statement that the liquidity provision program via repo and swap operations would be extended to the end of 2009, and it announced the implementation of a new complementary liquidity provision mechanism based on secured credit lines, for which the eligible collateral includes securities, Treasury bonds, and bank time deposits, among others.

Figure II.3

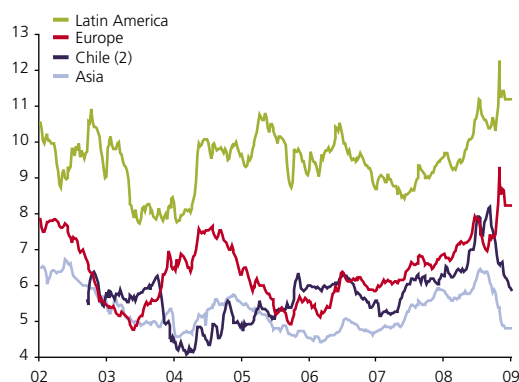
MPR and interest rates on Central Bank instruments
(weekly average, percent)



Source: Central Bank of Chile.

Figure II.4

Long-term interest rates in emerging economies (1)
(weekly average, percent)



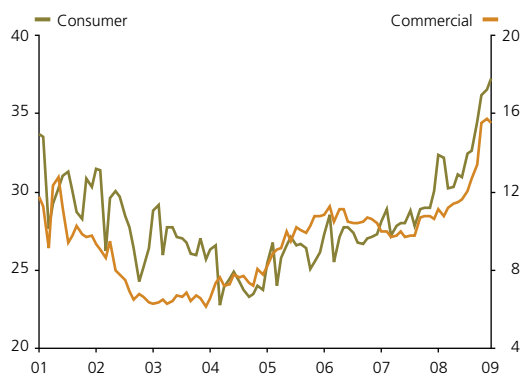
(1) Government Bond Index—Emerging Markets (GBI-EM), JP Morgan Chase.

(2) Five-year Central Bank bond in pesos (BCP-5).

Sources: Central Bank of Chile and JP Morgan Chase.

Figure II.5

Lending rates (*)
(percent)



(*) Weighted average rate.

Source: Central Bank of Chile.

Thanks to these measures and the easing of pressures in developed markets, the local interbank market is operating normally, and the volumes traded exceed the levels of early September. Similarly, not all the dollar liquidity offered by the Bank through swaps has been taken up, which suggests that access to these resources abroad is not constrained. The onshore spread has fallen substantially, dropping below even the early September levels, as have the rates on negotiable deposits.

The rates on Central Bank instruments in pesos have fallen more than 200 basis points since September, reflecting lower expectations for inflation and growth^{1/} (figure II.3). This differentiates Chile from similar Latin American and European countries, where the reemergence of stress in the financial markets generated a capital outflow and an increase in the rates on government bonds (figure II.4).

However, while the money market is operating more normally and the monetary policy rate (MPR) has stayed at 8.25% since September, the rates that banks offer the public have not fallen and lending standards have tightened, revealing a market with tighter credit conditions.

The Bank Lending Survey for the third quarter showed increasingly tight credit conditions—a process begun in late 2007. It also exposed a weakening in the demand for credit by both individuals and firms, especially real estate, in the context of a less dynamic banking sector. Market observation suggests that credit conditions have tightened even further, with trends toward credit for smaller amounts and shorter maturities and with greater collateral requirements, among other factors. In the case of business loans, this is particularly notable in sectors that are perceived as being more vulnerable to the cycle.

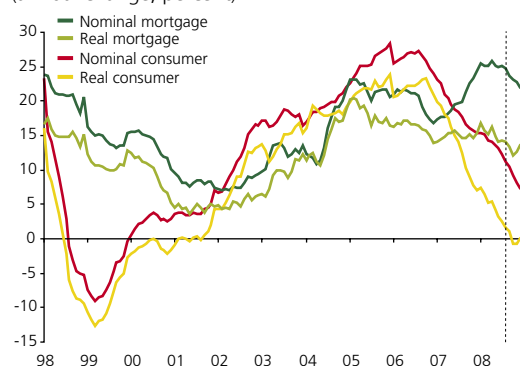
This situation is consistent with the increase since September in the rates the banks offer the public. Since the close of the September *Monetary Policy Report*, the interest rate differential between 30- to 89-day peso lending rates and the MPR doubled (box II.1). This differential has oscillated between 800 and 1,200 basis points, which is very high relative to the average of 440 basis points in the first nine months of 2008. On average, interest rates on consumer loans have increased nearly 500 basis points since the September *Report*, to 37.3% in December. Credit card rates continue to rise, from an average of 44% in the first half of the year to 50.7% in November—the highest rates on record (April 2002). Commercial loan rates registered a similar hike in this period, to around 16% in the last quarter (figure II.5). This is consistent with the increase in debt service captured in the listed companies' Uniform Codified Statistical Forms (FECU). Mortgage interest rates also increased significantly relative to the average for August: mortgage bills are as much as 700 basis points higher, while endorsable mortgage loans (available through September) show similar hikes, especially at shorter maturities. Case studies provide further evidence of rate increases for these operations.

^{1/} After the close of this *Report*, the Central Bank announced its auction schedule for the calendar year, which contemplates the issue of peso- and UF-denominated instruments with maturities from two to ten years, for a total of \$52 billion and UF1.800 billion a month.

Figure II.6

Personal loans (*)

(annual change, percent)



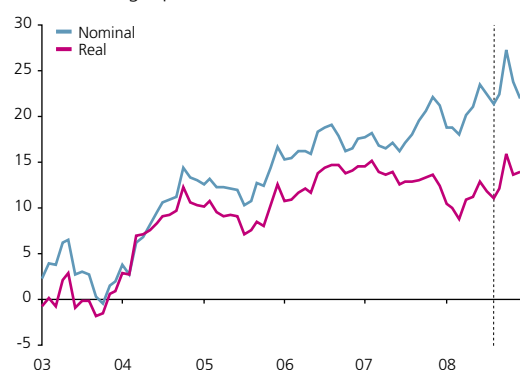
(*) Data for December 2008 are provisional.

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

Gráfico II.7

Business loans (*)

(annual change, percent)



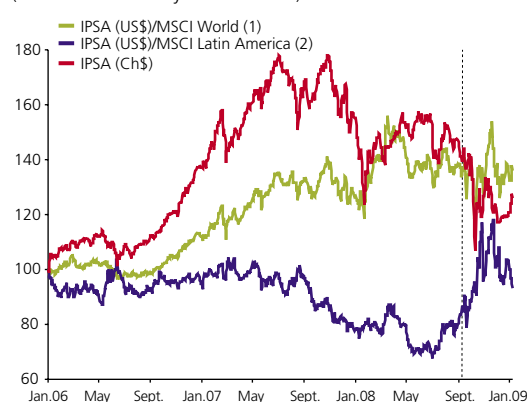
(*) Data for December 2008 are provisional.

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

Figure II.8

Stock market indicators

(indices 02 January 2006 = 100)



(1) World stock market index, Morgan Stanley Capital International.

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

Sources: Central Bank of Chile and Bloomberg.

The higher rates, tighter lending standards, and uncertainty about the unfolding of macroeconomic events have not yet translated into substantial reductions in the stock of loans, although some of its components have grown at a slower pace. In the case of personal loans, the slowdown has been particularly notable in consumer loans, which went from double-digit annual growth rates in the first half of 2008 to less than 2% growth in December. This coincides with a reduction in the consumption of durable goods, especially new cars. The growth rate of housing loans fell from around 24% in early 2008 to 18% in December. Again, this is consistent with the drop in new home sales reported by different sources, as well as the reduction in the number of mortgage bills and endorsable mortgage loans. Endorsable mortgages fell from a monthly average of over 1,500 transactions in the first six months of 2008 to 874 in September, while mortgage bills posted a similar drop (figure II.6). Business loans, in contrast, have maintained high growth rates. This can be attributed to the increase in foreign trade loans (with growth rates of over 50%, although this falls to 2% when expressed in dollars), which reflects an increase in exporters' demand in response to the exchange rate depreciation and the entry into the local market of firms that previously obtained financing overseas (figure II.7). These factors have also affected corporate bond placements in the local market and new issues by firms that previously sought financing overseas, especially exporters. These trends have occurred despite the less desirable conditions relative to a year ago: average corporate spreads rose from around 75–100 basis points, depending on the risk rating, to nearly 200 basis points beginning in October.

Local stock market indicators have fallen, but less than in the rest of the world. Since the close of the *September Report*, the IPSA has dropped 11% (26% in dollars). The Latin American exchanges, which were more affected by capital outflows following the outbreak of the world financial crisis, dropped nearly 60% in dollars from their peak in May 2008 (figure II.8). Similarly, in relative terms, banking sector stocks have not suffered as much as in the developed economies.

The monetary aggregates are reflecting the slowdown. The narrow definitions of money continue to show reductions in their annual nominal variation. After average variations of nearly 15% in the first half, M1 grew 4% in December 2008. This is consistent with the greater calm and the reduction in uncertainty about the performance of the financial system. M2 fell from an average of 18% to 11% in the same period. The broader aggregate (M3) has maintained growth rates near 17% in recent months, with particularly strong growth in foreign currency time deposits, consistently with the evolution of the exchange rate.

In line with the global trend in the dollar, the peso has continued to depreciate since the close of the *September Report*, with transactions carried out at a parity of just over \$630 to the dollar in the two weeks prior to the close of this *Report* (table II.1). The international performance of the currency was compounded by the terms of trade, in particular the copper price. Moreover, the plunge in international stock markets reduced the pension funds' foreign investment, forcing them to substantially reduce their hedging positions and thereby causing additional effects on the peso, especially in October^{2/}. The peso thus depreciated somewhat more than 20% against the dollar, relative

^{2/} For more details, see the *Financial Stability Report*, second half 2008.

Tabla II.1

Observed (OER), multilateral (MER), and real (RER) exchange rate

(OER: Ch\$/US\$, monthly average; MER and MER-X: 02 Jan. 1998 = 100; RER 1986 = 100) (1)

	OER	MER	MER-X	RER
Jan.08	480.90	100.50	97.35	89.40
Feb.08	467.22	98.25	95.34	87.80
Mar.08	442.94	94.82	92.47	84.55
Apr.08	446.43	96.13	93.91	86.78
May.08	470.10	100.86	98.43	91.14
Jun.08	493.61	106.34	103.90	96.55
Jul.08	502.24	108.94	106.65	99.32
Aug.08	516.70	110.38	107.55	98.93
Sept.08	530.17	110.32	106.57	96.83
Oct.08	618.39	121.96	115.75	104.99
Nov.08	651.51	125.91	118.71	106.66
Dec.08	649.32	126.05	118.89	106.11
Jan.09 (2)	638.62	125.11	114.99	

(1) See glossary for definitions.

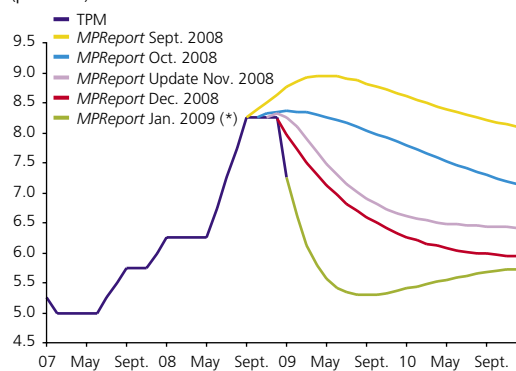
(2) Average as of 07 January.

Source: Central Bank of Chile.

Figure II.9

MPR and forward curve

(percent)



(*) Calculated using of financial asset prices on 09 January 2009.

Source: Central Bank of Chile.

Figure II.10

Swap rates (*)

(percent)



(*) See glossary for definition.

Source: Central Bank of Chile.

to the basket of currencies measured through the multilateral exchange rate index (MER): 14%, and 9% excluding the dollar (MER-X). As a working assumption, the real exchange rate is expected to fall from its current levels within the two-year projection horizon. This assumption is based on the assessment that it currently stands above the levels believed to be consistent with its long-run fundamentals.

Monetary policy

As a result of the drastic change in the macroeconomic scenario in recent months, the most likely scenario is that inflation will quickly converge to the target in the medium term. Therefore, in January the Board decided to initiate a process of monetary easing and to reduce the MPR by 100 basis points, to 7.25%.

The change in the macroeconomic scenario has also been reflected in market expectations. Through mid-September, market agents expected the MPR to continue an upward cycle. As the extraordinary pressures in the financial markets developed, with their consequences for world activity and external prices, the idea began to emerge that the international scenario could do part of the job normally accomplished by the MPR. More recently, the reduction in inflation and the slowdown in activity and demand have generated important downward adjustments in market expectations, consolidating the belief that the MPR will be reduced substantially in the short term.

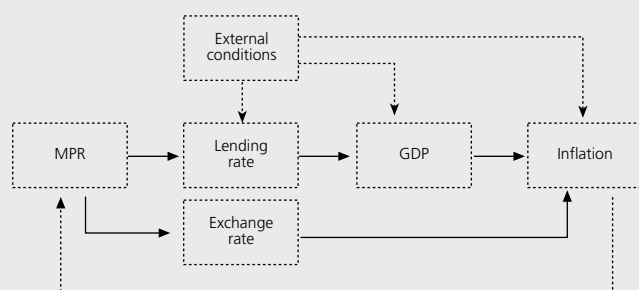
As a working assumption in the baseline scenario, the MPR will continue along a path that in the short term is somewhat lower than the implicit path in financial asset prices on 9 January 2009, after the Board reduced the MPR by 100 basis points. These private expectations consider that the MPR will be between 5.0 and 5.5% by mid-year (figures II.9 and II.10).

Box II.1: Changes in domestic lending conditions as a result of external financial shocks

There are several mechanisms through which the monetary policy rate (MPR) is transmitted to the economy and inflation, and there is an estimated lag of two to eight quarters for a rate change to act on inflation^{3/}. The MPR serves as a reference rate for all other effective interest rates in the financial market. It directly affects the cost of money, the consumption and investment decisions of market participants, the level of economic activity, the output gap, and inflation (diagram). The market interest rate level is determined by other factors in addition to the MPR, including current market conditions (both domestic and external), the credit risk assessment that each bank carries out on its clients, and the specific structure of the transaction.

Diagram

MPR transmission mechanisms

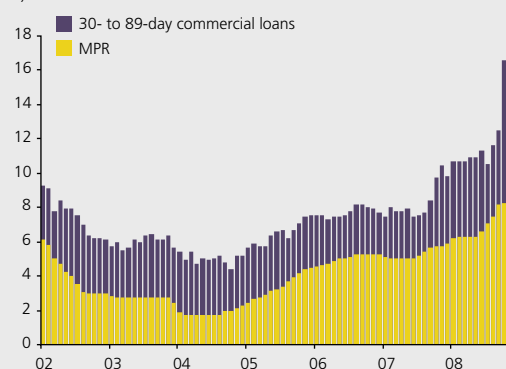


In the past eight years, the MPR and 30- to 89-day peso lending rate have been closely correlated, as is to be expected of the lending rate at these maturities. The lending rate has, for the most part, moved in line with changes in the MPR: between 2002 and mid-2007, the spread between the two rates was consistently on the order of 300 to 400 basis points (figure II.11). With the appearance of financial turbulence in August 2007, the spread increased to between 400 and 500 basis points. This phenomenon was accentuated in October 2008, when the tension in the international financial markets peaked. The lending rate thus increased about 500 basis points between September and December 2008, whereas the MPR remained unchanged^{4/}.

