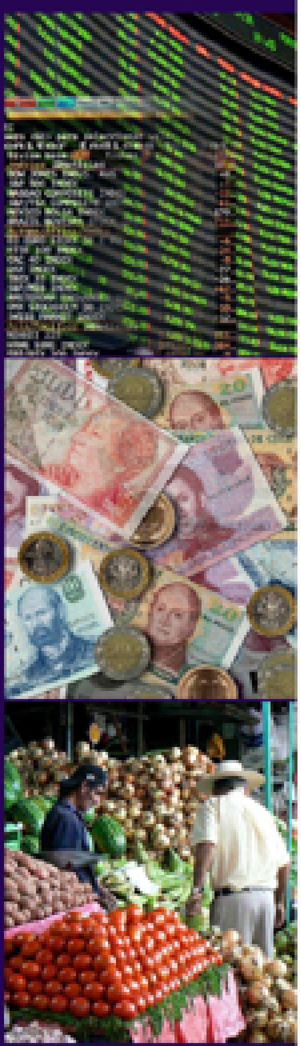
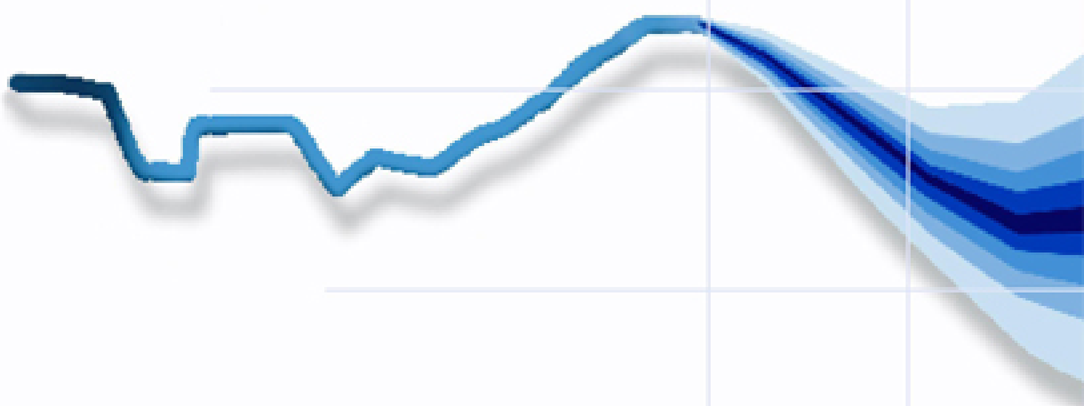
IPoM 2008

2008

SEPTEMBER

Monetary Policy Report





BANCO CENTRAL DE CHILE

Monetary Policy Report*

SEPTEMBER 2008

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.

Contents*

*/ The closing date for the figures included in this *Report* was September 5th, 2008.

Preface

The main purpose 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 most of the time at around 3% 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 by 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 main objectives of the *Monetary Policy Report* are: (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 players' expectations on future inflation and output trends. According to 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 that shed light on more detailed aspects of matters relevant to evaluating inflation and monetary policy.

This *Report* was approved at the Board meeting held on 8 September for its presentation to the Senate on 11 September 2008.

The Board

Summary

The inflation scenario faced by the Chilean economy has deteriorated drastically in the past few months. The high inflation of the first four months of the year met new rises in food and fuel prices, plus a more intensive propagation to other prices. Thus, contradicting predictions in May's *Monetary Policy Report*, inflation hit 9.5% y-o-y by mid year, substantially increasing the risks associated with convergence to target over a two-year horizon. Inflation expectations, by its several measurements, have shown important increases, while public concern on the subject has increased. The Board has reacted with determination, raising the monetary policy rate (MPR) by 200 basis points since June, totaling 325 basis points since mid-2007, and the future path of the MPR contemplates additional adjustments to ensure inflation convergence to the target. The Board reaffirms that it will take any actions necessary to ensure compliance with its objective of price stability, which is operationalized in an inflation target of 3% annually over a two-year policy horizon.

Inflation performance in the past year has been characterized by steady increases not only in the CPI but also in the set of trend inflation indicators and in those that exclude the prices that are more volatile or affected by external shocks. The increase in annual inflation has a variety of determinants.

Regarding imported inflationary pressures, the external price index relevant to the Chilean economy (EPI) is forecast to rise by 14% this year, significantly more than the 4.6% average of the period 2000-2007. This is largely due to hikes in commodity prices that, together with effective inflation levels, respond primarily to the fact that the global economy has remained strong despite the slowdown in developed countries. The increase in world foodstuff prices has had a significant incidence on the domestic prices of these products, explaining four percentage points of annual CPI inflation at August 2008. The transmission of the higher oil price, meanwhile, has varied across its various by-products. The impact on the cost of gasoline has attenuated its effect on the consumer price by a number of measures, including a tax cut and a fiscal injection of resources to the fuel price stabilization fund FEPC. Thus, while gasoline prices have risen by close to 50% in the world markets, in Chile they are about 10% higher. This situation has not been replicated for other fuels like liquefied gas and kerosene, which have increased their incidence in inflation. Diesel oil, which does not affect the CPI directly, does have an important effect on costs, and shows a greater increase than in previous years. Of the annual inflation accumulated at August this year, 1.4 percentage points are a direct consequence of fuel price increases.

Also worth noting is the rise in the cost of electricity that began in mid-2007, due mainly to a combination of shortage of water resources and natural gas and an increase in the cost of diesel oil. The direct effect of the rise in electricity rates in the CPI is the equivalent to 0.6 percentage points of the annual inflation accumulated in the year to August. According to information at hand, the increase in energy costs over the first half of 2008—considering higher costs of electricity and oil—could have an impact of around two percentage points in the economy's cost structure. If margins do not change, this could explain an increase of the same size in inflation (box V.2).

International baseline scenario assumptions

	2007	2008 (e)	2009 (f)	2010 (f)
Terms of trade	0.8	-5.9	-7.2	-4.3
Trading partners' GDP (*)	4.8	3.5	3.1	3.8
World GDP at PPP (*)	5.0	4.0	3.7	4.4
World GDP at market exchange rate (*)	3.8	2.8	2.5	3.4
External prices (in US$)	8.5	14.1	3.3	2.8
LME copper price (US¢/lb)	323	350	310	300
WTI oil price (US$/barrel)	72	115	116	115
Parity gasoline price (US$/m^3) (*)	597	810	805	810
Libor US$ (nominal, 90 days)	5.3	2.8	2.8	3.5

(*) For definition, see Glossary.
(e) Estimate.
(f) Forecast.

Source: Central Bank of Chile.

Since April, the nominal exchange rate has depreciated. Immediately after the Bank announced its reserves purchase program, the parity rose between $15 and $20. Subsequently, together with changes in developed economies' performance evaluation, price swings in commodities, especially copper and oil, and local developments in the inflation and output scenarios, the parity depreciated further, to 510 and 525 pesos per US dollar in the two weeks prior to the statistical closing of this *Report*, some 13% higher than the figures in May's *Report*. The multilateral exchange rate (MER) depreciated 11% over the same period. In any case, it is difficult to assign a significant part of this increase on the intervention. Overall, the current level of the nominal exchange rate does not differ much from its year-ago level, so its effect on annual imported inflation in pesos is negligible.

Regarding aggregate demand, third-quarter information available is consistent with prospects that in the second half of 2008 the economy will post annual growth significantly higher than in the first. Accordingly, the baseline scenario assumes growth for this year within a range between 4.5% and 5.0%. This scenario of dynamic output growth, particularly in sectors not related with natural resources, suggests that gaps have narrowed compared with previous forecasts.

This combination of higher cost pressures—both domestic and external—in an economy with less leeway than foreseen and with a domestic demand that continues to grow strongly, may have favored the persistence of high inflation and the propagation of the different shocks to other prices. Actually, the inflation measure that excludes the prices of energy and food products contributed to August's inflation slightly less than three percentage points, compared with the period 2001-2006 where its contribution averaged less than half the above figure.

The baseline scenario of this *Report* assumes that annual CPI inflation will meet the target of 3% during 2010. This projection is grounded on output slowing down, to grow around one percentage point below the trend over the policy horizon, which is consistent with GDP growing in the 3.5%-4.5% range during 2009, with a risk balance that, after considering possible eventualities, is biased downward. This trajectory, determined by the impact of a restrictive monetary policy, considers that sectors related with natural resources will grow more than the rest of the economy.

The baseline scenario assumes for 2009 a slowdown of domestic demand from the first half of this year. Private consumption will continue to decelerate, investment will reduce its annual growth rate, and public spending will also grow at a slower pace than this year, in line with recent announcements by the Ministry of Finance and the limits imposed by the structural surplus rule.

The convergence of inflation to the target considers an external scenario that does not help to widen the gaps in the domestic economy. According to the consensus scenario, during the projection scenario world growth will be more dynamic than it has been on average in the past twenty years, based on the performance of emerging economies. In turn, futures data and the analysis of the determinants of the current tightness of the markets, permit to forecast that the prices of both oil and foodstuffs will hover around their present levels over the next two years, so they will not be a source of inflation in the projection horizon, but they will not help in reducing the costs, either.

Economic Growth and Current Account

	2006	2007	2008 (f)	2009 (f)
GDP	4.3	5.1	4.5-5.0	3.5-4.5
National income	6.7	7.8	5.2	3.5
Domestic demand	6.4	7.8	9.1	3.9
Gross fixed capital formation	2.9	11.9	19.3	2.9
Total consumption	6.4	7.4	5.6	4.3
Exports of goods and services	5.5	7.8	2.1	3.8
Imports of goods and services	10.5	14.3	12.6	4.1
Current account (% of GDP)	4.7	4.4	-1.1	-2.7
Current account	6,838	7,200	-2,000	-5,300
Trade balance	22,587	23,653	16,300	10,100
Exports	58,485	67,644	74,700	72,500
Imports	-35,899	-43,991	-58,400	-62,400
Services	-628	-1,162	-1,600	-1,400
Rent	-18,418	-18,265	-20,000	-17,100
Current transfers	3,297	2,974	3,300	3,100

(f) Projection.

Source: Central Bank of Chile.

The baseline scenario assumes that inflation expectations and the future wage dynamics will be consistent with compliance with the target. This is consistent with annual growth in unit labor costs—currently between 7% and 9%—will return to levels consistent with the target in the projection horizon. This will be helped if mild future wages increases not fully reflecting past inflation, but rather considering as a fundamental determinant that inflation is returning to the target range in a limited period of time. Similarly, the baseline scenario assumes that pricing decisions are based on inflation expectations in line with the target.

As working assumptions, the baseline scenario considers that in the long term the real exchange rate (RER) is similar to its current level, and its short-term dynamics is consistent with the evolution of monetary policy. The real exchange rate (RER) shows no major movements either, and is estimated to be at a level consistent with its long-term fundamentals. Furthermore, the MPR is projected to follow a short-term path that will run above the one that can be derived from various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report*. This, in order to create the necessary gaps to attain convergence of inflation to the target.

Inflation

	2007	2008 (f)	2009 (f)	2010 (f)
Average CPI inflation	4.4	8.8	6.9	3.4
December CPI inflation	7.8	8.5	4.9	
CPI inflation around 2 years (*)				3.0
Average CPIX inflation	4.0	8.2	6.5	3.6
December CPIX inflation	6.3	8.4	4.8	
CPIX inflation around 2 years (*)				3.3
Average CPIX1 inflation	4.1	7.9	6.7	3.6
December CPIX1 inflation	6.3	8.5	4.8	
CPIX1 inflation around 2 years (*)				3.4

(f) Projection.
(*) Projected inflation at 2010.QIII.

Source: Central Bank of Chile.

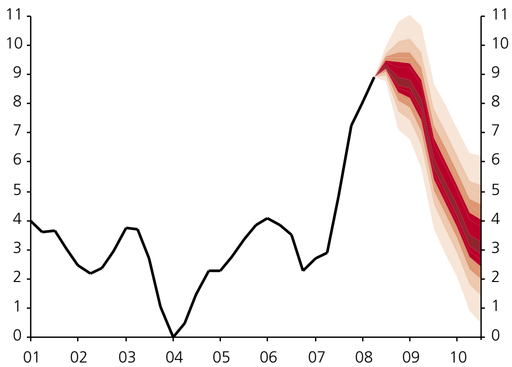
With this set of assumptions, the baseline scenario of this *Report* considers that annual CPI inflation will remain high for the rest of the year, will begin descending over the course of 2009, to reach the 3% target in 2010. However, a number of situations might drive effective inflation away from projections. On this occasion, after examining alternative events, the Board estimates that the balance of risks for inflation is biased upward in the short term, but unbiased over the projection horizon.

The Board reaffirms that, to the extent that macroeconomic variables drift away from the baseline scenario, jeopardizing compliance with the inflation objective, it will further tighten monetary policy. Conversely, if output gaps are widened while inflation expectations and wage dynamics are consistent with compliance with the target, it will not be necessary to incur additional costs to drive inflation to converge to 3% in two years.

Although the Bank orients its policies to achieving an inflation objective in the medium term rather than in the short term, part of its success is to prevent the incubation of inflationary pressures that could affect its credibility and the economy's inflationary anchor. It is normal for any shock to have some degree of propagation to the other prices. Actually, the monetary policy regime in place is based on a target two years ahead, partly because it recognizes that developments exist whose repercussions do not fade out

CPI inflation projection (*)

(annual change, percent)

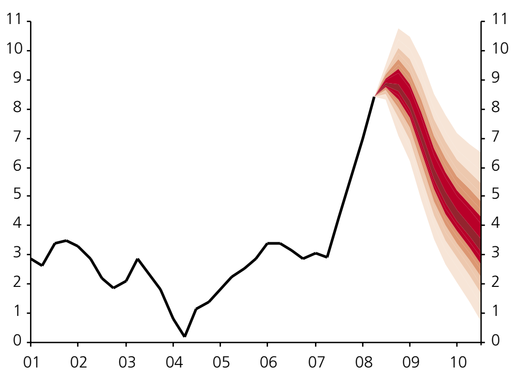


(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% are included for the baseline scenario. These confidence intervals summarize the Board's evaluation on inflation risks. The projection scenario incorporates as a methodological assumption that the MPR will follow a short-term path that will run above the one that can be derived from various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report*.