Although this increase could, in part, reflect the lagged effect of the 200-basis-point increase in the MPR between June

Figure II.11

MPR and bank lending rate in pesos
(percent)

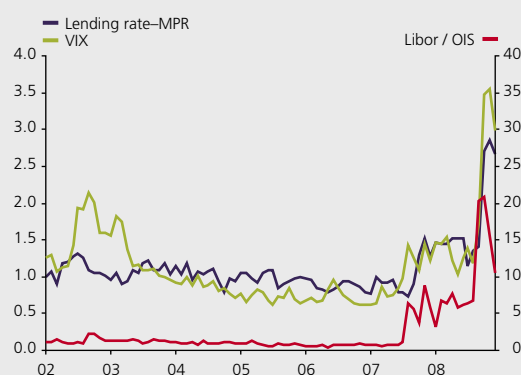


Source: Central Bank of Chile.

and September, given the timing and the elapsed period, it seems plausible that this phenomenon is linked to the sudden change in external conditions and its impact on risk assessment. In the last year and a half, when the stress in the developed financial markets intensified significantly, the external financing premium also increased (figure I.3). This is evident in the trend of the spread between the 30- to 89-day lending rate and the MPR, which has tended to coincide with the greater spread between the dollar Libor and the OIS, as well as the VIX^{5/} (figure II.12).

Figure II.12

Lending rate–MPR spread and other financial variables
(index, average January 2002–July 2007 = 1)



Sources: Central Bank of Chile and Bloomberg.

^{3/} For more on this issue, see Central Bank of Chile (2007).

^{4/} Becerra *et al.* (2008) and Núñez (2008) estimate, through traditional channels, the effect of an increase in the lending rate on output.

^{5/} Becerra and Pedersen (2008) provide some statistical explanations of the relationship between these and other variables.

The increase in the local spread was especially steep following the events of September and October, when a perception of heightened risk descended on the markets. Expectations that both the local and the global economic cycle would weaken had clearly increased, and it was feared that external financing could be affected. The banking industry has been expanding its loan-loss provisions since mid-2007, which provides an important safeguard for weathering a cyclical scenario in which the quality of the credit portfolio will probably worsen. In fact, nonperforming loans increased somewhat over the course of 2008 in the consumer and commercial segments^{6/}.

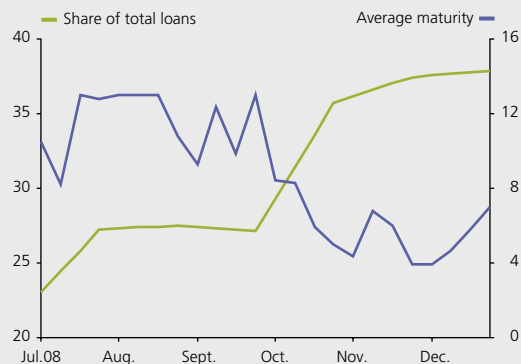
Not only are banks paying a higher financial premium on credit contracted overseas since October 2008, but maturities have also gotten shorter. This phenomenon, in turn, is reflected in the maturities of the credit portfolio in Chile, with a significant increase in the amounts loaned at 30 to 89 days vis-à-vis longer maturities (figure II.13).

^{6/} For more information on these indicators, see chapter V of the *Financial Stability Report*, second half 2008.

Figure II.13

Average maturity of banks' overseas credit and share of 30- to 89-day loans

(percent; months)



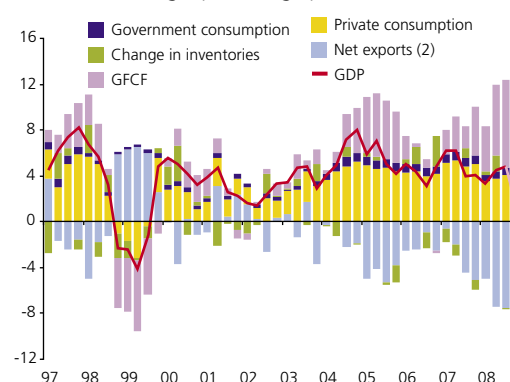
Source: Central Bank of Chile.

Finally, although domestic lending standards have tightened significantly, the annual growth of commercial credit has not fallen significantly in the last few months (figure II.7). However, the data indicate that the change in the macroeconomic scenario is having an impact beyond what was projected in November, with a substantial slowdown in activity.

III. Aggregate demand

Figure III.1

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



(1) Fourth quarter of 2008 is projected.

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

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 average annual growth rate of output was 4.2% through the third quarter of 2008, reflecting a steady increase in domestic demand supported by greater investment^{1/} (table III.1). In the last quarter of 2008, the macroeconomic scenario changed drastically, with a severe deterioration in the world economy, a significant tightening of domestic and external credit conditions, and a worsening of market participants' expectations.

Table III.1

Aggregate demand

(weight GDP; real annual change, percent)

	Weight, 2007						2008				
	2007	I	II	III	IV	Year	I	II	III	Accum.	
Domestic demand	106.3	6.8	8.0	7.9	8.6	7.8	8.3	11.4	11.2	10.3	
Final demand (excl. inventories)	105.6	8.1	9.1	7.2	9.5	8.5	8.1	10.2	11.4	9.9	
GFCF	25.8	9.1	13.2	8.0	16.9	11.9	16.5	24.4	30.1	23.7	
Machinery and equipments	12.0	7.7	18.3	8.8	26.1	15.5	22.9	34.0	49.7	35.7	
C&O	13.8	10.3	9.1	7.3	9.2	8.9	11.3	16.0	13.5	13.6	
Other	80.5	6.1	6.4	7.9	6.0	6.6	5.7	7.3	5.4	6.2	
Private consumption	67.6	8.0	8.3	7.2	7.4	7.7	5.4	5.7	5.8	5.6	
Durables	8.0	17.7	17.3	16.1	17.6	17.2	13.2	15.4	9.5	12.6	
Nondurables	29.4	7.6	6.9	6.3	6.2	6.8	4.3	5.7	6.6	5.5	
Services	30.1	6.4	7.4	5.8	6.1	6.4	4.7	3.2	4.1	4.0	
Government consumption	12.3	6.5	5.7	5.5	5.8	5.8	5.7	5.2	4.8	5.2	
CI (%GDP) (*)	0.7	1.0	0.7	0.9	0.7	0.7	0.7	1.1	1.0	1.0	
Goods and services exports	40.0	9.1	10.6	4.2	7.3	7.8	1.9	-1.4	6.5	2.2	
Goods and services imports	46.3	10.6	14.7	13.5	18.0	14.3	13.5	15.5	20.5	16.6	
GDP	100.0	6.2	6.2	3.9	4.0	5.1	3.3	4.5	4.8	4.2	

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

Source: Central Bank of Chile.

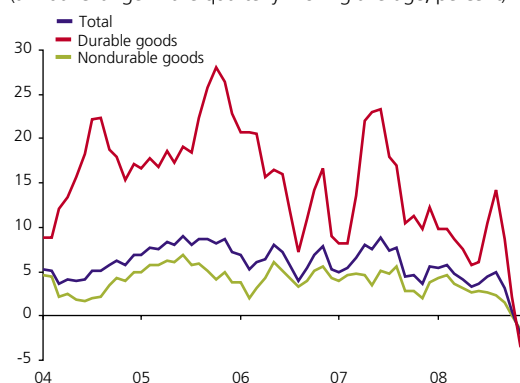
The available indicators for the fourth quarter of 2008 reveal a stronger economic slowdown than projected in November, which was also seen up in the components of spending that are most sensitive to changes in

^{1/} In accordance with the policy on the regular disclosure of the Quarterly National Accounts, the first GDP estimate for the third quarter of 2008 and a new GDP estimate for the first half of 2008 were published on 24 November.

Figure III.2

Real retail sales (IVCM)

(annual change in the quarterly moving average, percent)

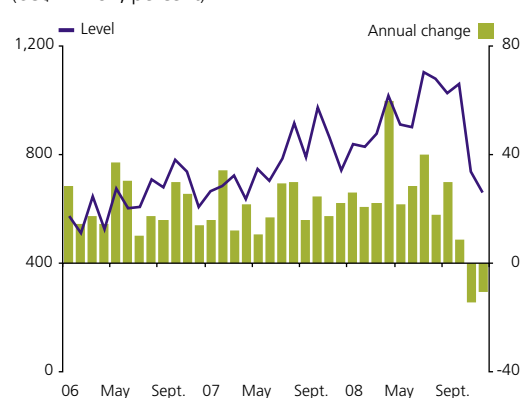


Source: National Statistics Bureau (INE).

Figure III.3

Consumer goods imports

(US\$ million, percent)

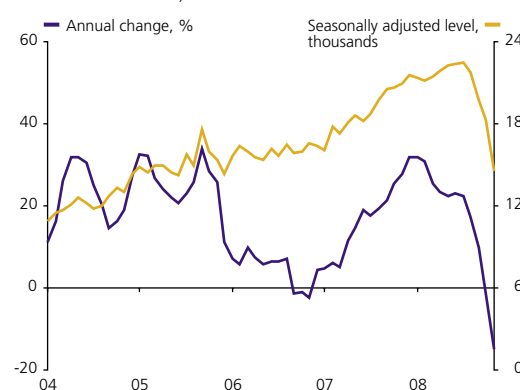


Source: Central Bank of Chile.

Figure III.4

New car sales

(annual change in the quarterly moving average, thousands of units)



Sources: National Automobile Association of Chile and Central Bank of Chile.

credit conditions (figure III.1). The annual increase in domestic demand is thus estimated to have fallen considerably in the period, with significantly lower growth in investment—in part, due to past high levels—and private consumption. Estimates for 2008 indicate that GDP grew 3.5%, while domestic demand increased 8.5% in annual terms. GDP growth in 2008 was slightly more than half a percentage point lower than forecast in November, which led to an expansion of excess capacity. The Board projects that in 2009, the annual growth of domestic demand will be markedly lower than in previous years, with a smaller increase in consumption and a decline in investment.

Private consumption and inventories

Estimates for the fourth quarter of 2008 indicate that private consumption growth declined to an annualized 3% (5.6% in the first three quarters of the year), and the drop was observed in both the durable and nondurable components. This implies that this factor of domestic demand will have increased around 5% in 2008 (versus 7.7% in 2007).

Partial indicators point to a weakening of consumption in the past few months. Retail sales, measured by various sources, fell significantly, with negative growth rates in November (figure III.2). Consumer goods imports also fell sharply, especially in November. Partial data for December indicate that the level fell again, although less markedly than in November (figure III.3). The slowdown in consumption was strongest in durable goods, which makes sense considering that this share of spending should be most affected by the change in credit conditions. Indicators such as car sales show a significant reduction in levels, with a sharp drop in annual growth rates (figure III.4).

The decline in private consumption coincides with the deterioration of some of its determinants. Credit conditions have tightened, not only in terms of the size of the loans and higher interest rates, but also with regard to lending standards. This is part of the natural normalization of the credit cycle in response to the projected deterioration of the economic cycle. The interest rates charged on this type of loan have increased substantially: almost 300 basis points between August and December 2008. The nominal stock of consumer loans grew at an annual rate of nearly 7% in late 2008, versus around 15% in the first half of the year. Another factor that has coincided with the weakening of consumption is the significant worsening in indicators of consumer expectations. The Economic Perception Index (IPEC) fell to just over 35 (where a pivot point of 50 indicates neutral expectations), thus approaching the lowest levels of the last six years (figure III.5). Although they are not included in the index, consumer perceptions on the economic situation of businesses and unemployment worsened, falling about 12 points in the last three months.

The reduction in consumption is consistent with the increase in firms' assessment of adequate inventory levels. According to the Monthly Business Confidence Indicator (IMCE), data on current inventories show a notable accumulation of inventories in manufacturing and retail firms in the last quarter of 2008 (figure III.6).

Figure III.5

Economic perception index (IPEC) (*)

(a value over (under) 50 points indicates optimism (pessimism))



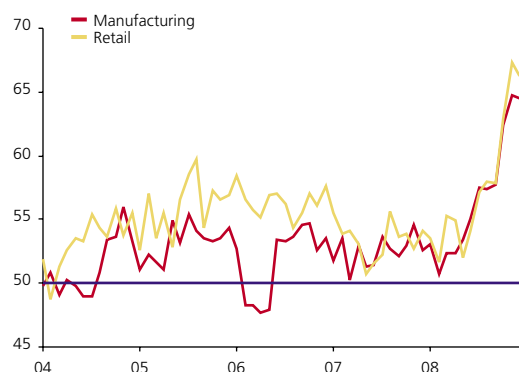
(*) Prior to January 2003, the index was quarterly; since that date, it is published monthly.

Source: Adimark.

Figure III.6

Current inventories (IMCE)

(a value over (under) 50 points indicates an excessive (inadequate) level)

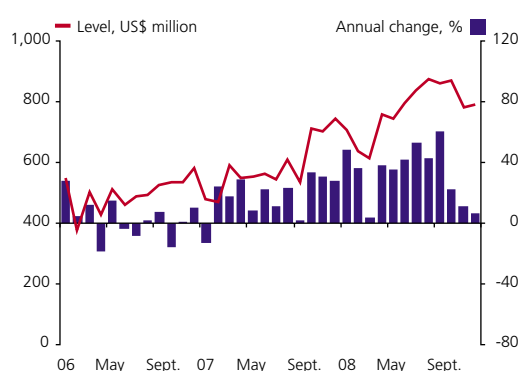


Sources: ICARE/Universidad Adolfo Ibáñez.

Figure III.7

Capital goods imports

(US\$ million; annual change, percent)



Source: Central Bank of Chile.

Gross Fixed Capital Formation (GFCF)

The annual growth rate of investment continued to expand strongly through the third quarter of 2008. In the fourth quarter, however, the outlook for investment changed significantly, especially in machinery and equipment. In November, the level of capital goods imports fell, and the growth rate declined significantly (figure III.7). The growth of new home sales also dropped substantially in the last few months, which is in line with the assessment that the real estate sector is being affected by the tighter credit conditions and heightened uncertainty (figure III.8). The demand prospects facing firms in the sector, as collected in the IMCE, worsened considerably and are now well below neutral.

For construction and engineering, the data available through the third quarter of 2008 show that, unlike other elements of spending, the annual growth rate did not change much. The September investment project survey carried out by the Capital Goods and Technological Development Corporation (*Corporación de Desarrollo Tecnológico y de Bienes de Capital, CBC*) showed a slight decline in the level projected for 2008 and continued to forecast important increases for 2009 and 2010. The continued annual growth of this component of investment can be attributed to the fact that an important share of investment projects are in advanced stages of development and thus cannot be adjusted substantially. Observation indicates that some investment projects have been put on hold and/or suspended, especially in the real estate sector. A November CBC survey confirms this trend and adds that, thus far, no energy projects have been suspended or deferred.

The slower annual growth of investment in machinery and equipment is consistent with the tighter credit conditions. Since August, interest rates on commercial loans have increased more than 500 basis points in nominal terms, although the annual growth rate of the nominal stock of commercial loans has not changed greatly in the last few months (figure II.7). The use of financing sources other than bank credit is on the rise. Corporate bond issues, in particular, represent an alternative to external financing and the local banking system, although the spreads are larger than in the past. Business expectations, as measured by the IMCE, have deteriorated markedly and are currently at the lowest level on record (the index has been published since 2003) for all sectors and even lower when the mining sector is excluded (figure III.9).

All told, GFCF is estimated to have grown 19.9% in 2008. This figure is somewhat higher than projected in the September *Report*, due to the revision of the data for the first three quarters of the year; the fourth quarter performance was clearly lower than forecast. The level of investment is thus around 30% of GDP, measured in 2003 prices (figure III.10).