Source: Central Bank of Chile.

CPIX 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% are included for the baseline scenario. These confidence intervals summarize the Board's evaluation on inflation risks. The projection scenario incorporates as a methodological assumption that the MPR will follow a short-term path that will run above the one that can be derived from various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report*.

Source: Central Bank of Chile.

rapidly but that, by their nature, do not warrant significant neutralization by monetary policy actions. However, it is its responsibility—and thus is considered by the Board in its decisions—to ensure that no unexpected and undesired increase in inflation will be perpetuated and propagated over time. Accordingly, if the Board considers that the propagation of past inflationary shocks continues to threaten the convergence of inflation to the target in the two-year policy horizon, it will necessarily take additional monetary policy actions to correct these imbalances.

The Board reaffirms its commitment to conduct monetary policy so as to ensure that the currently high inflation will be reduced to 3% in the policy horizon. This is essential to align the inflation dynamics with the price stability objective. The future path of the MPR considers further adjustments to ensure convergence of inflation to the target, at a pace that will depend on incoming information and its implications on projected inflation.

Monetary policy decisions in the past three months

Background: *Monetary Policy Report,* May 2008

By May, the economic outlook had changed markedly since the January *Monetary Policy Report*. The world growth scenario had deteriorated, economic activity, already meager in the second half of 2007, had further weakened and the peso had appreciated, a trend that was partly reverted in April by the Bank initiating a program of international reserves purchases. World food and commodity prices were still rising. Annual CPI inflation, although it had continued to rise in the first quarter, had done so more slowly than expected in January and without the unusual increases seen in the second half of 2007. In April the level of inflation had fallen and the baseline scenario expected that this trend would continue in the coming quarters. This permitted to maintain the monetary policy interest rate (MPR) at 6.25% since January, and remove the bias from its future path in April.

The baseline scenario contemplated annual inflation converging to the target level during 2009 since, among other considerations, inflation propagation was coherent with its normal pattern and medium- and long-term inflation expectations were in line with the target. Output was expected to grow between 4% and 5% with a downward biased risk balance. For 2009, given the effects of the worsening relevant external scenario, output could be expected to grow steadily throughout the year thanks to increased production from commodity-producing sectors where investment projects were in full operation.

Meetings from June to August

By June the macroeconomic panorama was substantially different. Inflation had registered a high and unexpected increase in May and the prices of oil and other raw materials had jumped, so there was a marked change in the inflationary outlook foreseen in May's *Monetary Policy Report* and a strong possibility of new deviations or surprises. Unlike the scenario of prolonged maintenance of the MPR assumed in the *Report*, the information gathered now made the Board consider that the most plausible options for June's meeting were to raise the MPR by 25 or 50 basis points. The surprise jump in inflation was worrying because, although it was concentrated on only a few foods and fuels, it could be representing an excessive propagation of international food and fuel price hikes on domestic prices. In addition, earnings were rising in line with the usual indexation but there was a potential risk of them not doing so in the future. In this new inflationary scenario, the progress of interest rates implicit in May's *Report* risked inflation not reaching its 3% target within the two-year horizon and inflationary expectations were even beginning to show strong signs of differing from the medium-term target. Moreover, central banks of the main world economies were expressing growing concern about the evolution of inflation and the need to avoid certain international price shocks spreading to other prices. In this context, the Board considered that raising the MPR by 50 basis points would reaffirm its commitment to the inflation target and would signal its proactive approach and will to control inflation. Furthermore, this decision opened the possibility of maintaining a neutral bias with respect to the future path of monetary policy. The Board therefore decided to raise the MPR by 50 basis points and confirm its commitment to conducting monetary policy so as to lower the present high level of inflation towards 3% within the policy horizon. At the same time, it indicated that developments on the complex international scene, the degree of propagation of recent inflationary shocks to other prices and wages and the upthrust of additional inflationary pressures were all particularly important factors affecting inflation and future changes to the MPR.

In July, the main news again was the high inflation registered for June and also the sharp increase in inflation expected over various terms. Consequently, the MPR would have to be raised again but the Board considered that 25 basis points would not be sufficient in view of the deteriorated inflationary outlook. The most plausible options were thought to be an increase of 50 or 75 basis points. The CPI rise confirmed that the progress of inflation over the coming months would be significantly different from that projected in May's *Monetary Policy Report* and would give rise to a slower convergence than that foreseen. Moreover there were signs that price rises were more generalized, affecting products other than basic foods, energy and fuels, indicating that the degree of inflationary propagation was greater than envisaged and could be more persistent than would be coherent with achieving inflationary convergence within the two-year horizon, given the present interest rate level. The most serious concern was the sharp and generalized rise in the various measures of breakeven inflation and inflation surveys. The 50-basis point rise effected in the previous meeting had been well received by the market but it had not been enough to avoid severely worsened inflation expectations and the Board was of the opinion that this constituted a serious threat to inflationary convergence. This crude diagnosis was tempered to some extent by evaluating the process of inflationary shock propagation to other prices and wages, In particular propagation to wages, that it was crucial to avoid as it would set off an inflationary spiral, up to then had been moderate. Moreover, it was thought that, although external causes were mainly to blame for the high inflation it was not correct either from a conceptual or a practical point of view to suggest that the Central Bank was not capable of having some effect on it. The Board decided that its actions and communications should make it clear that it upheld its responsibility and capacity of determining inflation within the policy horizon, even within a complex context. The size of the MPR rise and particularly its timing schedule was open for discussion but, considering that the market had reacted quite strongly to inflation developments, a rise of 50 basis points seemed reasonable and it was the amount largely expected. Raising the MPR by 75 basis points could produce adverse effects in the market since it could be taken as indicating that the Bank in fact foresaw an even worse scenario. Besides, spreading the increase out allowed time for credit and spending decisions to be revised and adjusted in the light of the new circumstances without generating undesirable effects. The Board therefore raised the MPR by 50 basis points for the second consecutive month and confirmed its commitment to conducting monetary policy so as to reduce the current high inflation towards 3% within the policy horizon. However, unlike the previous month, it stated that although the future path of the MPR would depend on incoming information, the most likely scenario pointed to further rate adjustments to ensure convergence to the inflationary target.

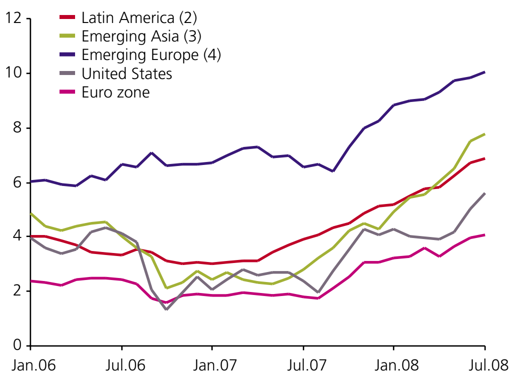
In August, the situation of inflation continued to worsen and short-term projections estimated that the annual inflation rate would remain high over the following months. There was also growing evidence of more intense propagation of past inflation and rising costs to consumer prices. The MPR would have to be adjusted again and, as in the previous meeting, the Board considered that 25 basis points would not suffice, given the deterioration of the inflationary perspective and that the most plausible options were to raise the MPR by 50 or 75 basis points. Propagation of inflation was more marked with regard to headline inflation but the various measures of medium-term expectations for inflation had gone down and wages growth was not showing much change. However, the Board considered that the risk of wage hikes was greater because of the level and persistence of inflation, and that risk could be heightened if it was felt that convergence towards the inflationary target was going to take longer than usual. On the external front, there were signs of weakness in some developed economies and commodity prices had dropped, except for oil prices which continued far higher than had been expected only a few months earlier, so there was not much hope of any significant relief for domestic prices in the short run. The peso had depreciated again, substantially distant from its peak in March. The situation of inflation, produced by a succession of supply shocks, made evaluation of the economy more complex and much more difficult to resolve than when shocks had been more specific and there had been greater credibility. For this reason, and since there were no gaps, monetary policy must be handled in such a way that aggregate demand would generate a limited and prudent negative gap. The fact that inflation expectations were higher than the target implied that a more negative output gap would be necessary to meet the inflation target because a greater dosage of monetary policy would be required to bring expectations down. Even if inflation expectations did come into line with the target, it could still be perfectly possible that the MPR would have to be raised yet higher. In this way, the moment in which inflation expectations came down would not necessarily determine the cycle of monetary policy. Moreover, the Board believed that keeping inflation expectations in line with the policy target was the best way to minimize the real costs of stabilization. An increase of 75 basis points would probably have a greater effect on expectations than one of 50 points, which was the widely expected increase. But it would be more prudent and credible to stick to a pace of substantial increases now and in the future to produce the desired convergence with expectations. This would leave room for the various agents to gradually revise their economic decisions in the light of the new macroeconomic conditions and this would make the Bank's task easier, and it would enable more information to be gathered because there was still considerable uncertainty regarding several areas of the world economy. An increase of 75 basis points could be taken as making all the required adjustment for the remainder of the year in one go and this was not consistent with the Bank's diagnosis. The Board therefore decided to raise the MPR by 50 basis points for the third consecutive month and confirmed its commitment to conducting monetary policy so as to reduce the present high inflation towards 3% within the policy horizon and stated that further adjustments would most likely be required.

I. International scenario

Figure I.1

CPI Inflation (1)

(annual change, percent)



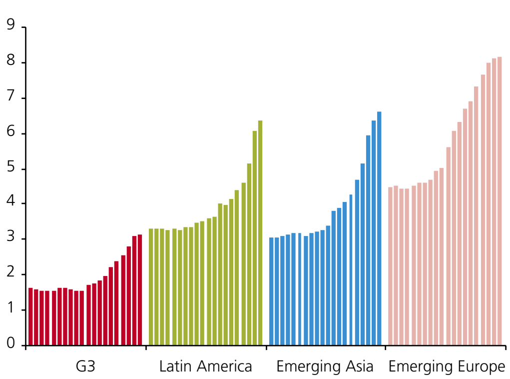
(1) Geometric average of the countries of each region.
(2) Brazil, Colombia, Chile, Mexico and Peru.
(3) South Korea, China, Indonesia, Malaysia, Singapore, Thailand and Taiwan.
(4) Hungary, Czech Republic, Russia and Turkey.

Source: Central Bank of Chile based on CEIC data.

Figure I.2

Inflation expectations for 2008 (*)

(annual change, percent)



(*) Each bar corresponds to the average annual inflation projection each month since January 2007. Geometric averages are calculated of projected inflation for the economies of each economic zone.

Source: Consensus Forecasts.

This chapter examines recent developments and outlook for the world economy over the next two years and describes the most likely external scenario relevant to the Chilean economy, as well as the main risks.

World inflation

In recent months, inflation has gone up in various developed and emerging economies, in line with significant increases in prices of energy and foods, and inflation has become the focus of attention of many central banks. Monetary authorities' targets have been exceeded in inflation-targeting countries and, in the others, inflation has gone higher than their defined comfort zone. For example, in the United States, annual CPI inflation in July reached 5.6%, in Japan, 2%, and in the euro zone it reached 3.8% in August. In emerging economies, rising inflation is widespread and has reached over 6% in Brazil, China and the Czech Republic, among others (figure I.1). Particularly worrying is the rising effect of food and energy price hikes on other prices. Consequently, inflation expectations throughout the world foresee rises and many countries' forecasts for this year double the level predicted a year ago. For 2009, the forecasts have also been revised upwards but not by as much as for this year (figures 1.2 and 1.3).

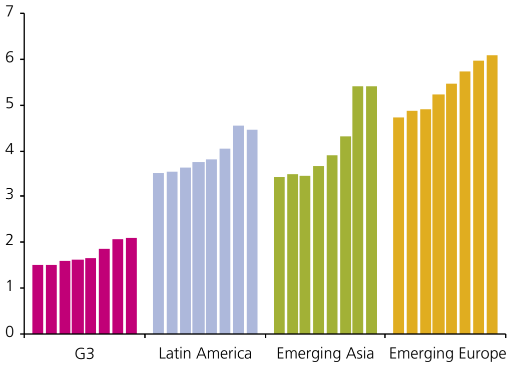
Central banks have toughened their discourse regarding their commitment to price stability. In many cases, particularly in emerging economies, tougher talk has been accompanied by restrictive monetary policy action (figure VI.6).

This generalized increase in actual and projected inflation is reflected in the effective and expected change in the external price index (EPI) in U.S. dollars relevant to the Chilean economy. In the second quarter of this year, the EPI rose by an annual 18% on average. For this year it is expected to rise by 14.1%, more than the 12.5% estimated in May (table I.1) and the baseline scenario assumes that its growth throughout the projection horizon will be at higher rates than foreseen in May. Unlike the corrections made in the *Monetary Policy Reports* of the past year, the main source of this rise is the increase in inflation in local currency in each country and not parity changes. In fact, the baseline scenario assumes a slight appreciation of the dollar in international markets. In any case, relevant external inflation for 2009 and 2010 is expected to be significantly lower than in the past five years because, apart from the dollar tending to appreciate, local inflation rates should be lower than those of this year due to monetary policy moves in the emerging economies and less dynamic activity in the developed ones.

Figure I.3

Inflation expectations for 2009 (*)

(annual change, percent)



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

Source: Consensus Forecasts.