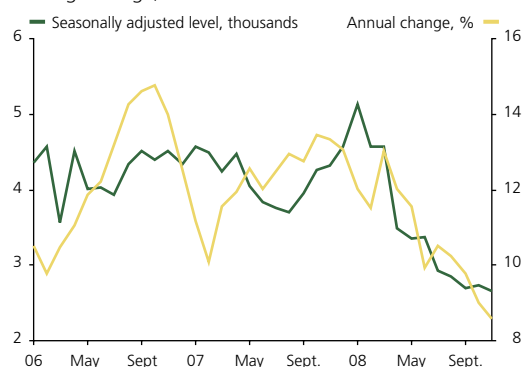
Fiscal policy

In September 2008, the budget performance of the Total Central Government resulted in an accumulated surplus of 5.1% of GDP (4% in June). In the first three quarters of 2008, budget revenues for one year decreased 6.1%, while budget expenditures grew 12.5% in real terms. The high growth in expenditures and compliance with the structural surplus target suggest that fiscal expenditures grew less at the end of 2008.

Figure III.8

National new home sales (*)

(thousands of units, annual change in the quarterly moving average)



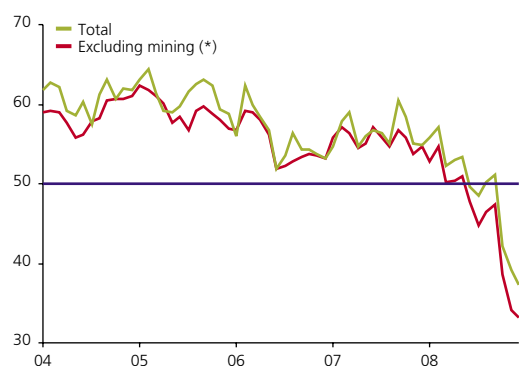
(*) Sales in the moving quarter ending in the corresponding month.

Sources: Central Bank of Chile and Chilean Chamber of Builders.

Figure III.9

Business confidence index (IMCE)

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



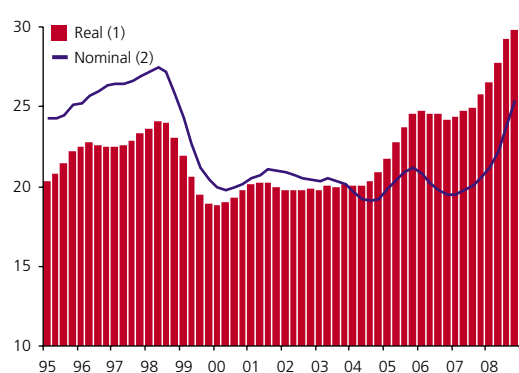
(*) Weighted average of three sectoral confidence indicators: Manufacturing, Retail, and Construction.

Sources: ICARE/Universidad Adolfo Ibáñez.

Figure III.10

Gross fixed capital formation (GFCF)

(percent of GDP, moving year)



(1) At 2003 prices.

(2) At current prices.

Source: Central Bank of Chile.

The implications of the fiscal stimulus program announced in early January are taken into account in the baseline scenario of this *Report*, which considers that the structural surplus rule will temporarily drop from 0.5% to 0% of GDP this year and growth in 2009 will be partly determined by this stimulus, with an effect that is in line with the Government's evaluation when it was announced.

Exports and imports

The trade balance is estimated to have closed 2008 with a surplus on the order of US\$10.000 billion, which is just under half the surplus registered in 2007. This outcome reflects a drop on the export side, especially in mining, as a result of lower global demand. Total fob exports were around US\$67.800 billion, with zero annual growth. Total cif imports are estimated at about US\$61.700 billion, which represents a 31% annual increase (table III.2).

Table III.2

Foreign trade

Exports

	Value (US\$ million)	Annual change, percent								
		Total Value	Mining Vol.	Price	Manufacturing Value	Vol.	Price	Agriculture Value	Vol.	Price
2006 Year	58,485	41.7	2.4	38.3	59.4	-1.1	61.2	19.5	5.3	13.4
2007 Year	67,644	15.7	7.1	8.0	16.6	7.6	8.4	13.6	5.9	7.3
2007 I	16,619	20.7	6.9	13.0	19.0	4.1	14.3	26.4	12.8	12.1
II	18,294	19.6	12.7	6.1	23.9	17.7	5.3	11.4	4.8	6.3
III	16,272	5.0	0.2	4.8	3.2	-1.9	5.2	5.8	1.6	4.1
IV	16,460	18.2	9.1	8.4	21.7	10.8	9.9	13.3	7.9	5.0
2008 I	19,137	15.2	-0.8	16.0	18.7	-0.9	19.8	6.0	-4.2	10.7
II	18,334	0.2	-6.6	7.2	-9.8	-14.0	5.0	15.6	2.7	12.6
III	16,816	3.3	3.8	-0.4	-9.5	0.1	-9.6	25.5	8.9	15.2
IV	13,503	-18.0								

Imports

	Value (US\$ million)	Annual change, percent								
		Total Value	Mining Vol.	Price	Manufacturing Value	Vol.	Price	Agriculture Value	Vol.	Price
2005 Year	32,735	32.0	21.1	9.0	24.9	22.0	2.4	59.3	56.1	2.1
2006 Year	38,405	17.4	11.6	5.3	21.1	19.3	1.5	1.7	0.5	1.2
2007 Year	47,125	22.7	17.5	4.4	20.6	18.1	2.1	17.8	16.7	0.9
2007 I	10,085	11.9	10.2	1.5	19.7	18.5	1.0	7.6	6.9	0.6
II	11,228	19.7	16.7	2.5	16.0	13.4	2.3	19.2	18.3	0.7
III	12,306	23.0	19.1	3.2	25.0	22.8	1.8	12.1	10.8	1.2
IV	13,506	34.9	21.9	10.7	21.3	17.1	3.5	30.6	29.2	1.1
2008 I	14,002	38.9	17.7	18.0	23.0	15.0	6.9	27.4	23.8	3.0
II	16,231	44.6	20.3	20.2	35.7	25.3	8.3	38.2	34.0	3.2
III	17,728	44.1	23.9	16.3	28.6	17.8	9.2	51.9	48.9	2.0
IV	12,892	-4.5								

Source: Central Bank of Chile.

Estimates indicate that the volume of exports fell around 2% in annual terms in 2008, reflecting the 5% drop in mining exports. This is explained by the various technical problems and lower-grade ore affecting the sector, which resulted in a negative impact on GDP. The volume of manufacturing exports is estimated to have grown around 2% in 2008, despite the weak performance of salmon exports in the last quarter of the year. This is in line with the fish health emergency currently hitting the sector.

The estimated increase in the volume of imports in 2008 is around 17% in annual terms. The fourth quarter of 2008 was marked by strong reductions

in the growth rates of all types of imports. Consumer imports declined in annual terms, while capital imports grew at a considerably lower pace than in preceding quarters.

The terms of trade fell sharply in recent months, with an estimated decline of 11.1% in 2008. Projections in September were for a 5.9% drop and in November for a 10.5% reduction. Projected drops for this year and the next are 19.1 and 2%, respectively. The former figure is almost triple the forecast in the last *Report*. This reduction is explained by a generalized reduction in the prices of Chilean exports as a result of the new global demand conditions, which more than offsets the oil price reduction. Forecasts for the copper price fell from a projected average for 2009 of US\$3.10 a pound in the September *Report* to US\$1.50 in this *Report*. Wood pulp fell 27% relative to the price in September, to around US\$640 a ton; this is the lowest price since 2006. Fishmeal fell 14% since the last *Report*, to around US\$915 a ton. In the same period, molybdenum suffered a strong downward adjustment of over 60%; it is currently trading at US\$12 a pound. The terms of trade excluding copper are expected to rise 4.3% in 2009 and fall 5.1% in 2010.

The current account of the balance of payments is estimated to have closed 2008 with a deficit of US\$4.500 billion, or -2.6% of GDP, which is slightly below the November estimate. Projections are for the deficit trend of the current account to be accentuated in 2009, as a result of the declining prices of various export products and weak world demand. Thus, in the most likely scenario, the current account of the balance of payments will run a negative balance of around 4.5% of GDP in 2009.

Box III.1: Effects of the drop in the copper price

The severe deterioration of the world economy has led to significant reductions in commodity prices. Copper has lost 70% of its value since early July, when it was over US\$4.00 a pound. It was trading around US\$1.40 at the statistical closing date of this *Report*. In real terms, deflated by the U.S. commodities PPI, its current level is above the lows of the late 1990s and early 2000s and is close to the average of the last twenty years (figure III.11).

Figure III.11

Real copper price (1)

(US\$/lb in 2005 prices)



(1) Copper price deflated by the U.S. Commodity PPI (2005 = 100).

(2) Annual averages through 2007; monthly averages for 2008.

Sources: Central Bank of Chile, Bloomberg, and Chilean Copper Commission.

In the past, the Chilean economy was strongly procyclical, tied to the copper price. Periods of high (low) prices were accompanied by a sharp expansion (contraction) of GDP (figure III.12). In recent years, the copper price has hit historic peaks, but GDP has not registered the customary expansions. This can be explained by the development of the Chilean macroeconomic framework, which includes policies to smooth cyclical fluctuations—most notably, an accountable and predictable fiscal policy that guarantees the solvency of the public sector and evens out the spending of copper revenues through the structural fiscal surplus rule.

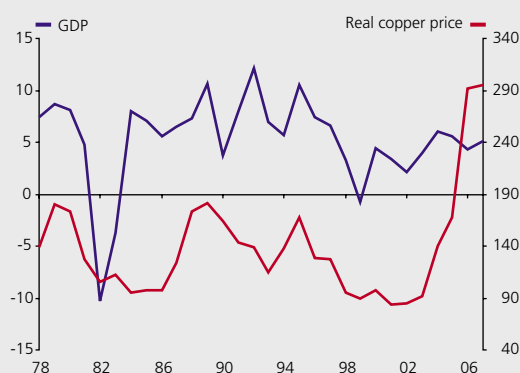
Although its relative weight has been declining in recent decades, copper continues to be Chile's main export product. As a result, the steep drop in price has important consequences for the value of national exports and, therefore, for the current account deficit. The baseline scenario of this *Report* projects that, in 2009, the value of copper exports will fall to practically half the 2008 level, with a direct effect on the trade balance. This effect is partially diluted in the current account, since a substantial share of the mining firms is foreign

owned, which reduces overseas remittances. Thus, the drop in the copper price has an important effect on nominal GDP that is somewhat lessened in the case of national revenues. Moreover, taking into account the fact that a share of the domestic mining companies is essentially state owned^{2/}, the effect on private earnings can also be estimated to be lower.

Figure III.12

GDP growth and the real copper price (*)

(annual change, percent, US\$/lb)



(*) Copper price deflated by the U.S. Commodity PPI (2005 = 100).

Sources: Central Bank of Chile and Chilean Copper Commission.

With regard to output, there is a direct channel to the extent that copper production is curtailed in response to the lower price. In the baseline scenario, the volume of copper exports will increase around 2% in 2009, compared with practically zero growth, on average, in the 2005–08 period. Unlike in 2008, mining activity is projected to have a positive impact on GDP. There is also an indirect channel if the lower national income^{3/} reduces domestic demand. Given the fiscal policy framework, this channel should be less important than in the past.

The drop in the copper price is part of the wider deterioration of the global cycle, and Chile will be affected since it is commercially and financially integrated in the world economy. This basically implies a reduction in national wealth, even though the impact on the economic cycle is more moderate than in the past.

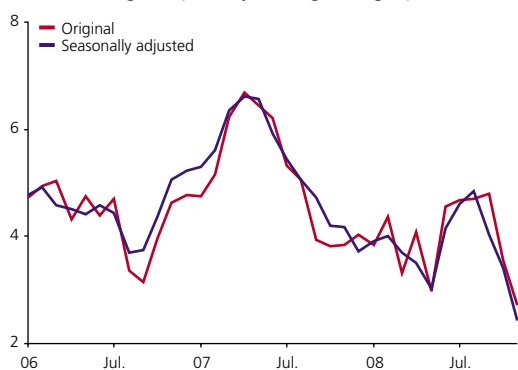
^{2/} Box III.1 in May 2005's *Monetary Policy Report* discusses the effect on fiscal revenues of each dollar of copper exports.

^{3/} For further details, see *Monetary Policy Report*, September 2006, box III.1.

IV. Output and the labor market

Figure IV.1

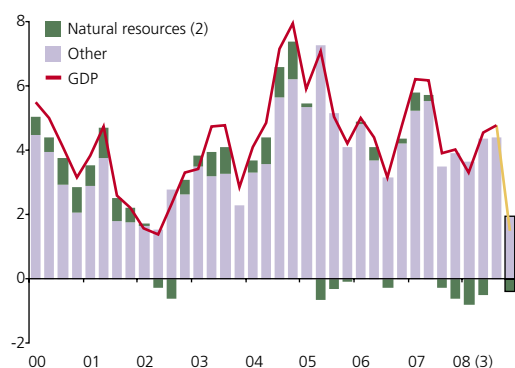
Monthly index of economic activity (Imacec)
(annual change in quarterly moving average, percent)



Source: Central Bank of Chile.

Figure IV.2

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



- (1) GDP at factor cost plus bank charges.
(2) Mining, fishing, and EGW sectors.
(3) The fourth quarter of 2008 is projected.

Source: Central Bank of Chile.

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

Total GDP

In the last quarter of 2008, output slowed more sharply than forecast in November. This outcome was driven by the change in the macroeconomic scenario, including a tightening of external and domestic credit conditions and a lot of uncertainty among economic agents.

Table IV.1

Gross domestic product
(real annual growth, percent)

	2007						2008			
	2007	I	II	III	IV	Year	I	II	III	Accum.
Agriculture, livestock, and forestry	3.8	4.7	5.8	-2.2	4.4	4.0	3.5	6.9	-2.9	3.8
Fishing	1.1	1.5	5.2	-1.5	-7.1	-0.1	-2.8	8.9	10.3	4.6
Mining	7.3	6.2	5.5	4.1	-0.7	3.7	-4.1	-5.3	-6.1	-5.2
Manufacturing	16.1	4.4	5.3	0.1	0.4	2.5	-0.1	-0.1	1.9	0.5
EGW	2.4	3.8	-9.5	-20.1	-17.0	-10.7	-17.3	-8.8	16.2	-4.8
Construction	7.2	9.5	8.5	6.8	8.5	8.3	10.4	14.6	12.4	12.5
Retail (1)	10.5	7.9	8.1	4.5	5.4	6.5	3.8	6.1	5.8	5.2
Transport	7.1	6.5	8.0	5.0	4.0	5.9	5.7	5.0	8.0	6.2
Communications	2.6	11.5	13.2	13.9	14.7	13.4	11.8	11.8	11.8	11.8
Other services (2)	36.4	5.8	5.9	5.0	5.3	5.5	5.1	5.0	4.8	4.9
Natural resources (2)	11.0	5.0	1.8	-2.5	-5.2	-0.3	-7.2	-4.5	-0.1	-4.1
Other (2)	83.7	6.3	6.6	4.2	4.8	5.5	4.4	5.2	5.2	4.9
Total GDP (3)	100.0	6.2	6.2	3.9	4.0	5.1	3.3	4.5	4.8	4.2

(1) Includes restaurants and hotels.

(2) See glossary for definition.