Table I.1

World inflation

(average annual change in local currency, percent)

	Average 1990-99	Average 2000-05	2007 (e)	2008 (f)	2009 (f)
United States	3.0	2.7	2.9	4.7	2.8
Euro zone	2.3	2.2	2.1	3.6	2.5
Japan	1.2	-0.5	0.1	1.5	1.1
China	7.8	1.2	4.8	6.8	4.7
Australia	2.5	3.3	2.4	4.2	3.2
New Zealand	2.1	2.5	2.4	4.0	3.2
Argentina	253.7	8.8	8.9	9.1	10.2
Brazil	854.8	8.4	3.6	5.8	5.5
Mexico	20.4	5.7	4.0	4.9	5.0
EPI (*)	1.9	3.8	8.5	14.1	3.3

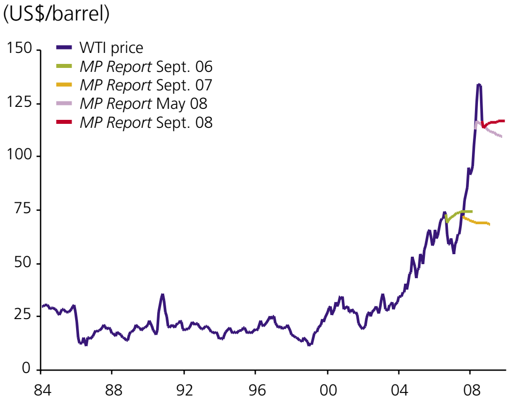
(*) See Glossary for definition.
(e) Estimate.
(f) Projection.

Source: Central Bank of Chile, based on Consensus Forecast and IMF.

Figure I.4

WTI oil price and futures (*)

(US$/barrel)



(*) Futures consider average of last 10 working days prior to each *Report*'s statistical close.

Source: Bloomberg.

Commodity prices

The persistent commodity price increases has reflected in higher world inflation. While extremely volatile, they have remained high, in some cases reaching historic peaks, creating great uncertainty about their future direction. The reasons are various and do not differ greatly from those given in previous *Reports*, in that they mainly reflect continuing robust demand, particularly from emerging economies, and a sluggish response of supply. To a lesser extent, commodity price changes are due to market speculators[1]/. Some market analysts have raised their long-term projections of commodity prices, suggesting that the high levels will persist longer. However, the current prices of commodities in general are higher than what long-term fundamentals indicate, which could imply that they will tend to come down in the future.

The WTI oil price is around US$110 a barrel, more than 50% over its price last year, and this increase is perceived as persistent. Long-term projections for the oil price have also risen accordingly from between US$45 and US$75 a barrel in January 2007 to between US$75 and US$135 at present. The long-term perception in general responds to the belief that the world economy, despite the weakness of developed economies, continues growing strongly and that supply will not be able to keep up the pace. Therefore, based on the prices implicit in futures contracts, the baseline scenario considers average prices about 5% higher than those foreseen in May, reaching US$115, US$116 and US$115 a barrel of WTI crude oil in 2008, 2009 and 2010, respectively (figure I.4).

The copper price has also remained high longer than was predicted in previous *Reports*. Its average in the year to date is US$3.7/lb on the London Metal Exchange (LME) and, like oil, it reached its highest level ever in early-July at US$4.07/lb. Prices of around US$3.5/lb over recent months are mainly due to supply-side factors, such as lower production by important suppliers and some labor conflicts at large-scale mines, while demand has continued strong.

Long-term expectations in the copper market have also moved up in the past year and a half, from values around US$1.5/lb to over US$2/lb. This price is coherent with the one used by the committee of experts called by the Minister of Finance to define the structural parameters for setting the 2009 budget framework. The baseline scenario considers higher prices than those foreseen in May: LME US$3.5, US$3.1 and US$3.0/lb for 2008, 2009 and 2010 respectively (figure I.5).

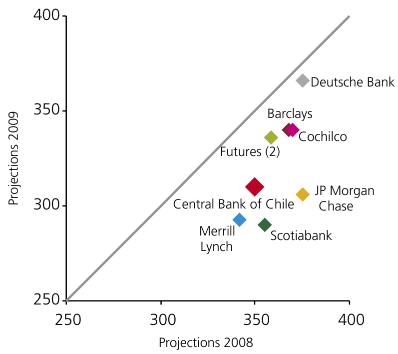
Prices of basic foods, a little later than those of metals and oil, have also risen substantially over the past year and a half, with international wheat and corn prices about 50% more than at the beginning of 2007 and rice almost 80% more. Thus, despite these prices being significantly lower than at the close of the May *Report*, thanks to the positive outlook for supplies, they are nevertheless well above their level of a year and a half ago (figure I.6).

[1]/ See *Monetary Policy Report* May 2008, box I.1, page 23.

Figure I.5

Copper market: dispersion of price projections (1)

(US¢/lb, annual average)



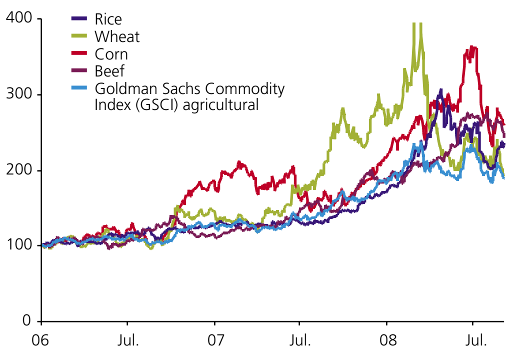
(1) Considers projections reported 31 July to 4 Sept. 2008.
(2) Futures consider average of last 10 working days as at 4 Sept. 2008.

Sources: Central Bank of Chile, Barclays (2008), Bloomberg, Cochilco (2008), Deutsche Bank (2008), JP Morgan (2008), Merrill Lynch (2008) and Scotiabank (2008).

Figure I.6

Food prices (*)

(indices 02.Jan.2006=100)



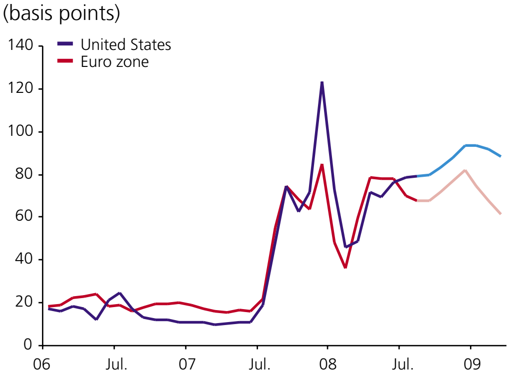
(*) Corn price corresponds to contract No.2 spot yellow corn. Wheat price corresponds to Soft Red Winter No.2 spot. Rice price corresponds to gross long grain No.2. Beef price corresponds to beef futures contracts, Brazil.

Source: Bloomberg.

Figure I.7

International market liquidity: short-term premiums (*)

(basis points)



(*) Difference between 3-month LIBOR and 3-month average monetary policy rate. Lighter color corresponds to projection based on futures contracts, using average of last 10 days prior to statistical close of this *Report*.

Source: Bloomberg.

Considering information on futures and analysis of the present supply situation in the markets, the baseline scenario foresees that prices of oil and basic foods will remain around their current level during the next two years. This assumption, as has been the tonic in the past few years, is subject to a wide range of risks as the situation could change one way or another.

Financial markets

Unlike the situation in most emerging economies, the concerns of central banks in developed economies, especially the United States, are split between the scenario of rising inflation and the persisting stress in their financial markets. In recent months, fears of a large impact on financial stability have been allayed to some extent but the problems of money market liquidity are still very much present with short-term premiums stubbornly not returning to their pre-subprime crisis levels (figure I.7). Their central banks have therefore had to extend and widen the measures aiming to provide liquidity. Important financial corporations have announced substantial losses associated with the subprime crisis which has kept their risk premiums very high. In the United States there are the outstanding cases of the two mortgage giants, Fannie Mae and Freddie Mac[2]/, with implicit state guarantees, under severe pressure and suffering hefty falls in their stock prices due to fears about their level of capitalization, despite determined support from the country's economic authorities (figure I.8).

The events triggered by the subprime crisis—among them the slackening of United States demand and the depreciation of the dollar—have contributed to reducing the United States current account deficit, which has dropped from the equivalent of over 6.5% of GDP at end-2005 to less than 5% today. Considering the trend prices of oil, the drop could be even greater, to 3.8% of GDP although the imbalance is still significant (figure I.9). As has been mentioned, prolongation of global imbalances is an element of risk that must be corrected so this reduction in the U.S. current account deficit is at least one good effect of the subprime situation. In recent months the depreciation of the dollar has slowed and in the past few weeks it has even tended to appreciate with respect to the currencies of its main trading partners. Nevertheless, with respect to some Latin American currencies, the dollar is more depreciated than in May.

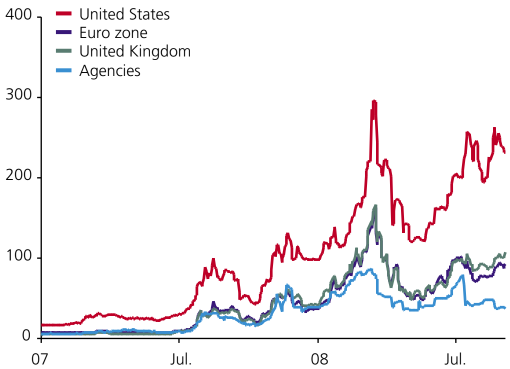
In the main developed economies the present monetary policy interest rates are expected to remain unchanged for some time. In the United States, the debate between concerns over inflation and growth is reflected in the changes to federal fund rates. In June, three 25-point increases were considered before the end of the year but by August this view had changed and no rises are foreseen for the rest of 2008. The euro zone central bank made a 25-basis point increase in July but is not expected to make any more changes this year, neither in Japan are any rises foreseen (figure I.10).

[2]/ The U.S. government's announcement of its intervention of these companies came after the statistical close of this *Report*.

Figure I.8

Credit default swap risk premiums of the banking sector(*)

(basis points)



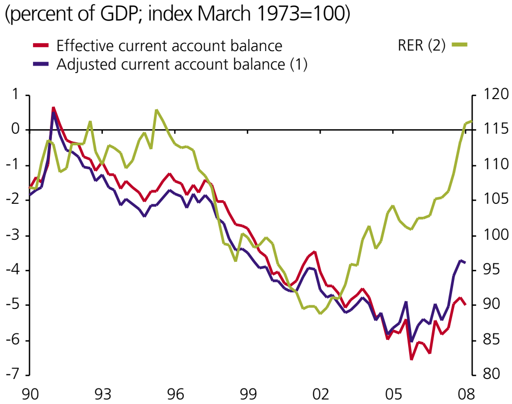
(*) See Glossary for definition. Simple average of main banks. The U.S. includes Citigroup, Goldman Sachs, Lehman Brothers and Merrill Lynch. Europe includes BNP Paribas, Société Générale, Deutsche Bank and UBS A:G:. United Kingdom includes HSBC Bank, Barclays Bank, Lloyds TSB Bank and Royal Bank of Scotland. Agencies include Fannie Mae and Freddie Mac.

Source: Bloomberg.

Figure I.9

United States: current account balance and real exchange rate (RER)

(percent of GDP; index March 1973=100)



(1) Considers oil imports valued at trend price, as lineal assumption.
(2) Increase indicates dollar depreciation.

Sources: Central Bank of Chile based on Bureau of Economic Analysis, Bloomberg and U.S. Federal Reserve.

Long-term interest rates in developed economies have been volatile since May. They rose in response to fears of rising inflation and higher than expected output figures for the first months of the year, but then they fell again due to fears of financial market problems causing economic slowdown, preference for safer assets and high oil prices. Thus they are now practically the same level as they were at the statistical close of the May *Report* (figure I.11).

During the first months of this year, emerging economies had remained relatively resilient to the events in developed economies but they have begun to feel the effects. Sovereign risk premiums have risen, stock markets have fallen sharply—the same as in developed economies—and the flow of foreign investment to emerging countries has clearly slowed, particularly with respect to corporative bond issues, showing that investors are turning to safer instruments (figures I.12 and I.13).

World growth

World economic growth was higher than expected in the first quarter of the year, reaching an annual 4%. However, especially in developed economies, fears persist of the financial crisis passing through to the real sector and that economic slowdown has only been held off for a while. Most indicators at the present moment point in this direction so any upward adjustments in projections for the year are more than anything due to the inclusion of effective figures. Nevertheless, even though world growth forecast for this year and next is less than it was in 2007, it is still higher than the average of the past twenty years, boosted by emerging economies' performance. The year 2010 is expected to see a world economic recovery, particularly in the developed economies, in part due to the delay in normalizing their monetary policy rate cycles. However, the most likely external scenario projects more dynamic world growth in the next two years than its past average so it will not contribute to generating gaps in the domestic plane.

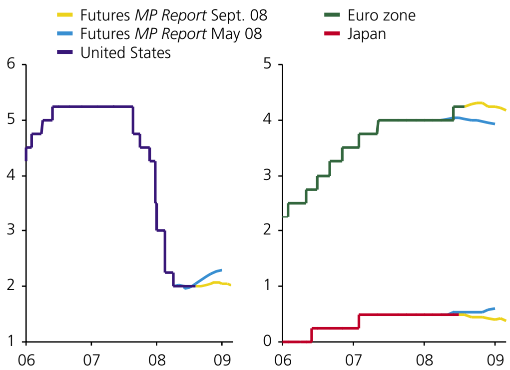
In the second quarter of 2008, the United States economy expanded 3.3% at an annualized quarterly rate (2.2% with respect to the same quarter of 2007) with notable reduction in inventories and a fairly buoyant external sector. Although this figure, together with the first quarter's 0.9%, describes an economy that is not in recession, the outlook for the second half of the year is gloomy. Consumption does not look promising because the fiscal package that boosted it during the second quarter has come to an end, the labor market is suffering job destruction, confidence indices are at almost all-time lows and household wealth is shrinking. The housing market worsens as residential investment has contracted by two-digit rates since early 2006 and investment in machinery and equipment also registers negative annual figures. So, the outlook for the United States is a prolonged slowdown.

In the euro zone, the first quarter's dynamism gave way to second quarter contraction, GDP shrinking by a quarterly annualized rate of 0.8% (1.4% compared to second quarter 2007). This was due to a drop in consumption, little investment and a sluggish external sector. Spot indicators, such as business confidence surveys and labor market figures, foresee this panorama persisting so that expectations for a weak 2009 are gaining ground (figure I.14).

Figure I.10

Monetary policy rate expectations in developed economies (*)

(percent)



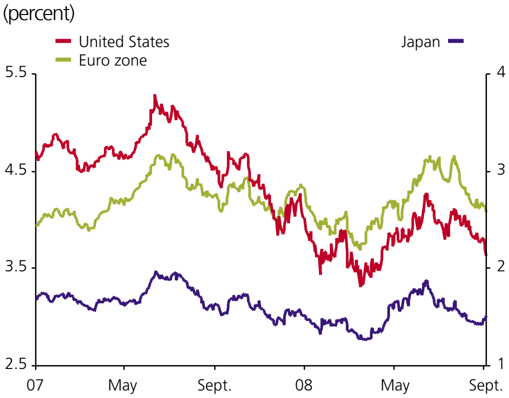
(*) Based on interest futures contracts. Considers average of last 10 working days prior to each *Report*'s statistical close.

Source: Central Bank of Chile and Bloomberg.

Figure I.11

Long-term interest rates in developed economies (*)

(percent)



(*) Corresponds to 10-year nominal government bonds.

Source: Bloomberg.

Figure I.12

World stock markets and risk premiums (*)

(indices 02.Jan.2007=100; basis points)

(*) Stock markets correspond to MSCI indicator by region.

Sources: Bloomberg and Morgan Stanley Chase International.

In Japan, second quarter GDP contracted by a quarterly annualized 2.4% (year-on-year growth of 1%) in line with market expectations and spot indicators which were already revealing a marked economic downturn. Apart from the contraction of both consumption and investment, the negative contribution of the external sector must be noted since, until recently, it was driving economic growth. Reduced demand from the United States and Europe will continue to undermine exports' contribution to growth. Moreover, investment prospects look cloudy and private consumption is not showing positive signs, either.

The emerging economies of Asia are still boosted by China and India's dynamic growth, by supplying their demands for imports from the rest of the region. Although China's growth in the first half of this year was less than the exceptional growth rates of the past few years it is still measured in two digits driven by investment and exports. The baseline scenario foresees slightly more moderate Chinese growth, in response to weaker external demand from the developed economies and forecasts 10% GDP growth for this year and 9% on average in the next two years.

The main Latin American economies keep up dynamic growth rates, mainly due to domestic demand. In Brazil, weaker private consumption was offset by increased public expenditure, although this continues within the primary surplus targets set by the authorities. The outlook is for a smaller contribution of net exports, and for growth driven by private consumption supported by the strength of the labor market. The Mexican economy has slowed down because the weakness of the U.S. economy means a drop in exports to that country. A less dynamic labor market and reduced household disposable income have affected consumption. The Argentine economy is driven by private consumption although it has slowed slightly. However, there are persistent risks associated with various social conflicts and these affect exports and the investment climate. Overall, growth forecasts for the region remain stable for 2008 and improve slightly in the following two years (table I.2).

Table I.2

World growth (*)

(annual change, percent)

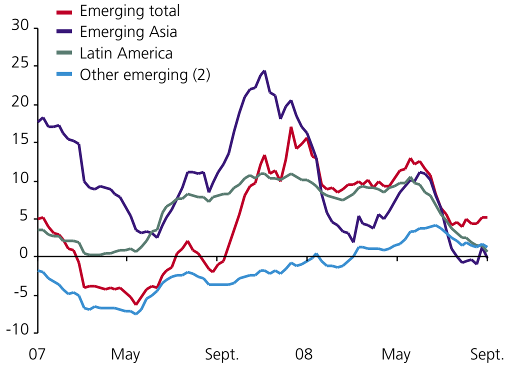
	Average 1990-99	Average 2000-05	2007 (e)	2008 (f)	2009 (f)	2010 (f)
World	2.9	3.8	5.0	4.0	3.7	4.4
World at market growth rate	2.4	2.9	3.8	2.8	2.5	3.4
United States	3.1	2.5	2.0	1.6	1.0	2.8
Euro zone	2.2	1.9	2.6	1.2	0.4	1.9
Japan	1.5	1.6	2.1	0.8	0.8	2.0
China	10.0	9.4	11.9	9.9	9.0	8.9
Rest of Asia	5.5	4.8	5.8	4.6	5.0	5.2
Latin America	2.7	2.9	5.6	4.3	3.8	4.2
Commodity exports	2.7	3.1	3.3	1.6	2.2	2.9
Trading partners	3.0	3.1	4.8	3.5	3.1	3.8

(e) Estimate.
(f) Projection.

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

Figure I.13

Investment fund net flows to emerging economies (1)
(US$ billion, accumulated)

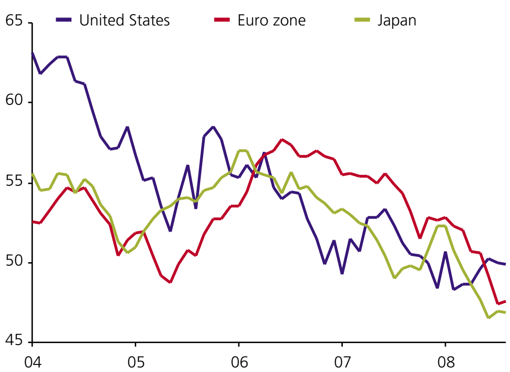


(1) Weekly figures.
(2) Emergin Europe, Middle East and Africa.

Source: Emerging Portfolio Fund Research.

Figure I.14

PMI manufacturing survey (*)
(balance of responses)

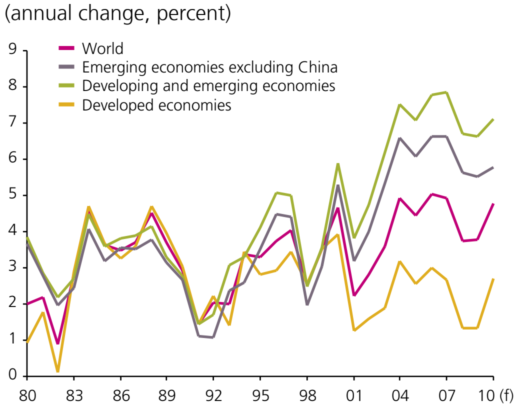


(*) PMI (purchasing managers' index), a survey of their evaluation of production, new orders, inventories, etc. Neutral level is 50.

Source: Bloomberg.

Figure I.15

World growth (*)
(annual change, percent)



(*) Classifications by region correspond to IMF definitions.
(f) Projection.

Source: International Monetary Fund.

Thus, projected world growth for this year and next is less than in 2007 but continues good in historic terms, basically thanks to the dynamism of emerging economies that is hoped will continue in a context in which commodities and basic foods continue to command high prices (figure I.15). The consensus of expectations foresees the decoupling of developed world growth and emerging economies' growth persisting. However, there are risks. On one hand, there may not be said decoupling and reduced world activity may take the pressure off commodity prices and inflation. On the other hand, global inflation, especially in developed economies, could be more persistent and could require brusque interest rate adjustments to resolve the problem of inflation.

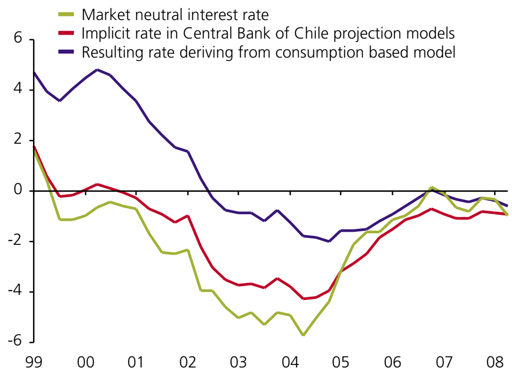
II. Financial markets

This chapter reviews recent developments of financial markets' main variables from a monetary policy perspective.

Figure II.1

Real interest rate gap : real MPR (*) less indicated neutral interest rate

(percent)



(*) Calculated as nominal MPR less expected inflation deriving from Central Bank of Chile's survey.

Source: Central Bank of Chile.

Monetary policy

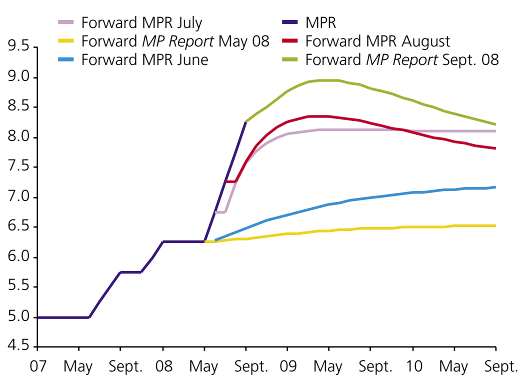
The inflation scenario faced by the Chilean economy has worsened drastically in recent months. Repeated shocks jeopardize the aim of bringing inflation, already significantly deviated from its target, back on track. The Board has raised the monetary policy interest rate (MPR) by 50 basis points at each of its meetings from June to September in order to contain the spread of these shocks to other prices and wages and to keep inflation expectations at levels coherent with the target. At the same time, the monetary policy bias has become more restrictive, indicating that additional MPR increases are contemplated in the future to ensure the convergence of inflation to the target range. Since mid-2007 to date, the MPR has been raised by 325 basis points (figure II.1).

The worsened outlook for inflation is reflected in the market's expectations for the MPR. Until May, the private sector had foreseen the interest rate path remaining flat, or at most rising or falling by a small amount, some 25 basis points up or down. But, from May, the outlook changed, the market began to expect a more aggressive MPR increase, and this feeling has intensified each time the Board has raised the MPR and indicated a restrictive bias in the future.

Figure II.2

MPR and forward curve

(percent)



Source: Central Bank of Chile.

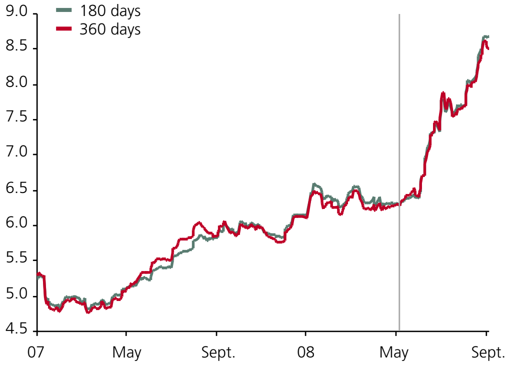
Considering information accrued during the two weeks prior to the statistical close of this *Report*, the various measures of market expectations for the MPR tend to see it rising to between 8.5% and 8.75% by year's end and to 9.0% during the first quarter of 2009. The inference derived from the forward curve is that the MPR will reach a maximum of 9.0% in the first quarter of 2009 and gradually fall towards the end of that year (figure II.2). Similarly, the swap rate curve implies the MPR reaching a high of 8.7% during the same period (figure II.3). In any case, the inverted slope of the curve suggests that market agents expect inflation to begin to ease in the following months and they see the MPR falling in 2009.

By way of a methodological assumption, the implicit projections in this *Monetary Policy Report* imply that in the short term the MPR will be higher than that deduced from the various measures of private-sector expectations accrued in the two weeks prior to the close of this *Report*. This should generate the necessary gaps to achieve the convergence of inflation to target.

Figure II.3

Swap rates (*)

(percent)



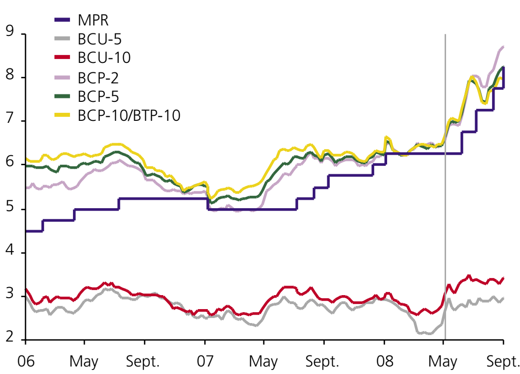
(*) See Glossary for definitions.

Source: Central Bank of Chile.

Figure II.4

MPR and interest rates on Central Bank of Chile instruments

(weekly averages, percent)

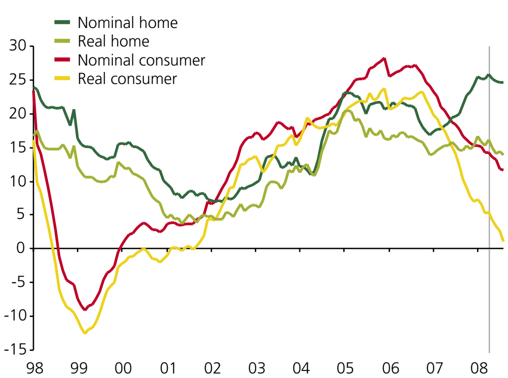


Source: Central Bank of Chile.

Figure II.5

Personal loans

(annual change, percent)



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

Financial conditions

Interest rates on Central Bank instruments have mainly been affected by the outlook for inflation and growth but also by the increased supply of instruments stemming from the sterilization of the Bank's foreign reserves purchase program. Nominal interest rates thus reached all-time high levels, while real rates, albeit higher than in May, are still comparable to the averages of the past five years (figure II.4).