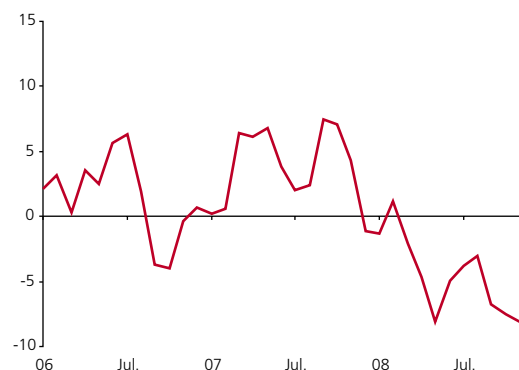
(3) Total GDP corresponds to the sum of GDP natural resources, other GDP, net VAT revenue, and import duties, less bank charges.

Source: Central Bank of Chile.

The data available at the close of this *Report* confirm the slump in output, especially in November, when the Monthly Index of Economic Activity (Imacec) grew at an annual rate of 0.1% and manufacturing fell nearly 6% in annual terms, according to the National Statistics Bureau (INE) (figure IV.1). The worsening of output indicators had a strong impact on output in the different natural resource sectors. The data for December—for

Figure IV.3

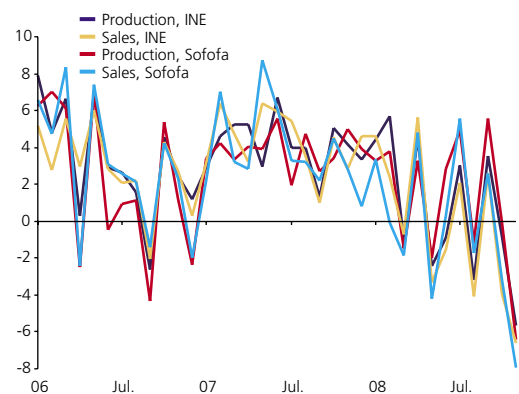
Mining production
(annual change in the quarterly moving average, percent)



Source: National Statistics Bureau (INE).

Figure IV.4

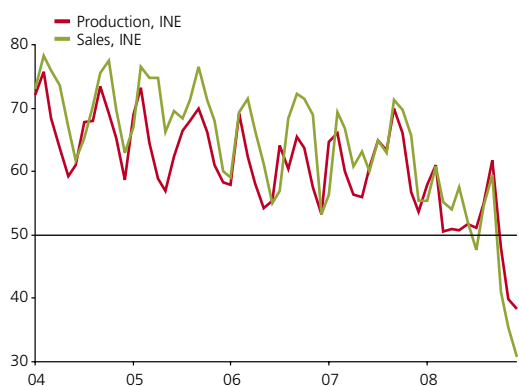
Manufacturing sector indicators
(annual change, percent)



Sources: National Statistics Bureau (INE) and Manufacturing Development Association (Sofofa).

Figure IV.5

Production expectations (IMCE)
(a value over (under) 50 indicates that it will increase (decrease))



Sources: Icare/Universidad Adolfo Ibáñez.

example, on electricity generation and imports—suggest that the economic downturn has not deepened. It is thus estimated that in the fourth quarter, the contribution of the different natural resource sectors to total output was significantly reduced (figure IV.2). The natural resource sectors maintained a negative contribution throughout the year. Only electricity, gas, and water (EGW) contributed positively to growth following the recovery of hydrologic conditions, with annual growth rates around 12% in the second half of the year. GDP is thus estimated to have grown 3.5% in 2008^{1/} (table IV.1). This is just over half a percentage point less than the growth rate forecast in November, which led to an expansion of excess capacity.

For this year, the Board projects that the Chilean economy will grow in a range between 2.0% and 3.0%. The use of a range for the growth projection reflects the different levels of output that are consistent with the set of assumptions about the external and internal scenarios, especially the effect of fiscal policy and the assumption in the baseline scenario of a MPR trajectory that is somewhat below market expectations, after the Board reduced it 100 basis points. The level of external uncertainty is higher than in previous periods, so the probability that the economy will grow within a projected one-percentage-point range is lower than on other occasions. Moreover, there is a stronger possibility of more negative alternative scenarios, which biases the balance of risks downward. In 2009, a key determinant of output will be the fact that the annual growth of domestic demand, in both its consumption and investment components, will be markedly lower than in previous years, in response to the deterioration of the international scenario and its effects on the Chilean economy. The demand for national exports is also expected to fall.

GDP for natural resources

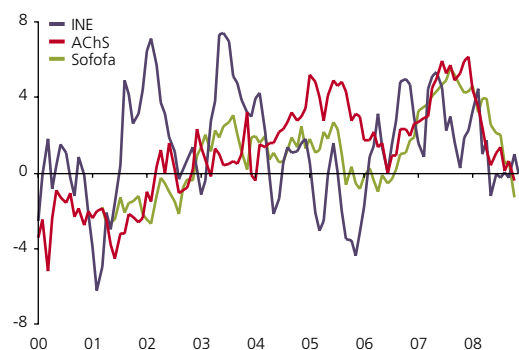
In the first half of 2008, the natural resource sectors completed a year of negative contribution to aggregate growth. In the third quarter, the compensatory effect of the strong recovery of EGW and the sustained growth of fishing managed to partially offset the meager performance of mining. The recovery of EGW was based on the improved hydrologic conditions. The favorable outcome for fishing was mainly due to the greater output of farming centers, stemming from the early harvest of salmon infected with the ISA virus, aimed at salvaging production. In mining, however, the unfavorable conditions persisted, with low-grade copper and technical problems. In addition, small mines became less profitable in the last quarter of 2008, as a result of the low prices (figure IV.3).

The baseline scenario considers that EGW will continue to post high annual growth rates at least in the first half of 2009, given the low basis for comparison. Mining is predicted to grow over the course of the full year, although it will continue registering negative annual growth rates in the first

^{1/} In accordance with the policy on the regular disclosure of the Quarterly National Accounts, the first GDP estimate for the third quarter of 2008 and a new GDP estimate for the first half of 2008 were published on 24 November.

Figure IV.6

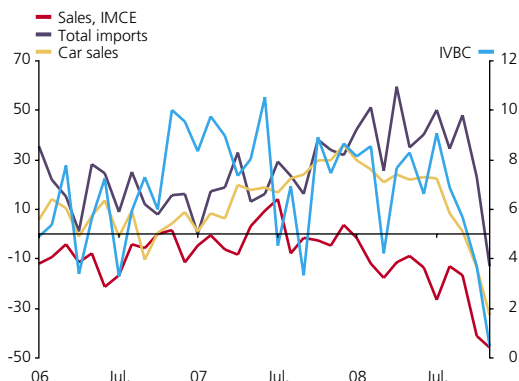
Manufacturing employment
(annual change, percent)



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

Figure IV.7

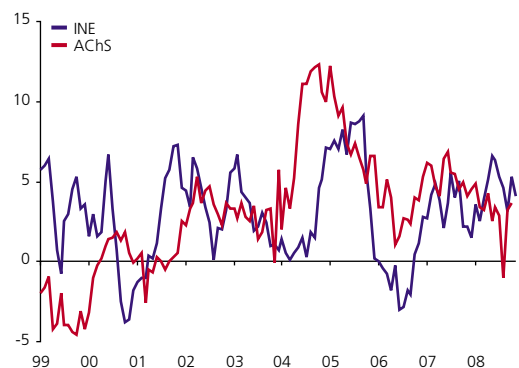
Retail sector indicators
(annual change, percent)



Sources: Central Bank of Chile, Icare/Universidad Adolfo Ibáñez, National Association of Car Dealers, and National Statistics Bureau (INE).

Figure IV.8

Retail employment
(annual change, percent)



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

half. Fishing will be the most depressed sector, as it continues to face the effects of the salmon crisis, compounded by scarce ocean resources. The indicators for the last quarter of 2008 and the outlook for 2009 suggest that salmon output will fall sharply.

Other GDP

In the third quarter of 2008, the GDP of sectors other than natural resources grew above the average for the first half of the year, with strong contributions from construction and retail. In the latter part of the year, however, the sectors that are the most sensitive to changes in demand were the most affected by the change in the macroeconomic scenario. Thus, the baseline projection for the coming quarters is that growth will be substantially slower than in previous periods.

Manufacturing

Manufacturing was not very dynamic throughout 2008. In the first half of the year, the sector's annual growth rate was near zero. It increased to around 2% in the third quarter, but the figures for October and especially November are negative, at -0.8% and -5.7% , respectively, according to INE data. These figures are similar to those reported by the Manufacturing Development Association (Sofofa) (figure IV.4). This phenomenon of a slump in Manufacturing is occurring in many economies (figure VI.5).

The baseline scenario projects that manufacturing will continue to post negative annual growth rates in the coming months, which is consistent with the current scenario of higher costs, weak global demand (and its implications for exports), and large inventories. Business expectations in the sector, measured through the IMCE, also point to declining production in the coming months, beyond seasonal considerations (figures III.7 and IV.5). Moreover, the closing of an automobile plant in the north of the country has affected the year-on-year comparison of the sector's output, which will continue to be felt for some time. Another factor with potentially serious effects on the sector are tighter credit conditions. Finally, the impact of the drop in the oil price will partially offset the deterioration of the macroeconomic scenario.

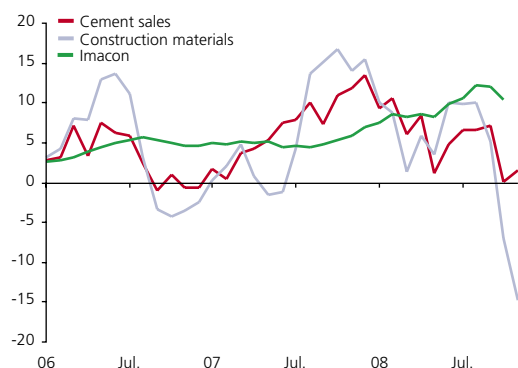
With regard to employment in the sector, the most recent data reveal practically zero annual growth, which is consistent with the pattern of sectoral output over the course of the year. INE data show essentially no job creation since mid-year. The Chilean Association for Occupational Safety and Health (AChS) reports zero annual growth in the moving quarter ending in October, while Sofofa shows a job contraction in the same period (figure IV.6).

Retail and other services

The available partial data for the last quarter of 2008 indicate that the annual growth rate of retail activity fell significantly relative to the first quarters of the year (figure IV.7). Car sales, in particular, posted a steep fall, from around

Figure IV.9

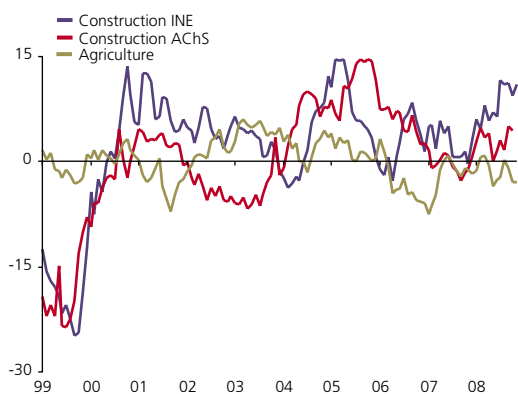
Indicators of construction activity
(annual change in the quarterly moving average, percent)



Sources: Central Bank of Chile and Chilean Chamber of Builders.

Figure IV.10

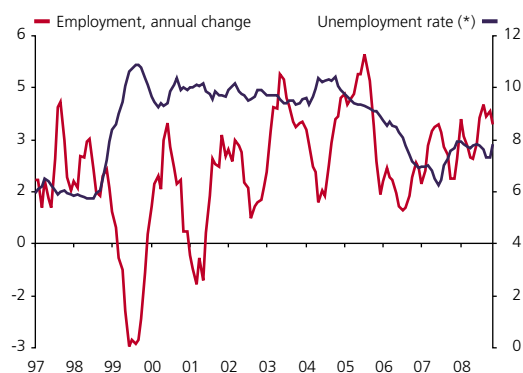
Construction and agricultural employment
(annual change, percent)



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

Figure IV.11

Employment and the unemployment rate



(*) Seasonally adjusted series.

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

20% growth in August 2008 to a 30% drop in November. These trends are in line with the lower imports of these goods and with observations of a build-up of excess stock. Retail sales became sluggish toward the end of the year, while wholesalers also reported a slump, primarily associated with less movement of construction materials and fuels and, more recently, a drop in machinery and equipment sales.

The baseline scenario assumes that the change in the macroeconomic environment will lead to an important adjustment in the annual growth of domestic demand, with slower growth of consumption and a decrease in investment. Both elements should contribute to lower annual growth rates for retail activity than in previous years. Business expectations in the sector—measured through the IMCE—support this diagnosis (figure IV.5). At the same time, the lower inflation expected for 2009 should have positive effects on available income, while the easing of monetary policy and the effect of the fiscal stimulus program should boost activity in the sector.

The annual growth of retail employment has not changed substantially in recent months. According to INE data, sectoral employment grew at an annual rate over 3% in the second half of 2008. The AChS reports that annual job growth has oscillated over the course of the year, but employment is currently near its level at the beginning of the year (figure IV.8).

Several sources indicate that other activities tied to the provision of services—such as transport and communications—also slowed in the fourth quarter of 2008, after growing strongly in the first three quarters of the year.

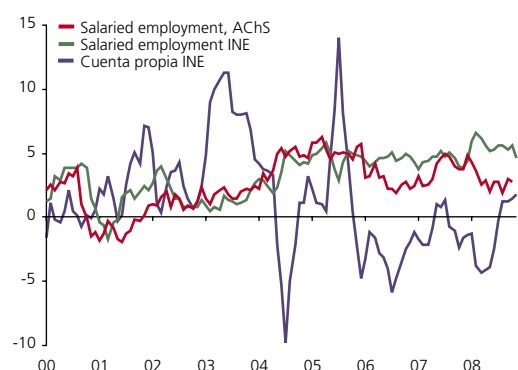
Construction

Aggregate indicators for the sector, such as the Imacon, have been stable, according to data available in November. Partial indicators for the sector, however, reveal a slump toward the end of 2008. Activities related to demand, such as new home sales, have slowed significantly (figure III.9). This coincides with the tighter credit conditions and the uncertainty about future macroeconomic developments. As a result, real estate projects have been temporarily postponed, in some cases indefinitely. Supply-side indicators have also declined, especially the sale of cement and other building materials (figure IV.9). In contrast, sectoral employment data show an annual growth rate that is similar to previous months (figure IV.10).

The short-term outlook for the sector, as in the case of gross capital formation in construction and engineering, mainly rests on the dynamic performance of ongoing engineering works. The September CBC survey of investment projects detected a slight decline in the level forecast for 2008, with continued increases in 2009 and 2010 (figure III.10). Unofficial reports indicate that some investment projects have been put on hold and/or suspended, especially in the real estate sector. A November CBC survey confirms this trend and adds that, thus far, no energy projects have been suspended or deferred. The Government recently announced US\$700 million in infrastructure projects, which should help the sector, although the duration of the effect is hard to estimate.

Figure IV.12

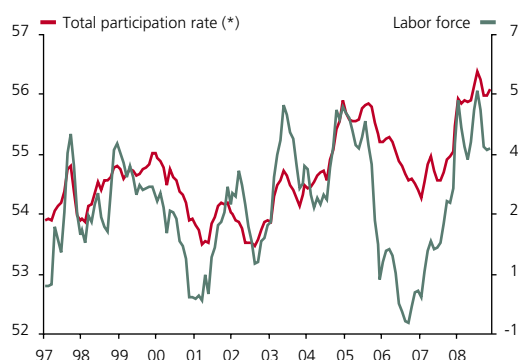
Employment by occupational category
(annual change, percent)



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

Figure IV.13

Total participation rate and annual growth of the labor force
(percent)



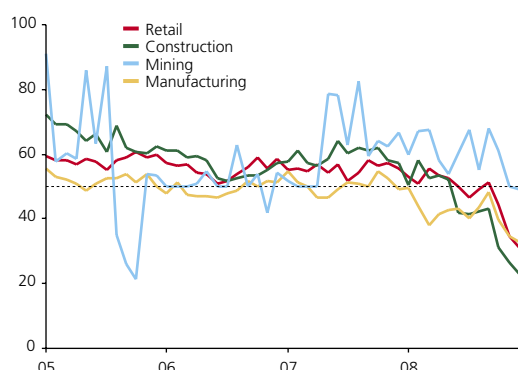
(*) Seasonally adjusted series.

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

Figure IV.14

Evolution of sectoral employment (IMCE)

(a value over (under) 50 indicates optimism (pessimism))



Source: Icare/Universidad Adolfo Ibáñez.

Agriculture, livestock, and forestry

In the third quarter of 2008, agriculture, livestock, and forestry recorded a contraction. The GDP of the agricultural subsector was affected by a drop in the production of crops for processing, the fruit subsector by lower export volumes, and the forestry subsector by a decline in lumber production. The most recent data indicate a reduction in cropping plans for this year, which is in line with the changes in relative prices (namely, lower sales prices and continued high input costs). Together with the reduced demand for wood-based products, these trends will decrease sectoral output. Sectoral employment, as reported by the INE, registered negative or near-zero growth throughout 2008 (figure IV.10).

Employment, participation, and unemployment

In contrast with output and demand, the labor market has not changed significantly in the past few months. According to INE data, employment continues to grow steadily, while unemployment rose slightly in the most recent period (figure IV.11). The share of wage labor continues to expand (around 5% in annual terms), while the contraction of self-employment has been reversed (figure IV.12). Other sources, such as the AChS and data from the University of Chile on Greater Santiago, report similar employment trends, with some differences in levels.

The participation rate, which increased steadily after late 2006, was stable in 2008, at 56% in seasonally adjusted terms (figure IV.13). The unemployment rate has fluctuated between 7% and 8% in recent months. It increased in November, returning to the upper end of that range. Nevertheless, the current unemployment level is within the range considered to be consistent with the Nairu.

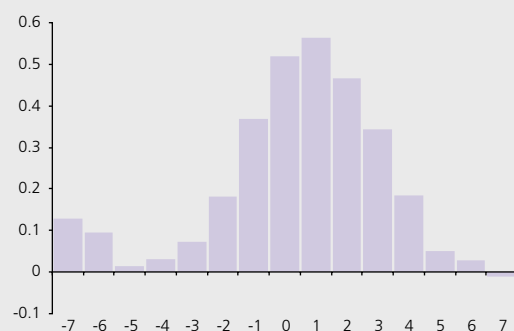
Past experience suggests that the slowdown in economic activity could cause a reduction in job creation. The Chilean economy has changed in the past several years, however, and the historical correlations between these variables may not be very informative about their future comovement (box IV.1). At any rate, forecasts for future employment, such as indicators based on IMCE data, feature lower expected job creation (figure IV.14).

Box IV.1: Employment outlook

The world economy has been subject to a lot of stress in recent months, the main developed economies are in recession, and the labor market, as is common in these cases, has begun to suffer the effects of the deterioration, and unemployment has increased significantly. The Chilean economy has also begun to feel the effects of the global downturn, which will be reflected in spending, employment, and inflation, among other variables. Restrepo and Soto (2006) show that employment is half as volatile as output and that its cycle lags behind the GDP cycle by one to three months (figure IV.15).

Figure IV.15

Correlation between GDP and employment
(over the annual change in the series)



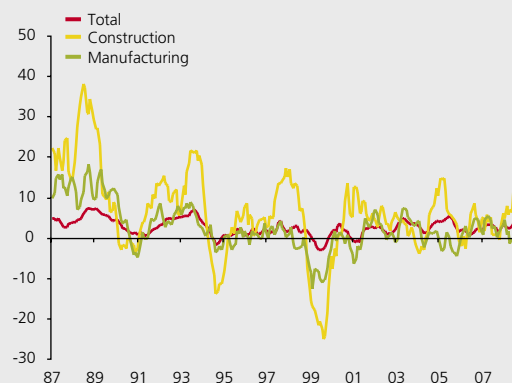
Source: Central Bank of Chile.

In the 1990 and 1998 cycles, the annual growth rate of employment declined much less than the GDP growth rate. The rate was not negative at any time in 1990–91, and it was negative for a shorter period than GDP growth in 1998–99. These aggregate figures hide the diversity of sectoral responses, especially in areas like construction and manufacturing, whose output and employment respond more strongly to the cyclical fluctuations of the economy. Between 1999 and 2000, construction jobs fell 25% (August 1999), and the drop in manufacturing employment was above the average (figure IV.16).

In construction, the potential impact on employment can be sized up using the historical correlation between this variable and some determinants of sectoral output, such as cement sales (figure IV.17). In general, cement sales lead changes in employment by about a quarter. Aisen and Jones (2008) build a model to project employment in the sector. Based on changes in variables such as cement sales, they estimate that sectoral employment will begin to post negative growth rates in the first quarter of 2009.

Figure IV.16

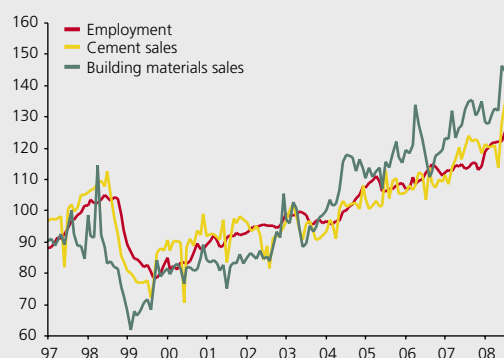
Sectoral employment
(annual change, percent)



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

Figure IV.17

Construction employment, cement, and building materials sales
(average index Jan. 1997 – Nov. 2008 = 100)



Source: Central Bank of Chile.

Historical data suggest that employment growth can be expected to suffer as a result of the downturn in the economic cycle. The magnitude of this effect cannot be directly projected based on historical experience, however. Because the Chilean labor market has undergone important structural changes in recent years, the response of the labor force is not at all clear, and the behavior of self-employment must be carefully monitored. The response of employment could also change because the market has incorporated new technologies and improved productivity, and the current political economy framework is different than in previous episodes. Job creation is therefore expected to reflect the impact of the new macroeconomic scenario without necessarily dovetailing the output trend, given special employment programs.

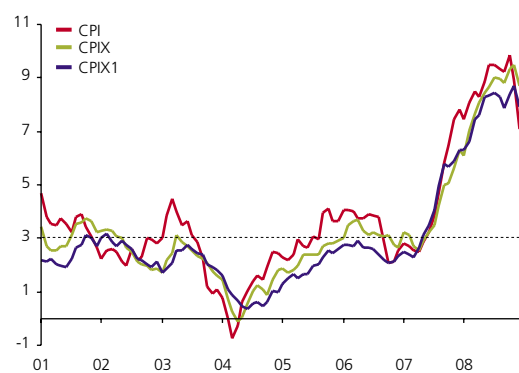
V. Prices and costs

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

Recent trends in inflation

Figure V.1

CPI, CPIX, and CPIX1 inflation (*)
(annual change, percent)

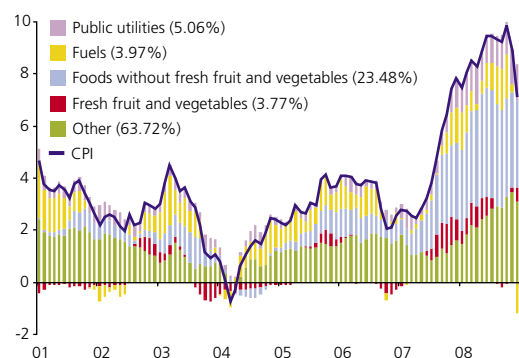


(*) See glossary for definition.

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

Figure V.2

Components of annual CPI inflation (*)
(percentage points)



(*) Share of CPI basket in parentheses.

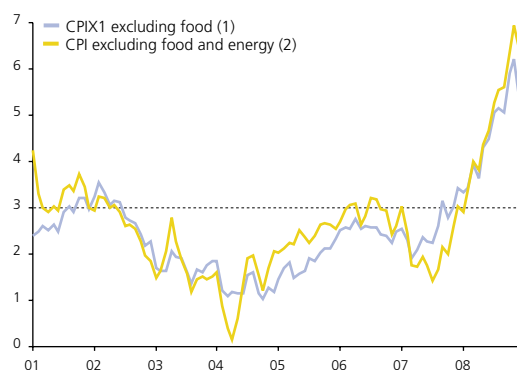
Sources: Central Bank of Chile and National Statistics Bureau (INE).

The macroeconomic scenario has continued suffering drastic changes in recent months, generating a medium-term outlook in which the inflationary pressures facing the Chilean economy are lower than projected in September. In the final months of the year, monthly CPI inflation was negative as a result in the drop in fuel prices, while the core and trend components posted smaller increases, at the margin, than in previous months. Nevertheless, annual inflation continues to be high and far above the inflation target.

Annual CPI inflation increased steadily to a peak of 9.9% in October. Inflation then began to ebb in November and especially December, largely because of the reduction in fuel prices. The negative monthly inflation rate was in line with November forecasts, and 2008 closed with an annual CPI inflation of 7.1%. The CPIX and CPIX1 measures of core inflation ended the year with annual rates of 8.7 and 7.9%, respectively; these rates are slightly lower than in the preceding months (figure V.1). In December, the monthly increases in these measures were again substantially below the levels of preceding months. This component continues to have a strong impact, however. Inflation excluding the prices of foods, fuels, and public utilities accounted for slightly more than three percentage points of the annual CPI growth in December, versus an average of 1.6 percentage points in the 2000–06 period (figure V.2).

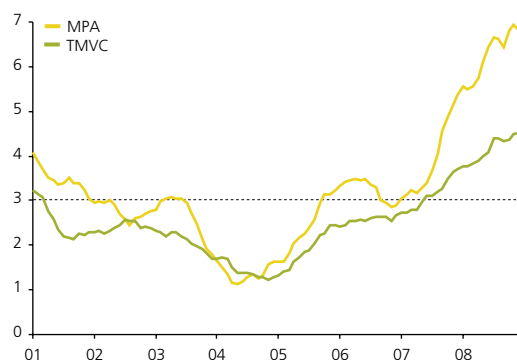
Other measures of core inflation also declined in the last month of 2008. Inflation measures excluding components such as food and energy prices posted substantial increases through November, although in annual terms they remain below the levels of the CPIX and CPIX1. In December, annual CPI inflation excluding food and energy (leaving 68% of the total CPI basket) was 6.4%, and the CPIX1 excluding food (leaving 52% of the total CPI basket) was 5.3% (figure V.3).

Trend inflation measures continue to rise, although much more gradually than the rate registered through August 2008. At the same time, the

Figure V.3CPI excluding different components
(annual change, percent)

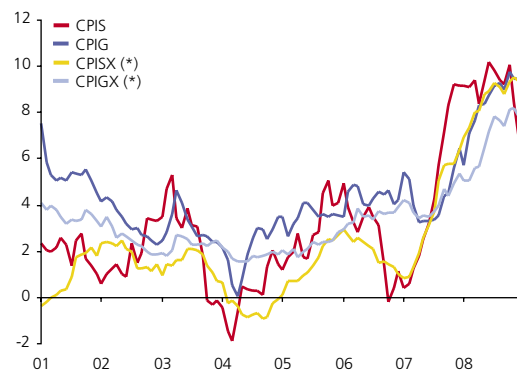
(1) Leaving 52% of the total CPI basket.
(2) Leaving 68% of the total CPI basket.

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

Figure V.4Trend inflation indicators (*)
(annual change, percent)

(*) See glossary for definitions.

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

Figure V.5Goods and services CPI inflation
(annual change, percent)

(*) See glossary for definitions.

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

quarterly rate of almost all the inflation measures fell toward the end of 2008. According to December records, the trimmed mean CPI was 6.8% in twelve months, and while the trim of most volatile components (TMVC) was 4.5%; both figures are slightly higher than the figures for August (figure V.4).

The annual change in tradables inflation (CPIT), which peaked at 9.9% in October, fell considerably in the last two months, to 3.6% in December. This is largely explained by the drop in fuel prices. In the same period, nontradables inflation (CPINT) was stable at 10%; this trend could largely reflect the pass-through of past inflation. Inflation of goods (CPIG) and services (CPIIS) display similar trends: while the former has dropped from its October peak, the latter remains high. Their core counterparts, the CPIGX and the CPIISX, followed an upward trend until November and then fell slightly through the close of the year (figure V.5).

Until the start of the fourth quarter of 2008, inflation was determined by the sharp increase in food prices, the immediate effects of the exchange rate depreciation, and the strong pass-through of past inflation.

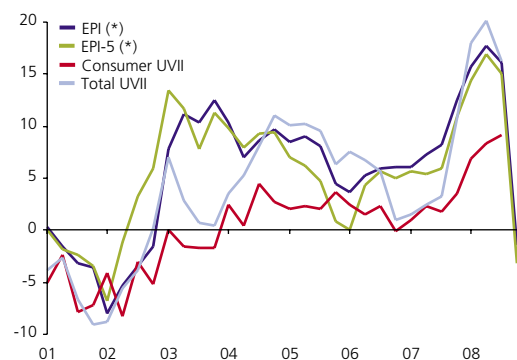
Food price inflation, which is one of the main sources of the current high inflation in Chile and several other economies, continued to rise in recent months. This increase, which has slowed relative to preceding months, largely reflects the strong impact of the prices of agricultural products in international markets in the past two years. Toward the end of 2008, basic food prices fell substantially in the external markets. Measured in dollars and using the prices recorded in the two weeks prior to the statistical closing dates of the *September Report* and of this *Report*, the prices of wheat, corn, and rice fell between 18 and 23%, thereby returning to the levels prevailing in mid-2007 (figure I.11). When converted to pesos, a large share of the drop is offset by the depreciation of the peso in the same period. Data on the prices of foods included in the CPIX1 reveal counteracting movements in the past few months. On one hand, prices are beginning to decline somewhat for products with a closer relationship to external food prices that have fallen abroad. This has been the case, for example, with rice and milk, which had a strong impact on rising inflation in 2007 and 2008. On the other hand, some prices, such as food consumed away from the home, are generally slower to rise and probably also to fall. The baseline projection scenario considers that, in the short term, some of the domestic prices of nonperishable foods will continue to fall, in part reflecting their external benchmarks.

The sudden plunge in the price of oil and its derivatives quickly passed through to the domestic market. As mentioned, this was a determining factor in the lower inflation at the end of 2008. This is partially the result of the change in the administration of the Fuel Price Stabilization Fund (FEPC). Thus, after several quarters of surprise jumps, the price of oil and its derivatives fell below the forecasts in both the *September* and *November Reports*. Oil went from around US\$110 a barrel at the statistical closing date

Figure V.6

External inflation

(annual change, percent)



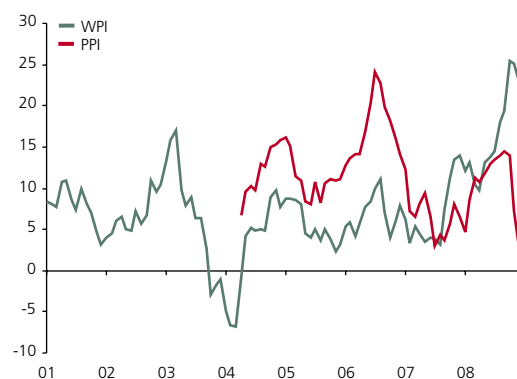
(*) See glossary for definitions.