The survey of bank loans during the second quarter reveals that financial conditions have become more restrictive, particularly for personal loans, as can be seen by the slower growth of consumer loans. It is coherent with the MPR rises passing through to the rates charged to the public and with information gathered from case studies in the regions. This has been reflected in the lower rate of growth in bank debt.

The same survey also reveals that banks have become more restrictive in offering consumer and mortgage loans, mainly because they are faced with increased portfolio risk. The tighter conditions include stricter requirements for loan approval and a wider spread over the cost of funds. At the same time demand for these loans has weakened because interest rates are less attractive and consumers are feeling the pinch in their incomes. It therefore comes as no surprise the drop in consumer loans since end-2006 when they were growing at over 25% per year in nominal terms to 10.5% in August this year (figure II.5). Nevertheless, the number of debtors continues to increase, to more than 3 million by June 2008, the group growing most being the small borrowers for amounts under UF20. Annual growth of mortgage loans had been around 16% in real terms up to April this year but is tending to descend recently, dropping to 14% in August, coinciding with the slowdown of new home sales during the second quarter. Interest rates charged on these personal loans are tending to rise (table II.1), particularly consumer loan interest rates increased from an average of 28.5% in 2007 to 32.6% in August 2008. The rise in credit card interest rates in 2008 is also worth noting: 46% in July, equivalent to a 220 basis point increase since December 2007. Interest rates on home loans have risen only moderately, in line with their reference rates, the rates on BC UF-denominated instruments. In the regions, these rates will probably take longer to move upwards because of the time lag between application for a loan and its approval.

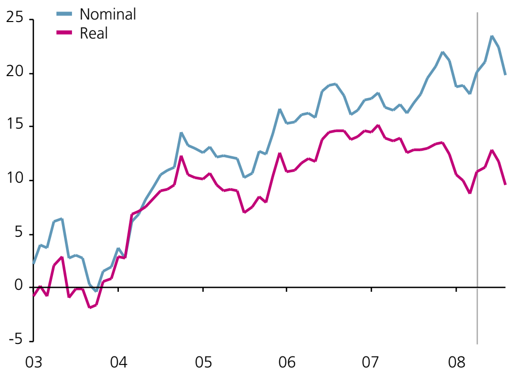
Lending standards for companies, according to the June credit survey, are also less favorable, because customers have a somewhat gloomy perception of the economic situation and its outlook, and lenders see their customers' greater credit risk. Consequently, the spreads over the cost of funding, the premium required on higher-risk loans and guarantees have all increased, while approved credit lines have shrunk. Respondents to the survey also blamed the less dynamic real estate market for the more adverse financing conditions and the drop in demand. Be that as it may, it is notorious that big companies faced with the changing conditions of the securities market have returned in force to banks. Interest rates on these credits have gone up, especially in the past month.

Thanks to foreign trade loans, companies' bank borrowing is growing at similar rates to those of the first quarter, with real annual growth reaching between 9% and 13% since January (figure II.6). Share issues up to July continued as at the beginning of the year with only sporadic placements,

Figure II.6

Corporate loans

(annual change, percent)

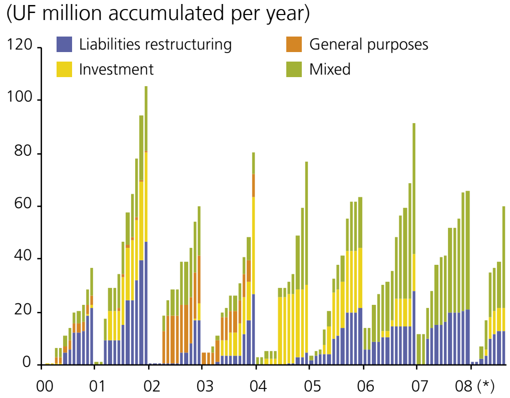


Sources: Central Bank of Chile and SBIF.

Figure II.7

Corporate bond issues by objective

(UF million accumulated per year)



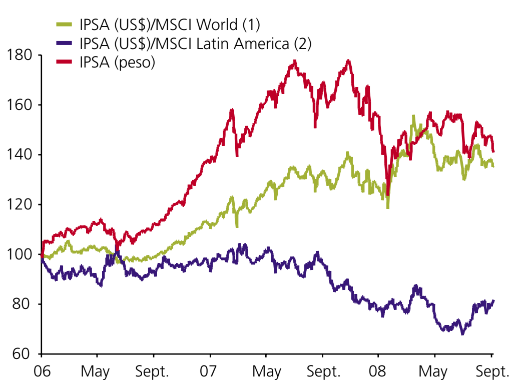
(*) Provisional figures for August 2008.

Sources: Central Bank of Chile and SBIF.

Figure II.8

Stock market indicators

(Indices 02.Jan.2006=100)



(1) MSCI world share index.
(2) MSCI Latin American share index.

Sources: Central Bank of Chile and Bloomberg.

whereas bond issues have been more dynamic with placements of UF18 million and UF21 million in May and August, respectively (figure II.7).

Stock market performance has been subject to external fluctuating conditions and to companies' second-quarter results. The IPSA (selected share index) has dropped 6.3% compared to its level at the close of May's *Monetary Policy Report*. However, if this index is measured in dollars, then the drop is 16.6% the same as that suffered by world stock exchanges, although less than the average drop of 26.4% in other Latin American stock exchanges (figure II.8).

Monetary aggregates, like all the series linked to monetary policy conduct, reflect the milder monetary impulse. In nominal terms, M1 growth was 12.5% in the first four months of the year and dropped to 11% in the second four months, though for August it was 10.3%. M2 grew by about 10% which had not happened since mid-2004, while M3 has continued at growth rates of around 15% since mid-2007 (figure II.9).

Table II.1

Lending rates

(base 360 days, percent)

		Consumer		LCH rates (3)				Commercial
	MPR	TPP (1)	Credit card (2)	Rate 4-5% and Dur: 5-6	Spread over BCU-5	Rate 5-6% and Dur: 5-6	Spread over BCU-5	TPP (1)
2004 Average	1.87	24.3	33.4	4.0	1.6	4.4	1.9	7.4
2005 Average	3.44	26.0	34.1	3.7	1.4	4.3	1.9	9.7
2006 Average	5.02	27.2	37.3	4.1	1.2	4.3	1.5	10.7
2007 Average	5.31	28.5	41.7	3.7	1.0	4.2	1.5	10.1
2007 Jun.	5.00	28.0	41.7	3.9	0.9	4.3	1.3	9.7
Jul.	5.16	28.8	41.8	3.8	1.1	4.2	1.5	9.7
Aug.	5.43	27.8	41.9	3.8	0.9	4.4	1.5	9.8
Sept.	5.63	28.9	42.3	3.7	1.1	4.1	1.4	10.7
Oct.	5.75	29.0	43.0	3.7	0.9	4.1	1.3	10.8
Nov.	5.75	29.0	43.7	3.6	0.7	4.1	1.2	10.8
Dec.	5.89	30.0	43.8	3.7	0.8	4.1	1.2	10.6
2008 Jan.	6.17	32.3	43.5	3.7	0.9	4.1	1.2	11.1
Feb.	6.25	32.2	43.8	3.6	0.9	3.9	1.2	10.8
Mar.	6.25	30.2	44.4	3.5	1.2	3.6	1.4	11.2
Apr.	6.25	30.3	44.6	3.4	1.2	3.6	1.4	11.4
May	6.25	31.1	43.9	3.7	1.0	4.4	1.7	11.5
Jun.	6.58	30.9	45.2	3.8	1.0	4.5	1.6	11.6
Jul.	7.07	32.4	46.0	3.9	1.0	4.4	1.5	12.0
Aug.	7.50	32.6		3.9	1.0	4.5	1.5	12.7

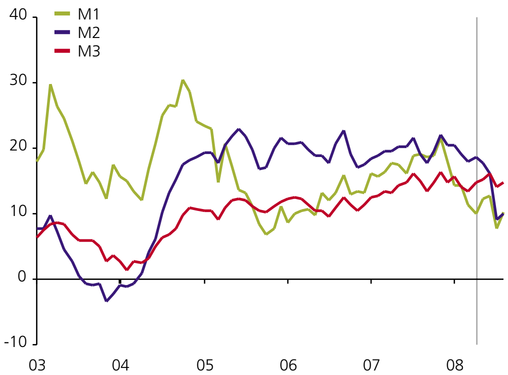
(1) Weighted average rate.
(2) Series published by SBIF, corresponding to peso transactions up to UF200 at over 90 days.
(3) Mortgage bills of credit with issue rate indicated.

Sources: Central Bank of Chile, Santiago Stock Exchange and SBIF.

Figure II.9

Monetary aggregates

(nominal annual change, percent)

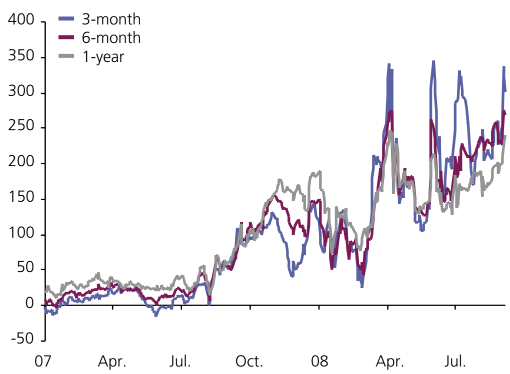


Source: Central Bank of Chile.

Figure II.10

Onshore spread

(spread over Libor)



Sources: Central Bank of Chile and Bloomberg.

Exchange rate

Since April to date, the nominal exchange rate has depreciated. Immediately following the announcement of the Central Bank's foreign-currency reserve purchase program, parity rose between 15 and 20 pesos. Later, under the effects of the changes in evaluation of developed economies' performance, commodity price fluctuations, especially of copper and oil, and domestic inflation and output figures, the peso continued to depreciate, reaching an exchange rate of between 510 and 525 pesos to the dollar in the two weeks prior to the statistical close of this *Report*, some 13% more than the exchange rates given in May's *Report*. The multilateral exchange rate (MER) depreciated 11% in the same period (table II.2) although it is difficult to ascribe a significant part of this change to the Bank's intervention. However, compared to a year ago, the current nominal exchange rate is not very different so its effect on imported inflation in pesos is not really relevant. As a working assumption, the baseline scenario considers a real exchange rate (RER) in the long run similar to the present level and in the short run evolving in line with monetary policy. The current RER, unlike the evaluation in May, is considered to be towards the top of the range of values supposed to be coherent with its long-term fundamentals.

Table II.2

Real. multilateral and observed exchange rates

(OER: pesos to US$, monthly average; MER. MER-5. and MER-X: 02.Jan.1998=100; RER and RER-5: 1986=100) (1)

	OER	MER	MER-5	MER-X	RER	RER-5
Jan.08	480.90	100.50	126.88	97.35	89.40	77.88
Feb.08	467.22	98.25	123.51	95.34	87.80	75.95
Mar.08	442.94	94.82	120.29	92.47	84.78	74.60
Apr.08	446.43	96.13	121.53	93.91	86.99	75.85
May 08	470.10	100.86	127.08	98.43	91.38	79.92
Jun.08	493.61	106.34	132.88	103.90	96.76	83.36
Jul.08	502.24	108.94	135.83	106.65	99.51	85.58
Aug.08	516.70	110.38	136.51	107.55	98.19	83.29
Sept.08 (2)	515.40	108.27	134.54	104.95		

(1) See Glossary for definitions.
(2) Average at 5 September.

Source: Central Bank of Chile.

The differential between Libor and domestic interest rates in dollars, referred to as onshore spread, over the past year has remained abnormally high. This is due to international financial uncertainty, the lack of liquidity in those markets and a perceived higher bank risk on a global level. These factors have made the spread more volatile and volatility has been heightened by changes in supply and demand for hedge and a greater dollar spot requirement on the part of institutions. Lack of liquidity has meant that, in this context, the forward exchange market does not adequately reflect expectations regarding the exchange rate. However, in this scenario, international arbitrage processes take place with a lag of a few days so brusque changes in the onshore spread do not persist (figure II.10).

III. Aggregate Demand

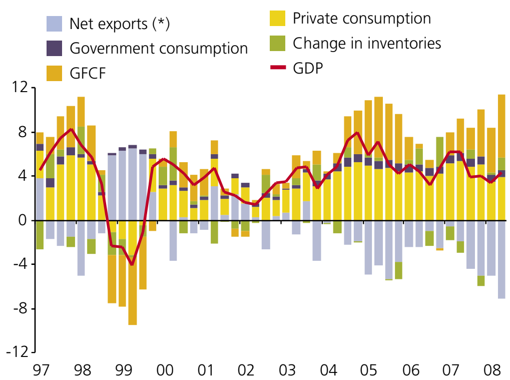
This chapter reviews recent trends in domestic and external demand and their short-term prospects in order to examine the possible inflationary pressures on goods and services markets and the most likely dynamics of economic activity.

Aggregate demand

Figure III.1

Contribution to GDP growth

(real annual change, percentage points)



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

Source: Central Bank of Chile.

Output registered annual growth of 3.8% in the first half of 2008, slightly lower than that of the second half of 2007, but quarterly registered growth was rising[1]/. In fact, in the first half of 2008 economic activity returned to quarterly growth rates of around 7%. Domestic demand averaged annual growth of 9.6% in the first half (table III.1). Final domestic demand (discounting inventory changes) increased by an annual 9.1% in the first half, with worth noting investment growth, especially in machinery and equipment (figure III.1). Although this investment has a bearing on GDP because it contributes to trade, it is fundamentally imports. That is why investment expenditure growth is not fully reflected in higher GDP growth but rather in a significant increase in capital goods imports. Similarly, but to a lesser extent, durable consumer goods consumption also registered substantial growth, matched by strong growth in imports of consumer goods that have reached record highs. Worth noting is the still high annual growth of fuel imports due to the change in the electricity-generating matrix.