Source: Central Bank of Chile.

Figure V.7

PPI and WPI

(annual change, percent)



Source: National Statistics Bureau (INE).

of September *Report* to around US\$45 at the close of this *Report*. Based on the new outlook for commodities, the projections of the average oil price for this year and next used in the baseline scenario in this *Report* are substantially lower than last September: US\$50 and \$60 a barrel, respectively. This, in turn, implies a lower trajectory for domestic fuel prices, which has largely been solidified. With regard to public transportation fares, which have not changed since February 2007, the baseline scenario takes into account an increase of 40 pesos in the first half of this year, as announced by the Ministry of Transport.

Data for August indicate that inflation pass-through is increasing significantly. In the September *Report*, the Board deemed that, given the high inflation level and the available data, inflation pass-through would continue to be significant for some time. The data for the last two months show increases in core inflation—although lower than in previous months—and generalized increases in some price categories, thereby confirming the continued validity of this assessment. Given the inflation inertia, the baseline scenario assumes that the underlying price trend will remain relatively high for some time. The pass-through of inflation shocks in the past year persists in the cost structure, so the price levels of many goods and services will not yet reflect the lower cost pressures present in the economy.

In February 2009, the INE will publish its inflation data using a new basket of goods and services for measuring the change in the CPI. As usual, the objective is to reflect how the average household's spending patterns have changed. This means changing the weights and adjusting the composition to include or eliminate goods and services in the basket. It also encompasses methodological changes in the measure (box V.1). The initial estimates suggest that the change in the methodology should have little effect on the current inflation level.

Cost pressures

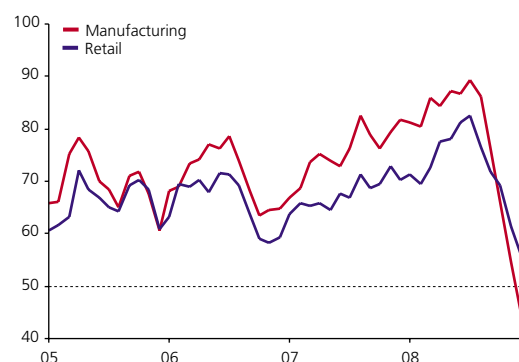
Cost pressures have eased substantially in recent months. Until the third quarter of 2008, imported inflationary pressures had increased significantly. Moreover, the medium-term outlook did not leave room for a significant attenuation in the next two years. The annual change in the external price index relevant to the Chilean economy (EPI) and the EPI-5 peaked in July. In August they started on a downward path that has led to negative changes in the last quarter, in line with the lower inflationary pressures present in the developed economies and the sharp drop in commodity prices. The twelve-month change in the unit value import index (UVII) peaked at 20.2% in the second quarter of 2008, then fell to 16.3% in the following quarter. It is estimated to have dropped again at the end of 2008, and it will deepen in the current quarter. The annual increase in the UVII for consumption followed an upward trend, reaching 9.2% in the third quarter. Estimates indicate that the annual growth rates of these prices fell significantly between the last quarter of 2008 and the first of 2009 (figure V.6).

The drop in commodity prices has caused a decline in the cost of these inputs in pesos, even after the depreciation of the peso is taken into account. The wholesale price index (WPI) and the producer price index (PPI) fell in

Figure V.8

Cost expectations by sector (IMCE)

(a value over (under) 50 indicates that costs will rise (fall))

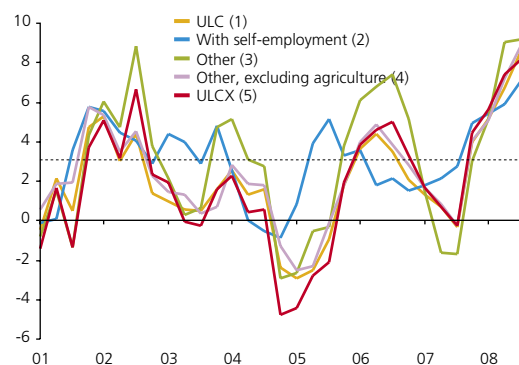


Sources: Central Bank of Chile and Icare/Universidad Adolfo Ibáñez.

Figure V.9

Unit labor costs

(annual change, percent)



(1) Total nominal labor cost, effective waged hours worked, wage employment, and total GDP.

(2) Analogous to total ULC, replacing wage employment with national employment.

(3) Other LC, other wage employment, other GDP (excluding EGW, mining, and fishing) and effective waged hours worked.

(4) Analogous to Other, excluding the agricultural sector in other waged employment and in other GDP.

(5) See glossary for definitions.

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

their month-to-month and annual measures. In December, the PPI—which includes the prices of domestic goods and services—hit the lowest point on record (2.4% annual growth), while the WPI—which considers only goods, domestic and imported—remained above 20% in annual terms (figure V.7). The Business Confidence Indicator (IMCE) for the last two months shows expectations of a strong reduction in costs in the retail and manufacturing sectors (figure V.8).

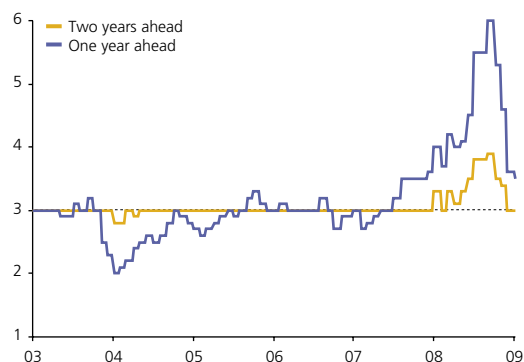
The jump in the electricity bills paid by both households and businesses has been an important source of inflation and cost pressures in the past two years. The price hike reflected the higher cost of electricity generation as a result of drought and the increase in the cost of alternative sources. While hydrologic conditions have improved, as shown by the growth in activity in the electricity, gas, and water sector, and fuel prices have fallen, electricity rates remain high. This is partly due to the effect of the exchange rate on the sector's rate adjustment calculations. The baseline scenario used in this *Report* assumes that, in the short term, the rate increase stemming from the setting of the node price in October 2008 will come into effect. Given the lag in implementing this charge, once it is in effect it will provoke a fluctuation in monthly inflation. Moving forward, the baseline scenario considers that electricity rates will fall as the lower price of fuels and other energy sources is consolidated and hydrologic conditions continue to be favorable.

Unit labor costs (ULC) continue to register a rising annual growth rate. Regardless of which measure is used, unit labor costs were higher in the third quarter of 2008 than at the close of the *September Report* (figure V.9). This increase is still largely due to the drop in measured labor productivity, which is related to the dynamics of salaried labor and activity and which was accentuated in the second half of 2008 in response to the economic downturn. Between July and November 2008, the different wage measures were practically constant, with nominal annual growth rates between 7.5% and 8.5%. This means that, based on the annual inflation level through that month (8.9%), nominal wages continued to grow less than the CPI. However, given the degree of wage indexation in the economy and the lag with which adjustments are made, the rapid drop in inflation should result in a positive real wage increase, which could grow in some months of this year. Since this reflects the normal behavior of wages, it does not necessarily imply greater cost pressures.

The baseline scenario of this *Report* assumes that unit labor costs will grow at rates consistent with the inflation target. This is based not only on moderate future wage dynamics that do not fully reflect the increase in past inflation, but also fundamentally on the assessment that inflation will return to the target.

Figure V.10

Economic expectations survey (EES)
(percent)



Source: Central Bank of Chile.

Figure V.11

Average forward breakeven inflation rate, based on
swap rates
(moving weekly average, percent)



Source: Central Bank of Chile.

Inflation expectations

Monetary policy actions through last September and the drastic change in the macroeconomic scenario caused the various measures of inflation to fall after the publication of the *September Report*. This drop was accentuated after the publication of the *Update of the Recent Projection Scenario* in November and the release of the inflation and output data for the fourth quarter of 2008. Thus, some measures are now below the 3% target. The Economic Expectations Survey (EES) went from expectations of 6.0% and 3.9% inflation one and two years ahead in September, to 3.5% and 3.0% in December (figure V.10). The one-year forward breakeven inflation rate one year ahead, calculated using swap rates, fell from a peak of 5.5% in the first days of September to 2.7% at the statistical closing date of this *Report*. At longer periods, where the previous increase was lower, the later reduction has also been lower. The two-year, three-year forward (that is, the three-year forward, two years ahead) and the five-year, five-year forward fell from 4.7% and 4.3%, respectively, to nearly 4.0% in the same period (figure V.11). Breakeven inflation rates contain several premiums, which are difficult to quantify. Consumer and business expectations surveys (the IPEC and the IMCE, respectively) also show reductions. In the IPEC, consumers who responded that they believed inflation would rise “a lot” in the next twelve months fell from 70% to nearly 50%. In the IMCE, business respondents in December said that inflation in twelve months would be 6.4%, versus 8.0% in September.

Box V.1: New CPI basket

Beginning in January 2009, the INE will use a new basket to measure the CPI, with a base index of December 2008 = 100. This box describes some of the more relevant methodological changes in the new measure and some possible implications.

The index currently used to measure the CPI dates to December 1998 and is based on the 1997 Family Budget Survey (FBS). The new CPI is based on a basket estimated using the 2007 FBS. The basket tries to reflect the spending patterns of an average household, assigning weights to the different goods and services included in it. A comparison of the two baskets shows that the average consumer has increased spending on services, while reducing the consumption of goods (table V.1). In principle, the CPI measure will continue to reflect only the price increases occurring in the Santiago Metropolitan Region. The INE has stated that, starting in 2010, the measure will include price increases in the regional capitals in the country.

Table V.1

Old and new weights, by group and division
(percent)

Group	1998	Division	2008
Food	28.5	Food and nonalcoholic beverages	17.9
		Alcoholic beverages and tobacco	2.1
		Restaurants and hotels	5.9
Clothing (including footwear)	7.3	Clothes and shoes	5.1
Housing	13.4	Housing, water, electricity, gas and other fuels	12.7
Household furnishing	9.7	Furniture, household supplies, and household maintenance items	7.2
Health	6.0	Health	5.5
Transport and communications	15.5	Transport	18.7
		Communications	4.5
Education and recreation (including culture)	12.2	recreation and culture	8.7
		Education	6.2
Other	7.5	Various goods and services	5.4
Total	100.0		100.0

Source: National Statistics Bureau (INE).

The regular updating of the methodology for calculating the CPI is an appropriate practice. It allows the index to incorporate methodological improvements: for example, housing payments and retirement savings (previously weighted at 2.5%) have been eliminated in the new basket, as they are not considered consumer spending. In addition, the earlier measure does not reflect changes such as improvements in the quality of the goods and services included in the CPI measure and/or the more extensive use of goods that were previously unavailable or not commonly used. These can come to represent a significant share of an average family's budget, and the failure to update them produces a quality bias. This bias increases proportionally over time if the CPI basket is not modified. A typical case is

technological change: for example, the old CPI basket does not encompass Internet access. Another source of bias is substitution, which also increases over time and which stems from the effect on consumption patterns (and therefore on the basket weights) of changes in the relative prices of goods and services.

Some estimates suggest that these biases can be considerable. For the United States, the Boskin Commission Report (1996) determined that the total bias error was 1.1% a year, with a range of 0.8%–1.6%, where substitution bias accounted for 0.4% and quality bias 0.6%. For Chile, Lefort (1998) showed that, using the CPI basket with a base index of April 1989, the substitution bias was 0.6%.

The change in the basket modifies the coverage of the usual measures of core inflation, whether through the number of products included in each measure or through their percentage of coverage relative to the total basket (table V.2).

Table V.2

Old and new weights of core measures
(percent)

Core measure	1998	2008
CPIX	92.3	91.1
CPIX1	69.7	72.2
CPI excluding food and energy	68.0	68.7
CPIX1 excluding food	51.5	56.6

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

It is premature to compare the inflation dynamics resulting from the new CPI measure with the previous one, but some preliminary conclusions can be drawn from the changes in weights. With the new basket, sudden changes in food prices should have a smaller impact on CPI inflation, while the opposite should be the case with the exchange rate and oil, because of the greater weight of transportation. The greater weight of the usual core inflation measures could result in a more persistent inflation process as measured by the new CPI, precisely because the measures that exclude the most volatile elements—such as food, utilities, and energy—tend to be more persistent over time.

The projections in this *Report* assume that the new basket will have a small impact on the expected inflation trend. This assessment is subject to a high degree of uncertainty, in particular if food prices, electricity rates, or the exchange rate deviates from the baseline scenario.

VI. Inflation scenarios

Table VI.1

World growth (*)
(annual change, percent)

	Average 90-99	Average 00-05	2007	2008 (e)	2009 (f)	2010 (f)
World	2.9	3.8	5.0	3.6	1.2	3.3
World at market nominal exchange rate	2.4	2.9	3.8	2.4	-0.3	2.3
United States	3.1	2.5	2.0	1.2	-1.8	2.0
Euro zone	2.2	1.9	2.6	0.9	-1.9	1.0
Japan	1.5	1.6	2.4	-0.1	-2.4	1.2
China	10.0	9.4	11.9	9.2	7.5	8.0
Rest of Asia	5.5	4.8	5.8	4.0	1.2	3.2
Latin America	2.7	3.0	5.6	4.7	1.2	2.7
Commodity exporters	2.7	3.1	3.3	1.2	0.2	1.8
Trading partners	3.1	3.1	4.8	3.2	0.4	2.7

(e) Estimate.

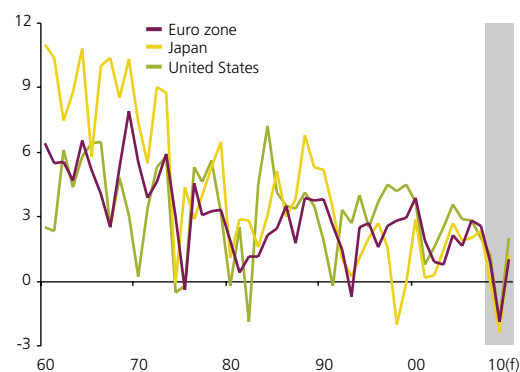
(f) Projection.

(*) See glossary for definitions.

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

Figure VI.1

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



(f) Projection.

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

This chapter presents the Board's evaluation of the prospects for the Chilean economy for the next two years, including the analysis and decision of the monetary policy meeting on 8 January 2009. Projections are shown for the most likely inflation and growth trajectories, identifying the most important risks. These projections use, as a methodological assumption, that the MPR will follow a short-term path that will run somewhat below the one implicit in the prices of financial assets, after the Board reduced the MPR by 100 basis points. This is a working assumption and does not compromise the future monetary policy, which will adjust to the evolution of the macroeconomic scenario and inflation projections. Projections are also conditional to a set of events that make up the baseline scenario, so the Board's evaluation with respect to risks on output and inflation is also included.

External scenario

The external scenario considered the most probable assumes weak growth for the world at large and for Chile's trading partners. It also foresees that international lending markets will continue relatively tight. The baseline scenario projects that lending conditions will tend to normalize in 2010 while interest rates will rise above their current levels.

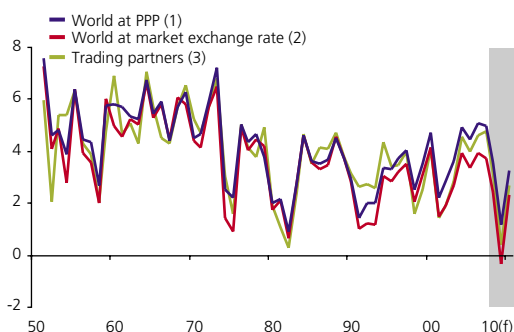
This *Report's* baseline scenario, which is based on the market consensus, assumes that the developed world will suffer a deep recession this year, the worst since World War Two. The U.S. will see GDP drop 1.8% in 2009, the euro zone 1.9% and Japan 2.4% (table VI.1 and figure VI.1). Emerging economies will perform weakly, although in the aggregate the difficulties will not amount to a recession. Countries like China and India will grow less than in previous years, but still more than the world average by far. China, in particular, will grow by a projected 7.5%. Thus, world growth in 2009, measured at purchasing power parity (PPP), will stand at 1.2%. This is a relatively low figure by historic standards, even if adjusted by the changes in the relative share of the different economic areas (figure VI.2). In the baseline scenario, in 2010 the world economy will begin a visible recovery. Thus, world GDP at PPP will see an increase of 3.3% that year.

The baseline scenario forecasts commodity prices not decreasing beyond their current levels (figure VI.3). Actually, according to futures, toward 2010 they will have risen above their present numbers. The pound of copper will post an average of US\$1.50 this year and US\$1.60 next; the barrel of WTI oil will average US\$50 and US\$60 in 2009 and 2010, respectively. Prices of basic foodstuffs such as corn, milk, and wheat will also increase over the next two years.

Figure VI.2

World growth

(real annual change, percent)



(f) Projection.

(1) Between 1950 and 1980, weighted by PPP of 1980. From 1980 on, with 2008 weights.

(2) Between 1950 and 1970, weighted by market exchange rate of 1970. From 1970 on, with 2008 weights.

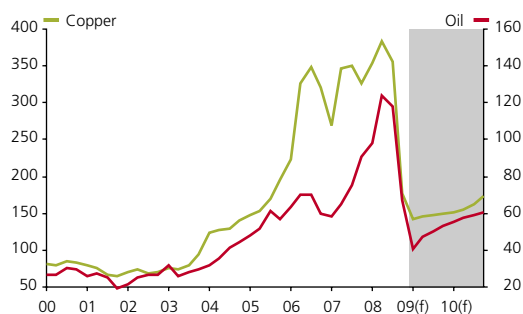
(3) Between 1950 and 1970, weighted by trading partners of 1970. From 1970 on, with 2008 weights.

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

Figure VI.3

Oil and copper prices

(US\$/lb LME; US\$/barrel, WTI)



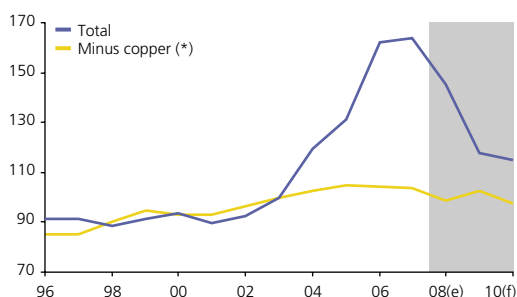
(f) Projection.

Source: Central Bank of Chile.

Figure VI.4

Terms of trade

(index 2003=100)



(e) Estimate.

(f) Projection.

(*) Estimated using the average price at the London Metal Exchange of 2003 as reference. No other potential effects on price and quantity are considered.

Source: Central Bank of Chile.

Hence, terms of trade (TOT) are projected to post an annual decline of around 19% in 2009 and 2% in 2010 (figure VI.4). The external inflation rate relevant to Chile (EPI), measured in U.S. dollars, will fall 0.8% this year to increase 5.5% in 2010, due to the combination of the expected commodity price rebound and the depreciation of the U.S. dollar in international markets. In the fourth quarter of 2008, external inflation in dollars showed negative month-on-month variations because of the reduction in inflation in domestic currency and the appreciation of the dollar in the world. The projection horizon considers that, starting from its current level, the dollar will begin losing value against the other currencies but not necessarily returning to comparable parities to the ones that prevailed before September 2008.

Internationally, the range of risks facing the baseline scenario is unusually wide, and most of them have negative implications on world growth. On one hand, it is possible that the world economy will be hit even harder by stringent global lending conditions due to a number of factors. The world economic downfall may be worse than foreseen, triggering a deflation and further financial stress in the world, even in the face of extremely expansionary monetary policies. Neither can it be ruled out that the strong stimulus being applied by economic policies around the world can unlock credit markets much faster, prompting a strong economic expansion with a substantial effect on inflation. It could also happen that a deterioration in the external position of many economies triggers the adoption of protectionist measures at the global level. Similarly, it must be taken into account that, while recent events have helped somewhat, global imbalances persist and may require significant corrections in currency parities, thus creating further stress in the world economy.

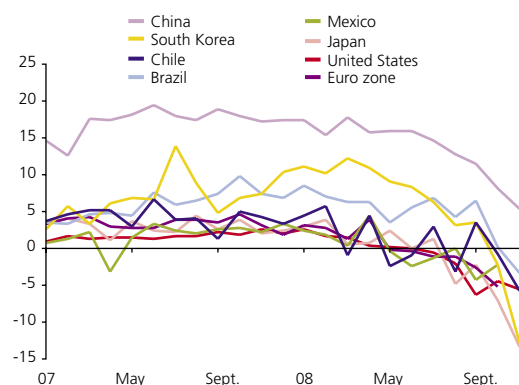
Aggregate demand, output and external accounts

In the last quarter of 2008, aggregate demand was hit hard by the change in the macroeconomic scenario. Domestic demand growth neared 3% year-on-year, clearly less than the 10% average it scored the first three quarters. Earlier projections showed consumptions slowing down toward the end of 2008, but partial indicators suggest that the drop was sharper than forecast. This was particularly visible in the durable component, possibly partly due to some sudden adjustment in accumulated stocks. Investment slowed down also, although because of the high level it had already attained it kept its high annual growth rates. Net exports reduced their negative incidence on aggregate demand, particularly because of a big reduction in the annual increase in imports, consistently with the slowdown of consumption, investment and inventories. Exports also reduced their annual growth, although mainly because of supply factors such as technical problems in mining production and a sanitary emergency in the salmon industry.

The dynamics of the adjustment of domestic demand and production during the fourth quarter is qualitatively similar to what could be observed in a variety of economies, both industrialized and emerging. In November, manufacturing production, retail sales, imports and inventory accumulation posted a sharp correction at the global level (figures VI.5 and VI.6). The synchrony of this phenomenon may be responding to a number of factors. On one hand, the severe turmoil in September and October propagated quickly to every banking and financial system due to the high degree of

Figure VI.5

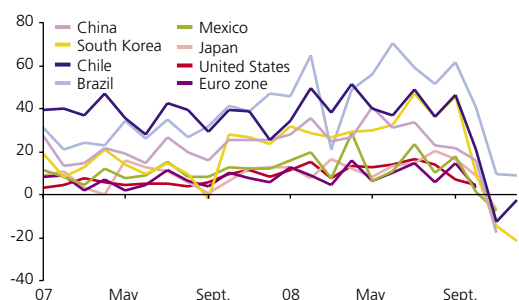
Manufacturing output
(annual change, percent)



Source: Bloomberg.

Figure VI.6

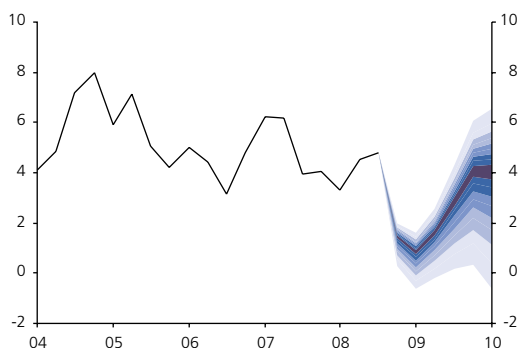
Imports
(annual change, percent)



Source: Bloomberg.

Figure VI.7

Quarterly GDP growth scenario
(annual change, percent)



(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on growth as assessed by the Board. The projection scenario incorporates as a methodological assumption that the monetary policy rate will follow a short-term path that will run somewhat below the one implicit in the financial asset prices after the Board reduced it by 100 basis points.

Source: Central Bank of Chile.

financial globalization of present times. On the other, the very size of the world crisis probably acted as a coordinator of expectations of households and firms in the most varied places, triggering a sudden postponement of private spending decisions. This behavior was clearly visible in credit spreads and indicators of households and firms' expectations in Chile (figures II.12, III.6 and III.11). Although financial stress has seen some relief, credit risk premiums remain high, prospects for global growth have deteriorated severely and expectations are still low. The baseline scenario assumes that in the short run there will be no further deterioration of domestic demand and of output that can be compared with the situation of the last quarter of 2008. This, considering that this scenario does not foresee a repetition of financial stress episodes like those of late September and early October. This does not mean that a significant recovery of domestic demand and output can be expected.

This *Report's* baseline scenario foresees annual GDP and domestic demand growth will be low this semester, mainly reflecting the statistical effect of the low level of the end of 2008 rather than a further fall. Recent macroeconomic policy measures should result in a higher level of economic activity beginning the second quarter, but with lags that are difficult to identify. The fiscal stimulus package is expected to have an incidence on this year's output of around one percentage point but, as aforesaid, it is difficult to predict the timing of this effect. While spending in infrastructure has direct sectoral effects on production, the effect of the tax cut and larger transfers to the private sector depends on the way households and firms will finally react to the incentives. The materialization of the more expansionary monetary policy, that already started with the 100 basis point cut to the monetary policy rate on 8 January, should also influence private spending decisions. These effects' timing is subject to the usual lags of monetary policy, which are somewhat longer than for fiscal policy. Thus, the baseline scenario assumes that in the second half of 2009 annual growth in GDP and in domestic demand will outperform that of the first half. In addition to the macroeconomic stimulus, this will also respond to the effect of the low basis for comparison of end 2008 and the gradual normalization of external conditions assumed.

Accordingly, the Board foresees for the baseline scenario that during 2009 output growth will be in the range of 2% to 3% (table VI.2). It is worth remembering that the use of a range for growth projections reflects different levels of output consistent with the set of assumptions considered in the external and internal scenario, particularly regarding the effects of the fiscal policy, as well as the baseline scenario's assumption of the MPR trajectory running in the short run somewhat lower than the market's expectation, after the Board reduced it by 100 basis points. The level of external uncertainty is higher than it was in earlier periods, so the probability of GDP growth being within the projected one percentage point range is lower than in other occasions. The possibility of more negative alternative scenarios is higher, so the risk balance is downward biased (figure VI.7). This means that the risk scenarios where growth in 2009 is below the range considered in the baseline scenario are more likely to occur than those above the range. Obviously, the materialization of the risk scenarios has implications on the actual trajectory of inflation and on monetary policy.

Table VI.2

Economic growth and current account

	2006	2007	2008 (e)	2009 (f)
	(annual change, percent)			
GDP	4.3	5.1	3.5	2.0 - 3.0
National income	6.7	7.8	3.9	0.0
Domestic demand	6.4	7.8	8.5	0.7
Gross fixed capital formation	2.9	11.9	19.9	-4.5
Total consumption	6.4	7.4	5.0	2.5
Goods and services exports	5.5	7.8	1.8	2.1
Goods and services imports	10.5	14.3	13.4	-1.7
Current account (% of GDP)	4.7	4.4	-2.6	-4.6
	(US\$ million)			
Current account	6,838	7,200	-4,500	-6,800
Trade balance	22,587	23,653	10,200	-2,400
Exports	58,485	67,644	67,800	46,400
Imports	-35,899	-43,991	-57,600	-48,800
Services	-628	-1,161	-1,200	-800
Rent	-18,418	-18,265	-16,400	-5,300
Current transfers	3,297	2,974	2,900	1,700

(e) Estimate.

(f) Projection.

Source: Central Bank of Chile.

The baseline scenario assumes that domestic demand will grow 0.7% year-on-year in 2009. Private consumption will grow more than the other components. Investment will fall by 4.5% this year, with a larger fall in machinery and equipment. In 2003 prices, the investment to GDP ratio will be two percentage points less than in 2008, while in current prices it will be around half a percentage point more. This, because of the effect of the lower copper price on GDP's nominal value. In the baseline scenario, and unlike previous years, net exports will contribute part of the growth in domestic demand foreseen for 2009. Despite the weak global environment, exports will increase both because of the rebound of volume exports of copper and because the real exchange rate will be, on average, higher than in the past few years. Imports will reflect the bulk of the correction of private domestic demand.

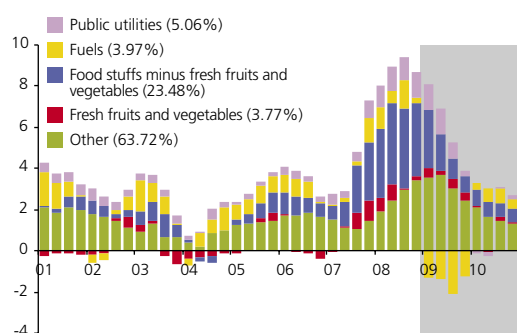
The sharp changes in relative prices of recent months have driven major shifts in the savings-investment balance of the Chilean economy, especially with respect to 2007 and early 2008. As aforesaid, in the baseline scenario investment levels will remain high, but the current account deficit will increase largely, because of the significant impact of the copper price decline on the State's cyclical income and public savings. Thus, it is projected to near US\$7 billion or around 4.5% of projected nominal GDP. Nonetheless, because of reduced volume imports and domestic demand corrections expected to take place in 2009, the current account deficit at trend prices is smaller than projected before, falling from levels around 5% of GDP to somewhere around 4.5% of GDP*.

It is worth noting that the sharp correction to the trade balance between 2007 and 2009, from a surplus of around US\$23.5 billion to a deficit close to US\$2.5 billion is not fully transmitted to a higher current account deficit,

*/ This calculation considers corrections to prices but not volumes. Long term prices used are US\$1.60/lb for copper and US\$75 per barrel for oil.

Figure VI.8

Incidence in annual CPI inflation
(percentage points)



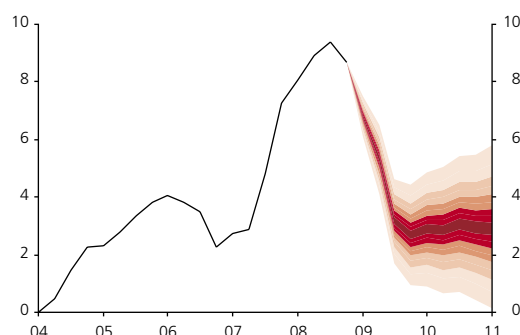
(1) Gray area denotes, from first quarter of 2009 on, inflation decomposition projected in the baseline scenario.

(2) Weights in CPI basket in parentheses.

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

Figure VI.9

CPI inflation projection
(annual change, percent)



(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on growth as assessed by the Board. The projection scenario incorporates as a methodological assumption that the monetary policy rate will follow a short-term path that will run somewhat below the one implicit in the financial asset prices after the Board reduced it by 100 basis points.

Source: Central Bank of Chile.

because the smaller exports also have a large effect on the amount of accrued profits of foreign owned enterprises (box III.1). In fact, the rents entry in the current account—which records accrued profits from foreign investment and investment abroad, together with interests on the net external finance debt position—change from a net outflow of around US\$18.3 billion in 2007 to US\$5.3 billion projected for 2009.

In the baseline scenario, a significant portion of the projected current account deficit corresponds to less public saving and, therefore, is consistent with a fiscal deficit. A working assumption considers that the fiscal accounts will behave as described by the government when announcing the recent fiscal policy measures. From the same announcements it can be inferred that such fiscal deficit, and therefore its counterpart the current account deficit, will be financed to a large extent by the resources accumulated in the Economic and Social Stabilization Fund (ESSF). The baseline scenario assumes no further stress in the Chilean economy's external financing. There are risks, however, as noted in our *Financial Stability Report* of the second half of 2008, but in case they materialize they will be offset by the high levels of accumulated external liquidity.