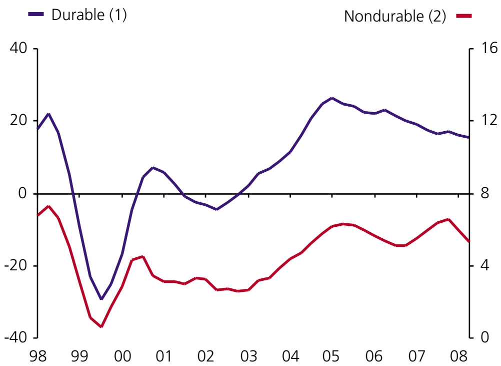
The baseline scenario of this *Monetary Policy Report* foresees annual output growth in the second half of 2008 higher than in the first half. This prediction is based on a recovery of the sectors related with natural resources, especially thanks to better hydrological conditions and the start up of new mining projects. Similarly, service sectors should continue with the same impetus of the first half in view of the estimated path of investment and despite the foreseen private consumption slowdown. Information already available for the third quarter is, in fact, coherent with the view that annual economic expansion in the second half will be significantly higher than in the first half of 2008. The baseline scenario thus foresees annual GDP growth of 4.5% to 5.0%. In this context, annual domestic demand growth should reach a little over 9.0% this year, higher than was estimated in May. The main source of

[1]/ On 25 August, Quarterly National Accounts, in accordance with its normal publication of figures, revealed the first estimates of second quarter GDP and domestic expenditure and the corrected figures for the first quarter of 2008.

Figure III.2

Real private consumption (1)

(annual change, percent, annual moving average)



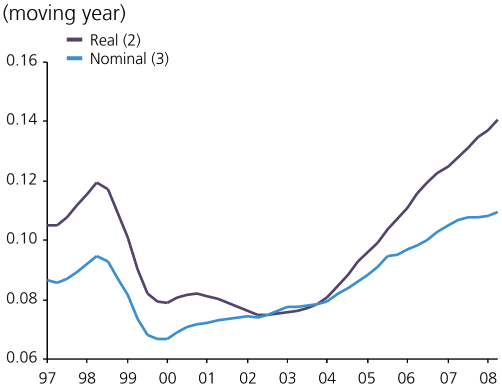
(1) At 2003 prices.
(2) Includes nondurable consumption and services.

Source: Central Bank of Chile.

Figure III.3

Durable over nondurable consumption (1)

(moving year)



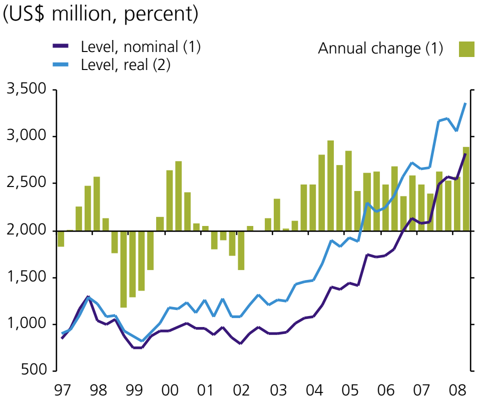
(1) Includes nondurable consumption and services.
(2) At 2003 prices.
(3) At current prices.

Source: Central Bank of Chile

Figure III.4

Consumer goods imports

(US$ million, percent)



(1) At current prices.
(2) At 1996 prices.

Source: Central Bank of Chile.

domestic demand growth is investment which is estimated to expand by over 19% this year. The second half of 2008 should continue as dynamic as the first half, particularly thanks to the development of mining and energy projects both of which are enjoying high prices.

Table III.1

Aggregate demand

(weight in GDP; real annual change, percent))

	Weight 2007	2007 I	II	III	IV	Year	2008 I	II	Half I.
Domestic demand	106.3	6.8	8.0	7.9	8.6	7.8	8.3	11.0	9.6
Final demand (without inventories)	105.6	8.1	9.1	7.2	9.5	8.5	8.1	10.0	9.1
GFCF	25.8	9.1	13.2	8.0	16.9	11.9	16.6	22.9	19.8
Machinery and equipment	12.0	7.7	18.3	8.8	26.1	15.5	22.8	34.4	28.6
C&O	13.8	10.3	9.1	7.3	9.2	8.9	11.6	13.0	12.3
Other	80.5	6.1	6.4	7.9	6.0	6.6	5.7	7.2	6.4
Private consumption	67.6	8.0	8.3	7.2	7.4	7.7	5.4	5.9	5.6
Durables	8.0	17.7	17.3	16.1	17.6	17.2	13.2	15.3	14.2
Nondurables	29.4	7.6	6.9	6.3	6.2	6.8	4.3	5.7	5.0
Services	30.1	6.4	7.4	5.8	6.1	6.4	4.7	3.4	4.0
Government consumption	12.3	6.5	5.7	5.5	5.8	5.8	5.9	5.5	5.7
CI (% GDP) (*)	0.7	1.0	0.7	0.9	0.7	0.7	0.7	1.0	0.8
Goods and services exports	40.0	9.1	10.6	4.2	7.3	7.8	2.0	-0.7	0.6
Goods and services imports	46.3	10.6	14.7	13.5	18.0	14.3	13.6	15.5	14.5
GDP	**100.0**	**6.2**	**6.2**	**3.9**	**4.0**	**5.1**	**3.3**	**4.3**	**3.8**

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

Source: Central Bank of Chile.

Private consumption and inventories

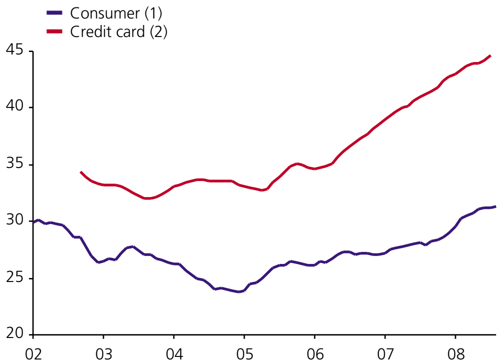
Private consumption growth was less in the first half of 2008 than in the second half of 2007. This was observed in both durable and nondurable goods. Although annual growth of durables consumption is around 14%, this rate has been slowing for almost two years in line with accumulating stocks of these goods (figure III.2). Nevertheless, the ratio of durables to nondurables is increasing and is now considerably bigger than the maximum that it reached towards the end of the past decade (figure III.3). As aforesaid, consumption growth has gone hand in hand with growth in durables imports which in the first half averaged around 30% year on year (figure III.4).

The recent slowdown in private consumption is explained in part by the change in some of its determinants, such as growth in real gross wages[2]/ growth, which has substantially slowed in the face of higher prices, and the drop in disposable private income. Financial conditions are

[2]/ Obtained by multiplying the hourly earnings index in real terms by salaried employment and the number of actual hours worked.

Figure III.5

Consumer loan and credit card interest rates
(base 360 days, percent, 6-month moving average)



(1) Weighted average consumer loan rate in pesos.
(2) Credit card interest rate at over 90 days on amounts up to UF200.

Sources: Central Bank of Chile and SBIF.

Figure III.6

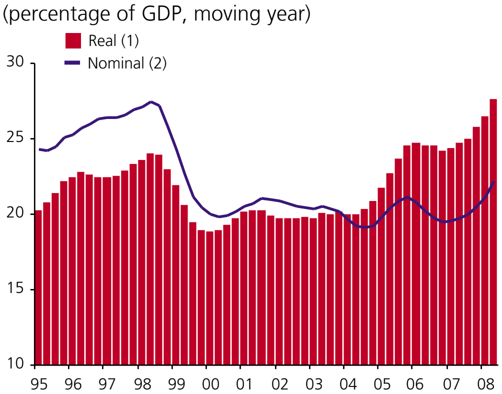
Consumer perception index (IPEC)(*)
(positive/negative responses)

(*) Index reading over/under 50 indicates optimism/pessimism. Index was published quarterly up to 2003, from then on, monthly.

Source: Adimark.

Figure III.7

Gross fixed capital formation (GFCF)
(percentage of GDP, moving year)



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

Source: Central Bank of Chile.

also more restrictive for households as regards the size of loans and the interest charged on them, interest rates on consumer loans having gone up considerably in recent months, about 500 basis points compared to August 2007 (figure III.5).

This slowdown in consumption and the less favorable outlook for the determinants of consumption growth coincide naturally with more pessimistic consumer expectations. Adimark's economic perception index IPEC dropped to almost 30, nearing the lowest levels of the past ten years, 50 being the neutral level (figure III.6).

Consumption growth is expected to continue falling in the second half of this year, in line with the recent and expected evolution of some of its determinants, in particular the financial conditions. However, private consumption has shown surprising resilience to the inflationary shock of the past year so the possibility of its slowdown being more moderate cannot be ruled out. The tightness of the labor market and increased female participation could help consumption to continue to grow at its present pace.

In the moving year ended second-quarter 2008, inventories accumulated represented 1% of GDP measured at constant prices. This is slightly up on end-2007 and is coherent with growth in imports and slower growth in private consumption.

Gross fixed capital formation (GFCF)

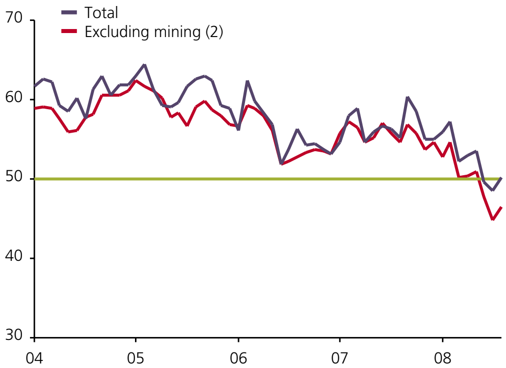
Investment continued to grow strongly during the first half of this year and to be the main factor driving domestic demand. Investment increased in both machinery and equipment and in construction and engineering work, both components registering annual growth rates higher than those of the second half of 2007. Thus, in the moving year ended second quarter 2008, investment over GDP rose to 27.6% at 2003 prices and 22.2% at current prices (figure III.7). An important part of investment growth is associated with various mining and power projects that demand large amounts of money. However, corporations are facing less favorable borrowing conditions, as revealed by the June credit survey, and this is due in part to the deterioration in the prevailing and future economic environment. The monthly business confidence indicator (IMCE) is at a neutral level but if mining is excluded it drops to below neutral (figure III.8). Nevertheless, investment conditions in general remain favorable, with long-term interest rates still low from a historic point of view and with substantial funding available for corporations. Borrowing is somewhat larger than in the first quarter of this year with real annual growth rates over 11% in the past four months.

By components, GFCF in machinery and equipment averaged annual growth of 28.6% in the first half of the year, the main component of which, capital goods imports, reached record levels with rising annual growth rates (figure III.9) while investment in construction and engineering registered annual growth of 12.3% in the first half of 2008. The investment project survey of the capital goods and technological development corporation

Figure III.8

Business Confidence Index (IMCE) (1)

(positive/negative responses)



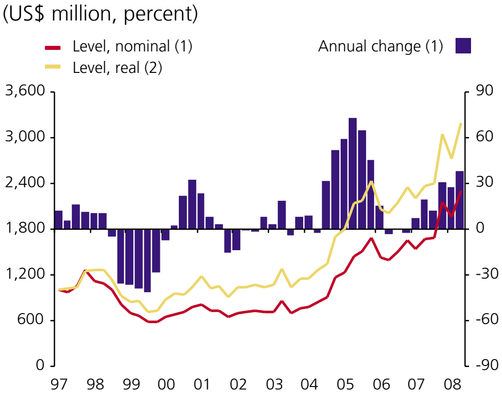
(1) Index reading over/under 50 indicates optimism/pessimism.
(2) Corresponds to weighted average of confidence indicators of three sectors: manufacturing, trade and construction.

Source: Adolfo Ibáñez University.

Figure III.9

Capital goods imports

(US$ million, percent)



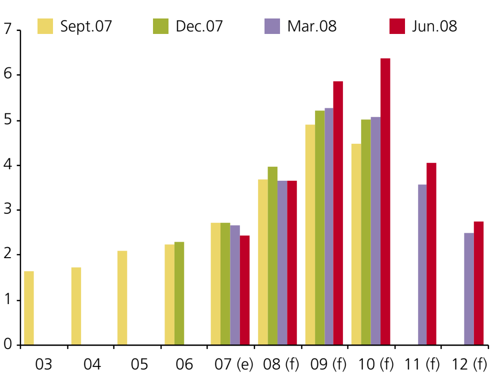
(1) At current prices.
(2) At 1996 prices.

Source: Central Bank of Chile.

Figure III.10

Investment in construction and engineering (*)

(US$ billion)



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

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

(*Corporación de Desarrollo Tecnológico y de Bienes de Capital, CBC*) showed no big change in the level anticipated for 2008, which is substantially higher than that of 2007. Moreover, investment is expected to continue growing strongly through 2009 and 2010 (figure III.10). The survey reveals that most of the projects being developed are in the mining and power sectors.

This *Report*'s baseline scenario assumes investment growing more slowly in this second half than in the first half of the year. It also foresees investment growth will slow as large-scale mining and power projects reach completion. Thus investment will reach an increase of 19.3% in the year and investment over GDP will be 29% at 2003 prices and 24% at current prices.

Fiscal policy

At June 2008, executed central government budget accumulated an overall surplus of 7.6% of GDP, compared with 9.4% at end-March. Fiscal authorities announced smaller fiscal expenditure growth in the second half of the year so that the overall surplus for 2008 will reach an expected 6.7% of GDP.

As regards setting the budget for 2009, the new referential copper price is taken at US$1.99/lb, up from US$1.37/lb, based on the high levels it has maintained on world markets and the gradually lower prices foreseen. Trend GDP growth of around 4.9% is coherent with the range considered in this *Report*'s baseline scenario which also considers that fiscal expenditure in 2009 will increase more slowly than in 2008, in line with recent Finance Ministry announcements and with the limits imposed by the structural surplus rule.

Exports and imports

Net exports were increasingly negative in the first half of 2008. On one hand, the growth in volume of exports was slower than at end-2007, averaging an annual -3.1% (table III.2), while, on the other, the volume of imports continued at high rates of growth, particularly imports of capital and consumer goods, as already mentioned. Prices of commodities and basic foods are notoriously high. Thus the trade balance at end-second-quarter amounted to US$10.07 billion, which is lower than that of the same period last year.

Total exports at fob value in the first half of 2008 amounted to US$38.28 billion, an annual increase of 9.6%, with second quarter results less than

Table III.2

Foreign trade

Exports

	Value US$ million	Annual change, percent											
		Total			Mining			Manufacturing			Agriculture		
		Value	Vol.	Price	Value	Vol.	Price	Value	Vol.	Price	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	8.5	6.0	2.4
2007 Year	67,644	15.7	7.1	8.0	16.6	7.6	8.4	13.6	5.9	7.3	16.4	5.3	10.5
2007 I	16,619	20.7	6.8	12.9	19.0	4.1	14.3	26.4	12.9	12.1	21.6	12.1	8.5
II	18,294	19.6	12.8	6.1	23.9	17.7	5.3	11.4	4.8	6.3	18.7	6.5	11.4
III	16,272	5.0	0.2	4.8	3.2	-1.9	5.2	5.8	1.6	4.1	30.4	16.8	11.8
IV	16,460	18.2	9.1	8.3	21.7	10.9	9.9	13.3	7.9	5.0	-13.2	-22.2	11.6
2008 I	19,324	16.3	-0.1	16.5	19.8	-0.8	20.7	6.0	-4.1	10.5	11.5	3.3	7.9
II	18,956	3.6	-6.0	10.2	-5.3	-14.2	10.4	15.6	3.5	11.6	27.2	16.7	9.0

Imports

	Value US$ million	Annual change, percent											
		Total			Consumption			Capital			Intermediate		
		Value	Vol.	Price	Value	Vol.	Price	Value	Vol.	Price	Value	Vol.	Price
2006 Year	38,405	17.3	11.4	5.3	21.1	19.4	1.4	1.7	0.3	1.4	20.1	11.5	7.8
2007 Year	47,125	22.7	17.5	4.4	20.6	18.1	2.1	17.8	16.7	0.9	25.5	17.8	6.6
2007 I	10,084	11.9	10.2	1.5	19.7	18.5	1.0	7.6	7.0	0.7	9.8	7.6	1.9
II	11,228	19.7	16.8	2.6	16.0	13.4	2.3	19.2	18.3	0.7	22.4	18.2	3.4
III	12,306	23.0	19.1	3.3	25.0	22.7	1.8	12.1	10.8	1.2	26.5	20.9	4.6
IV	13,506	34.9	21.9	10.7	21.3	17.2	3.5	30.6	29.2	1.1	42.9	22.3	16.7
2008 I	13,959	38.9	17.6	18.1	23.0	15.0	7.0	27.4	23.6	3.1	49.2	18.2	26.2
II	16,194	44.2	20.3	19.9	35.7	25.7	8.0	38.2	34.4	2.9	47.7	14.3	29.3

Source: Central Bank of Chile.

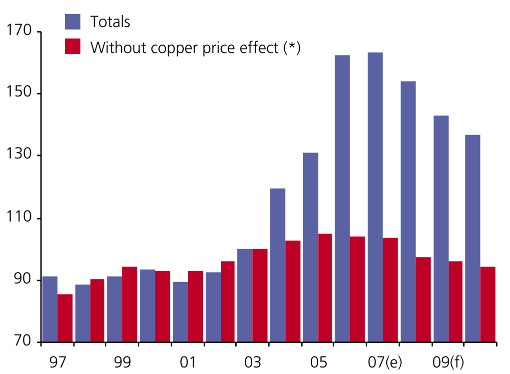
first quarter. Volumes exports as a whole grew substantially less and only agricultural exports increased, thanks to increased shipments of fruits. Mining exports were hurt by labor conflicts during this period and lower ore purity.

Imports in the first half of 2008 amounted to US$30.15 billion at cif value, equivalent to annual growth of over 40%. The pronounced rise in capital and consumer goods imports was accompanied by a continuing considerable increase in fuel imports for electricity generation. However, as hydrological conditions in Chile continue to improve—as is apparent in recent output figures—, these imports should decrease.

Terms of trade have thus deteriorated in the first half of the year and are expected to continue along the same path in the remainder of the year. This *Report*'s baseline scenario estimates a 5.9% drop in 2008, 7.2% in 2009 and 4.3% in 2010 (figure III.11), based on a projection of oil prices that, according to what can be implied from futures contracts, should be higher than was foreseen in May, reaching US$115, US$116 and US$115 in 2008, 2009 and 2010, respectively. The average LME copper price per pound estimated for these projections is US$3.5, US$3.1 and US$3 in 2008, 2009 and 2010 respectively. Again, these prices mainly consider a continuing robust demand and a sluggish response of supply. Prices of other exports remain high, at similar levels to May's.

Figure III.11

Terms of trade
(index 2003=100)



(*) Estimated using average 2003 LME price as reference. Not considering other potential effects on price and quantity.
(e) Estimate.
(f) Projection.

Source: Central Bank of Chile.

The NBSK wood pulp price was just under US$900/ton and although the price is expected to fall it will still be good, over US$650 a ton because world supply has been reduced by northern hemisphere producers being forced out of the market by rising production costs and adverse climatic conditions. Molybdenum continues at around US$33/lb and high prices should persist as demand remains high but supply is limited because some important suppliers are restricting their sales. The main suppliers of fishmeal in the world are Chile and Peru but their production has dropped, offsetting the drop in consumption and keeping prices up. This balance of supply and demand is expected to continue so prices should remain the same in the coming months.

The balance of payments current account registered a deficit of US$114 million at end-first half 2008, equivalent to 0.6% of GDP in the last moving year. The current account has steadily deteriorated in recent quarters and turned negative in the second quarter of the year due to a smaller trade balance surplus and a bigger deficit in the services balance. In the most likely scenario this trend is expected to continue, producing a balance of payments current account deficit equivalent to 1.1% of GDP for 2008.

IV. Output and the labor market

Table IV.1

Gross Domestic Product

(real annual growth, percent)

	Weight	2007					2008		
	2007	I	II	III	IV	Year	I	II	Half I
Agriculture, livestock and forestry	3.8	4.7	5.8	-2.2	4.4	4.0	3.5	6.9	5.1
Fishing	1.1	1.5	5.2	-1.5	-7.1	-0.1	-2.8	8.9	2.7
Mining	7.3	6.2	5.5	4.1	-0.7	3.7	-4.1	-5.3	-4.7
Manufacturing	16.1	4.4	5.3	0.1	0.4	2.5	-0.1	-0.1	-0.1
EGW	2.4	3.8	-9.5	-20.1	-17.0	-10.7	-17.3	-8.8	-13.4
Construction	7.2	9.5	8.5	6.8	8.5	8.3	10.6	12.0	11.3
Trade (1)	10.5	7.9	8.1	4.5	5.4	6.5	3.8	6.2	5.0
Transport	7.1	6.5	8.0	5.0	4.0	5.9	5.7	5.0	5.3
Communications	2.6	11.5	13.2	13.9	14.7	13.4	11.7	11.9	11.8
Other services (2)	36.4	5.8	5.9	5.0	5.3	5.5	4.8	4.7	4.7
Natural resources (2)	11.0	5.0	1.8	-2.5	-5.2	-0.3	-7.2	-4.5	-5.9
Other (2)	83.7	6.3	6.6	4.2	4.8	5.5	4.4	4.9	10.4
Total GDP (3)	**100.0**	**6.2**	**6.2**	**3.9**	**4.0**	**5.1**	**3.3**	**4.3**	**3.8**

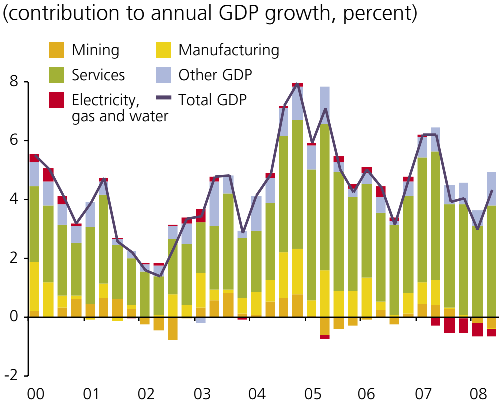
(1) Includes hotels and catering.
(2) See Glossary for definitions.
(3) Corresponds to the sum of GDP natural resources, other GDP, net VAT revenue, import duties, less bank charges.

Source: Central Bank of Chile.

Figure IV.1

Gross Domestic Product

(contribution to annual GDP growth, percent)



Source: Central Bank of Chile.

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

Total GDP

GDP growth in the first and second quarters of 2008 was 3.3% and 4.3%[1/] respectively in annual terms (table IV.1). Second-quarter growth was mainly driven by positive results from the construction, trade and transport sectors, as counterpart to the continued dynamic demand especially in gross fixed capital formation. The growth of these sectors was offset to some extent by the drop in natural resource GDP, in particular mining and electricity, gas and water, EGW (figure IV.1). Output recovery observed in the last quarter of 2007 accelerated in this first half of the year.

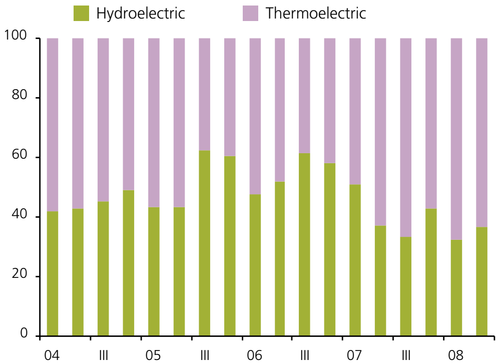
However, the baseline scenario for the second half of the year foresees quarter-on-quarter output slowing, even though GDP growth in annual terms should be stronger than in the first half. The GDP prediction is based on considerations that there are more working days in the second half, the same period of 2007 presents a low basis for comparison, and output has already achieved a reasonable level in the first half, and, moreover, natural resource sectors should recover in view of improved hydrological conditions and the start up of new mining projects. At the same time, service sectors should continue as dynamic in the second half as they were in the first half, bearing in mind the expected increase in investment and despite the expected drop in private consumption. Third-quarter information already available is coherent with the outlook for annual economic expansion in the second half being significantly higher than in the first half. Consequently, the baseline scenario assumes GDP growth reaching an annual 4.5% to 5.0% this year.

[1/] On 25 August, Quarterly National Accounts were published as usual giving a first estimate of 2008 second quarter GDP and a new estimate of 2008 first quarter GDP.

Figure IV.2

Electric power generation

(percentage share of each type of generation)

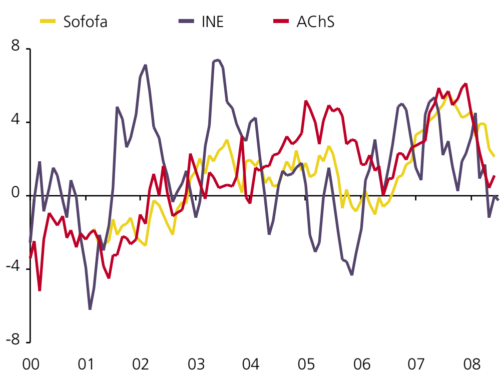


Sources: CDEC of Central and Northern Grid Systems (SIC and SING).

Figure IV.3

Manufacturing employment

(annual change, percent)

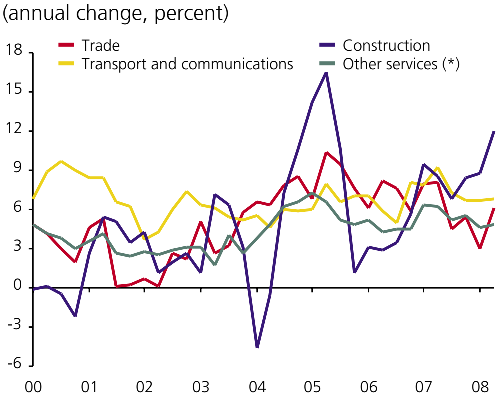


Sources: Chilean Association for Occupational Safety and Health (AChS), National Statistics Bureau (INE) and Manufacturing Development Association (Sofofa).

Figure IV.4

GDP: service sectors

(annual change, percent)



(*) Includes financial and business services, personal services and public administration.

Source: Central Bank of Chile.

GDP for natural resources

In the first half of 2008, natural resources sectors completed a year of contributing negatively to GDP and this was largely due to the drop in output from the electricity, gas and water sector with the change in the power matrix composition (figure IV.2). Added to this, in the second quarter, the mining sector also made a negative contribution because there were labor conflicts, lower production of some minerals and a drop in copper purity from the main ore bodies. Only fishing-sector output grew during this half as the late mackerel season concentrated all the large-scale fishing activity into the second quarter. There was also a strong expansion in fish-farming output.

In this second half-year, electricity, gas and water sector activity is expected to continue to recover and give positive results as hydroelectric power generation increasingly replaces thermal generation. Mining should benefit from new ore bodies being exploited whereas fishing will probably reflect problems in fish farming, especially of salmon, due to the ISA virus.