Inflation scenario

The baseline scenario assumes that annual CPI inflation will stay high during the first quarter, to quickly slide down to 3% by mid year. Then it should hover around 3% until the end of the projection horizon, that now stands between the last quarter of 2010 and the first quarter of 2011 (table VI.3 and figure VI.8). The Board considers that, after taking into account the potential alternative developments, the risk scenario for inflation is unbiased (figures VI.9 and VI.10). In 2009, CPIX1 inflation will decrease at a slower pace than CPI inflation, largely because propagation is stronger for the former and the fall in fuel prices does not reflect directly on it. Toward 2010 it will be below the CPI because of the projected widening of the gaps.

Table VI.3

Inflation

(annual change, percent)

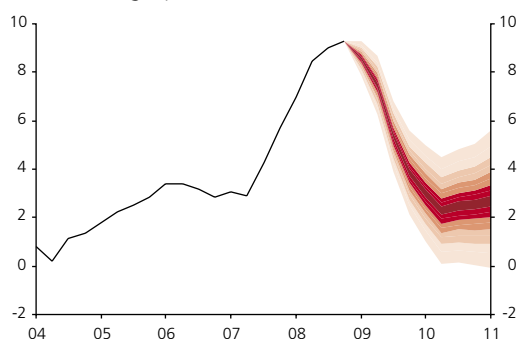
	2007	2008	2009 (f)	2010 (f)
Average CPI inflation	4.4	8.8	4.5	2.9
December CPI inflation	7.8	7.1	3.1	
CPI inflation in around 2 years (*)				3.0
Average CPIX inflation	4.0	8.4	6.3	2.6
December CPIX inflation	6.3	8.7	3.0	
CPIX inflation in around 2 years (*)				2.8
Average CPIX1 inflation	4.1	7.8	5.4	2.7
December CPIX1 inflation	6.3	7.9	3.3	
CPIX1 inflation in around 2 years (*)				2.5

(f) Projection.

(*) Corresponds to inflation projection between the fourth quarter of 2010 and the first quarter of 2011.

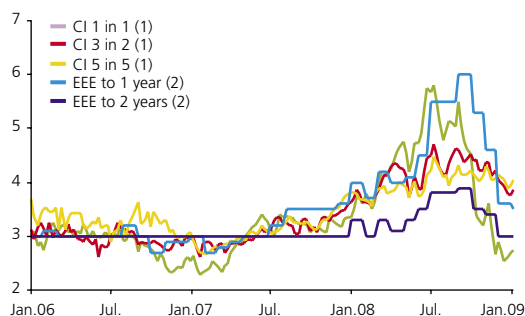
Fuente: Banco Central de Chile.

On average, the economy grew less in 2008 than seen in November by a little over half a percentage point. Thus, the slowdown of the second half of the year widened the output gap by some two percentage points. The baseline scenario foresees economic activity growing below trend over the policy horizon. Accordingly, these gaps will tend to persist, since they are the main factor explaining the reduction in inflationary pressures.

Figure VI.10CPIX inflation projection
(annual change, percent)

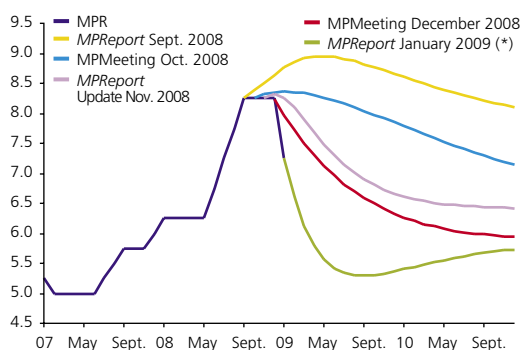
(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on growth as assessed by the Board. The projection scenario incorporates as a methodological assumption that the monetary policy rate will follow a short-term path that will run somewhat below the one implicit in the financial asset prices after the Board reduced it by 100 basis points.

Source: Central Bank of Chile.

Figure VI.11Expected inflation
(promedios semanales, porcentaje)

(1) Forward breakeven inflation based on swap rates.
(2) Central Bank of Chile's Economic Expectations Survey.

Source: Central Bank of Chile.

Figure VI.12Monetary Policy Rate and forward curve
(percent)

(*) Calculated using financial assets prices of January 9, 2009.

Source: Central Bank of Chile.

The baseline scenario considers that, given the inflationary inertia, the underlying trend of prices will remain fairly high still for some time. The cost structure of the economy is believed to be still under the effects of the propagation of last year's inflationary shocks to other prices. Therefore, the baseline scenario projects that the prices of various goods and services will not necessarily reflect for the moment the decline in cost pressures that are present in the economy. Wage dynamics will also be affected by inflationary inertia. In line with usual indexation patterns, annual variations in nominal wages will remain stable in the months to come and, given the foreseen decline in inflation, will begin to outpace it. Thus, an increase in real wages should come as no surprise, coming simply by the lagged effect of inflation on nominal wages.

The baseline scenario is constructed with the working assumption that, over the two-year projection horizon, the real exchange rate will be lower than it is today, consistently with its long-term fundamentals. This, combined with lower international inflation in dollars will mean less inflationary pressures from abroad. Coming the other way will be the oil price which, according to futures contracts, is expected to rise to an average of US\$60 in 2010. This also helps to shape the dynamics of CPI, CPIX and CPIX1 inflation over the policy horizon.

Projections in the baseline scenario assume that the change of CPI measuring methodology to be adopted by the INE in January will have small effects on inflation. Regarding public transport fares, that have been unchanged since February 2007, the baseline scenario contemplates a 40 peso rise in the first half of 2009 as announced by the authorities.

Inflation expectations have changed significantly since mid last year. Between April and September 2008 inflation expected for 2010 neared 4%, while breakeven inflation implicit in financial assets got close to 6% over the same horizon (figure VI.11). After the economic meltdown of September, medium-term inflation expectations began falling, a process that has consolidated in recent months. At present, every measure places expected inflation, even for late this year, around 3%.

As always, the baseline scenario uses a trajectory for the monetary policy interest rate as a working assumption. In this *Report*, it assumes that the MPR will depict a short-run trajectory somewhat below the one implicit in financial asset prices as of 9 January 2009, after the Board reduced it by 100 basis points. These private expectations assume that the MPR will stand between 5.0% and 5.5% in mid-2009 (figure VI.12).

Index of tables and figures

Tables

International baseline scenario assumptions	8
Economic growth and current account	9
Inflation	10
I.1: World growth	17
I.2: World inflation	19
II.1: Observed (OER), multilateral (MER), and real (RER) exchange rate	26
III.1: Aggregate demand	29
III.2: Foreign trade	32
IV.1: Gross domestic product	35
V.1: Old and new weights, by group and division	46
V.2: Old and new weights of core measures	46
VI.1: World growth	47
VI.2: Economic growth and current account	50
VI.3: Inflation	51

Figures

Projected CPI inflation	11
Projected CPIX inflation	11
I.1: Risk premiums on credit default swaps	15
I.2: Stock market volatility	15

I.3: Three-month liquidity conditions in the interbank market	16
I.4: Long-term interest rate	16
I.5: Net foreign investment inflows to emerging economies	16
I.6: Current account balance	17
I.7: Exchange rate parities	17
I.8: World growth at PPP	17
I.9: WTI oil prices and futures	18
I.10: Copper market	18
I.11: Food prices	18
I.12: CPI inflation	19
I.13: Inflation expectations for 2009	19
I.14: Expected monetary policy rate in developed economies	19
I.15: Fiscal and current account balance: average 2005–2008	20
I.16: Country risk premium by size of the current account balance	20
I.17: CPI inflation, total and by component	22
II.1: Spread between onshore dollar interest rates and the Libor	23
II.2: Rates on negotiable time deposits	23
II.3: MPR and interest rates on Central Bank instruments	24
II.4: Long-term interest rates in emerging economies	24
II.5: Lending rates	24
II.6: Personal loans	25
II.7: Business loans	25
II.8: Stock market indicators	25
II.9: MPR and forward curve	26
II.10: Swap rates	26
II.11: MPR and bank lending rate in pesos	27
II.12: Lending rate–MPR spread and other financial variables	27
II.13: Average maturity of banks' overseas credit and share of 30- to 89-day loans	28
III.1: Contribution to annual GDP growth	29
III.2: Real retail sales (IVCM)	30
III.3: Consumer goods imports	30
III.4: New car sales	30
III.5: Economic perception index (IPEC)	31
III.6: Current inventories (IMCE)	31
III.7: Capital goods imports	31
III.8: National new home sales	32
III.9: Business confidence index (IMCE)	32

III.10: Gross fixed capital formation (GFCF)	32
III.11: Real copper price	34
III.12: GDP growth and the real copper price	34
IV.1: Monthly index of economic activity (Imacec)	35
IV.2: Gross domestic product	35
IV.3: Mining production	36
IV.4: Manufacturing sector indicators	36
IV.5: Production expectations (IMCE)	36
IV.6: Manufacturing employment	37
IV.7: Retail sector indicators	37
IV.8: Retail employment	37
IV.9: Indicators of construction activity	38
IV.10: Construction and agricultural employment	38
IV.11: Employment and the unemployment rate	38
IV.12: Employment by occupational category	39
IV.13: Total participation rate and annual growth of the labor force	39
IV.14: Evolution of sectoral employment (IMCE)	39
IV.15: Correlation between GDP and employment	40
IV.16: Sectoral employment	40
IV.17: Construction employment, cement, and building materials sales	40
V.1: CPI, CPIX, and CPIX1 inflation	41
V.2: Components of annual CPI inflation	41
V.3: CPI excluding different components	42
V.4: Trend inflation indicators	42
V.5: Goods and services CPI inflation	42
V.6: External inflation	43
V.7: PPI and WPI	43
V.8: Cost expectations by sector (IMCE)	44
V.9: Unit labor costs	44
V.10: Economic expectations survey (EES)	45
V.11: Average forward breakeven inflation rate, based on swap rates	45
VI.1: GDP growth in developed economies	47
VI.2: World growth	48
VI.3: Oil and copper prices	48
VI.4: Terms of trade	48
VI.5: Manufacturing output	49

VI.6: Imports	49
VI.7: Quarterly GDP growth scenario	49
VI.8: Components of annual CPI inflation	51
VI.9: CPI inflation projection	51
VI.10: CPIX inflation projection	52
VI.11: Expected inflation	52
VI.12: Monetary Policy Rate and forward curve	52

Diagram

II.1: MPR transmission mechanisms	27
-----------------------------------	----

Glossary

Commodities exporters: Australia, Canada, and New Zealand.

CPIGX: Goods price index excluding fuels and fresh fruit and vegetables, leaving 51.2% of the total CPI basket.

CPISX: Services price index excluding utility rates and public transportation fares, leaving 35.5% of the total CPI basket.

CPIX: Underlying consumer price index excluding fuels and fresh fruit and vegetables, leaving 92% of the total CPI basket.

CPIX1: CPIX excluding fresh meat and fish, regulated utilities, indexed prices, and financial services, leaving 70% of the total CPI basket.

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

Emerging Asia: China, Hong Kong, India, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Thailand, and Taiwan.

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, it is the annualized change in the moving quarter in a seasonally adjusted series. For quarterly data, it is 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.

Government Bond Index—Emerging Markets (GBI-EM): Index of government bond rates of emerging economies, traded in the domestic market of each economy. Maintained by JP Morgan Chase.

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 2008, the following countries are included: Argentina, Belgium, Brazil, Canada, China, Colombia, Ecuador, France, Germany, Italy, Japan, Mexico, the Netherlands, Peru, South Korea, Spain, Sweden, Taiwan, 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.

Onshore rate: The estimated external interest rate relevant for the domestic foreign exchange market. In general terms, it is derived from the forward prices of currency hedging operations.

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.

RER-5: RER using the same basket of currencies as the MER-5.

Rest of Asia: Hong Kong, Indonesia, Malaysia, the 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.

TMVC (trim of most volatile components): Trimmed mean CPI, excluding the items with the most volatile prices.

Trading partners' 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&P500 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, October 2008). World growth projections for 2008–10 are calculated from a sample of countries that represent about 86% of world GDP. The growth of the remaining 14% is estimated at around 5.0%.

Abbreviations

BCP: Central Bank bonds in pesos

BCU: Central Bank bonds in UFs

BTU: Treasury bonds in UFs

BTP: Treasury bonds in pesos

MPR: Monetary policy rate

Bibliographic references

- a/ Aisen, A. and I. Jones. 2008. “Escenarios de proyección de la tasa de desempleo para el primer semestre del 2009.” Mimeo. Central Bank of Chile. December.
- b/ Barclays. 2008a. Emerging Markets Quarterly. December.
Barclays. 2008b. Euro Weekly. December.
Barclays. 2008c. Market Strategy Japan Weekly. December.
Barclays. 2008d. Market Strategy Americas Weekly. December.
Barclays. 2008e. The Sterling Story. December.
Becerra S., M. García, J. Medina, M. Pérez, and C. Soto. 2008. “Evolución reciente de variables financieras y sus posibles impactos en la actividad y la inflación.” Mimeo. Central Bank of Chile. October.
Becerra, S. and M. Pedersen. 2008. “Explicando el desarrollo de la tasa de colocación.” Mimeo. Central Bank of Chile. December.
Boskin M.J., E. Dulberger, R. Gordon, Z. Griliches, and D. Jorgenson. 1996. “Towards a More Accurate Measure of the Cost of Living.” December.
- c/ Central Bank of Chile. *Financial Stability Report*. Various issues.
Central Bank of Chile. *Monetary Policy Report*. Various issues.
Central Bank of Chile. 2007. La política monetaria del Banco Central de Chile en el marco de metas de inflación. January.
Central Bank of Chile. 2008. Actualización del escenario reciente de proyecciones. November.
Consensus Forecasts. 2008a. A Digest of International Forecast. Various issues.
Consensus Forecasts. 2008b. Global Outlook: 2008–2018. October.
- d/ Deutsche Bank. 2008a. Global Economic Perspectives. December.
Deutsche Bank. 2008b. Focus Europe. December.
Deutsche Bank. 2008c. Emerging Markets Monthly. December.
Deutsche Bank. 2008d. Dollar Bloc Weekly. December.
Deutsche Bank. 2008e. Asia Economics Monthly. December.
- i/ International Monetary Fund. 2008a. World Economic Outlook Update. November.
International Monetary Fund. 2008b. World Economic Outlook. October.
- j/ JP Morgan Chase. 2008a. Emerging Markets Economic Indicators. November.
JP Morgan Chase. 2008b. Global Data Watch. December.
- l/ LarraínVial. 2009. El Radar. Estrategia de renta fija. January.
Lefort, F. 1998. “Sesgo de sustitución en el IPC.” *Economía Chilena* 1(1): 43–58. Central Bank of Chile. August.
- n/ Núñez, M. 2008. “Impacto del sector financiero en la política monetaria utilizando un modelo estructural.” Mimeo. Central Bank of Chile. November.
- r/ Restrepo, J.E. and C. Soto. 2006. “Regularidades empíricas de la economía chilena: 1986–2005.” *Economía Chilena* 9(2): 15–40. Central Bank of Chile. August.

Juan Esteban Laval Z.
Legal Representative

BANCO CENTRAL DE CHILE
Institutional Affairs Management
Publications Department
January 2009

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



BANCO CENTRAL
DE CHILE