Other GDP

Although the GDP of sectors other than natural resources was lower than in 2007, it underpinned total GDP growth in the first half of 2008 and is expected to continue buoyant in the second half of the year, reaching annual growth rates of over 5.0%, but declining.

Manufacturing

Manufacturing industries reported almost null growth in the first six months of the year. The main reasons being the drop in methanol production, increased wood pulp production capacity entered into the basis for comparison and, above all, high energy costs accompanied by hikes in other input prices, such as steel, iron and labor costs. The monthly business confidence index (IMCE) reveals that entrepreneurial expectations systematically since the beginning of 2007 anticipate costs rising and even more so this year (figure V.11).

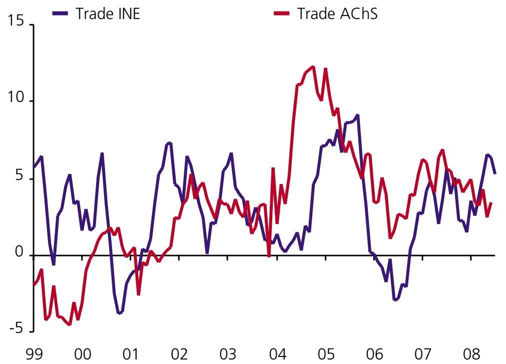
The baseline scenario assumes that manufacturing's annual growth rates for the third and fourth quarters will be somewhat higher but mainly thanks to 2007 giving a low basis for comparison. Higher costs of inputs, together with the expected drop in consumption, will continue to affect industrial activity.

In line with the sector's weakness, various sources of information reveal a marked slowdown in job creation during this year. The National Statistics Bureau, INE, registers job destruction in the past three moving quarters while the Chilean Association for Occupational Safety and Health (*Asociación Chilena de Seguridad*, AChS) registers zero job creation in recent months. The Manufacturing Development Association (Sofofa) reports that annual expansion of employment in manufacturing has halved since January and currently stands at a little over 2% (figure IV.3).

Figure IV.5

Trade employment

(annual change, percent)

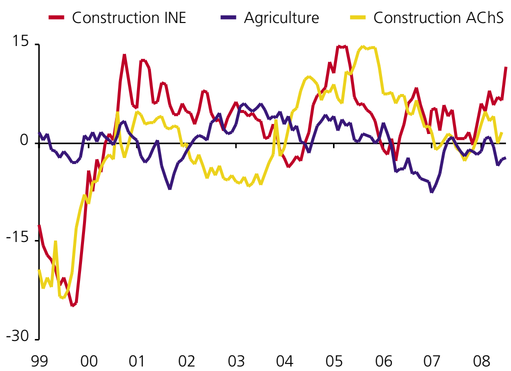


Sources: Chilean Association for Occupational Safety and Health (AChS) and National Statistics Bureau (INE).

Figure IV.6

Construction and agriculture employment

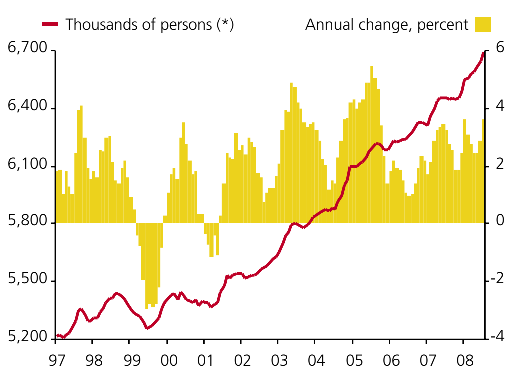
(annual change, percent)



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

Figure IV.7

National employment



(*) Seasonally adjusted series.

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

Retail and other services

Retail, after slowing in the first quarter of 2008 from end-2007, grew by 6% in the second quarter (figure IV.4). Car sales were surprisingly high and wholesale machinery and equipment sales continued buoyant, in line with the strong growth of this type of investment. However, this only partly offsets the drop in sales of raw materials, food and beverages which are probably more affected by high inflation and sluggish consumption. The reduced retail trade in foodstuffs was compensated by increased sales of hardware. Nevertheless, for the second half of 2008, this sector's activity is expected to be more dynamic on average than in the first half since despite consumption slows, high levels of investment will persist.

According to INE's figures for the moving quarters ending between April and July, employment in this sector has expanded greatly in annual terms, reaching almost 6% on average. But the figures put out by AChS are quite the opposite, revealing a reduction in this sector's employment (figure IV.5).

Transport and communications continued to perform better than aggregate GDP. Annual growth rates for transport were lower in this half year because there was less freight and passenger rail transport but the good performance of the communications subsector continued, driven by the sustained prosperity of mobile telephone services.

Construction

Construction sector activity registered higher annual growth in the first half of 2008 than in the fourth quarter of 2007. This sector has depended strongly on investment in engineering work, in particular energy projects. Building has moderated, in line with the feeling of pessimism about this sector's prospects and slower sales of new homes, thought to be due to more restrictive financial standards and to the higher cost of inputs. However, this outlook is hardly compatible with the real estate development observed in several regions of the country and with the reported sales of cement and other construction materials. The Capital Goods Technological Development Corporation makes a survey of investment in this sector and the information it reports tends to foresee an even more dynamic sector during the following quarters than in the first half.

Figures on employment in this sector vary widely, so no conclusion can be drawn. INE reports dynamic employment in recent months and rising in annual terms since April, whereas AChS publishes much lower annual growth figures for this year: job creation to June has grown by 1.6%, while the building companies themselves claim a shortage of labor (figure IV.6).

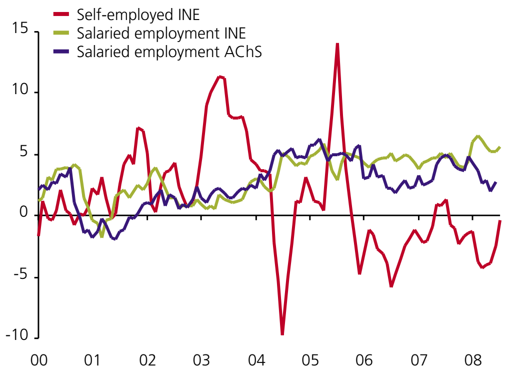
Agriculture, livestock and forestry

This sector's growth was weak in the first quarter but picked up considerably in the second, thanks to fruit-growing—with increased exports and more fruit going to supply agribusinesses—and to the livestock sector. Only forestry activity decreased because production of sawn timber was less, in response to reduced demand from abroad. Employment in this sector has been sluggish for some time, annual growth was around 0% in the first four months of the year and dropped to -3% in the past three months, arguably due to the growing demand for labor in other sectors.

Figure IV.8

Employment by occupational category

(annual change, percent)



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

Figure IV.9

Unemployment rate and workforce

(percent)

(*) Seasonally adjusted series.

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

Employment, participation and unemployment

There has been little change in the labor market gaps since May's *Monetary Policy Report*. It remains tight with job creation continuing at an annual growth rate of around 3% (figure IV.7). Self-employment, according to INE, is shrinking, which could be due to the workforce having a better level of education in recent years, to the increased presence of women in the labor market and also to a tighter labor market[2]/ (figure IV.8). Salaried employment is growing at annual rates of over 5%, but since the May *Report* the share of self employment in total employment has increased.

The labor force continues to expand, boosted mainly by strong growth in the female workforce (8.9% per year increase in the figures for the moving quarter ended July). Women's participation, in the aggregate for men and women, has remained flat all year, around 56% according to seasonally-adjusted data.

Unemployment has remained at around 8% in seasonally-adjusted terms since end-2007 and this is within the NAIRU range (figure IV.9). INE figures for the Santiago Metropolitan Region are comparable to those of the University of Chile's employment survey for Greater Santiago which reports more dynamic employment and an unemployment rate of 8%.

[2]/ See Villena (2008) for a deeper discussion of the possible reasons for the reduction in self-employment.

V. Prices and costs

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

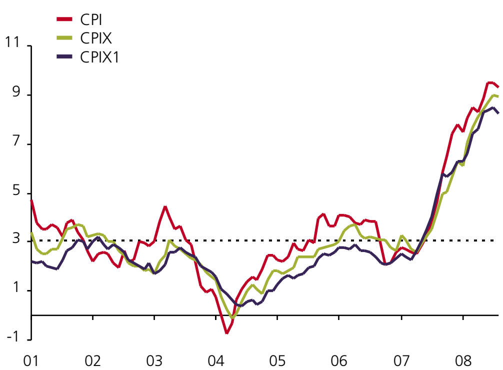
Recent trends of inflation and costs

The Chilean economy is facing a scenario of inflation drastically deteriorated over recent months. Prices of commodities and basic foods have reached record highs and, despite their recent reductions, they are still well over prices of a year ago. At the same time, the cost of electricity has soared, partly due to the higher price of oil and its derivatives. Inflation expectations have risen too. The situation has recently been further complicated by inflation propagating further and more persistently. All this means that inflation figures from May to date jeopardize the achievement of convergence to target within the policy horizon, triggering a strong monetary policy reaction resulting in the MPR being raised by 200 basis points since June.

Figure V.1

CPI, CPIX and CPIX1 inflation (*)

(annual change, percent)



(*) See Glossary for definitions.

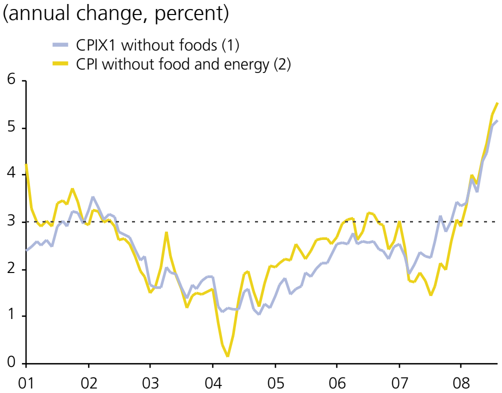
Sources: Central Bank of Chile and National Statistics Bureau (INE)

Annual CPI inflation continued to climb in the second four-month period of the year, reaching a peak of 9.5% at mid-year. At August, the CPI, CPIX and CPIX1 registered annual increases of 9.3%, 9.0% and 8.3% respectively (figure V.1). The various measures of core inflation and trend indicators reveal a generalized rise in prices in the different categories of CPI. This can be seen, for example, in that the measures of inflation excluding components such as food and energy prices register substantial increases, although they remain in annual terms below those registered by such indices as CPIX and CPIX1. In particular, annual CPI inflation excluding food and energy (leaving 68% of the total CPI basket) and the CPIX1 without foods (leaving 52% of the total CPI basket) are both above 5% (figure V.2). It is worth noting that the incidence of inflation excluding prices of foods, fuels and public utilities in August accounted for almost three percentage points of inflation, whereas in the 2001-2006 period it contributed on average less than a half of that figure (table V.1).

Figure V.2

CPI excluding diverse components

(annual change, percent)



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

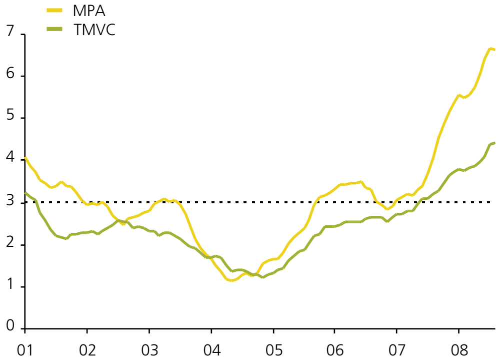
Sources: Central Bank of Chile and National Statistics Bureau (INE).

The quarterly velocities of inflation—CPI and CPIX1—also accelerated, whereas the speed of CPIX remained the same. Trend inflation indicators continued to show high rates of inflation, bigger annual increases than at the close of May's *Report*. According to the August register, the trimmed average CPI (MPA) was 6.6% in twelve months (5.7% in April) while the trim of most volatile components (TMVC) increased by 4.4% (3.9% in April) (figure V.3).

Figure V.3

Inflationary trend indicators

(annual change, percent)



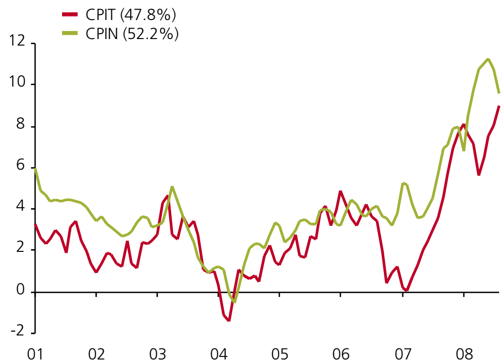
(*) See Glossary for definitions.

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

Figure V.4

CPI tradables and nontradables (*)

(annual change, percent)



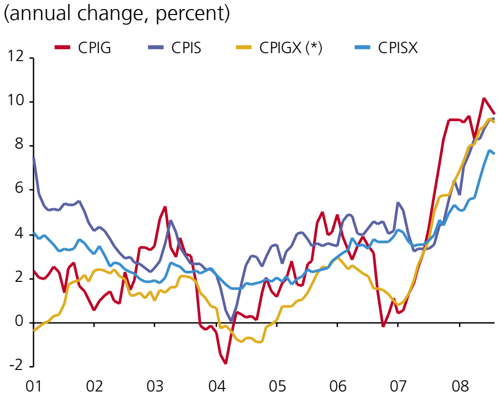
(*) See Glossary for definitions.

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

Figure V.5

CPI goods and services

(annual change, percent)



(*) See Glossary for definitions.

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

Table V.1

Annual CPI inflation: incidence by group

(percentage points)

	Fuels (3.97%)	Food excluding fresh fruit and vegetables (23.48%)	Fresh fruit and vegetables (3.77%)	Public utilities (5.06%)	Other (63.72%)	CPI
Dec.01	-0.2	0.6	-0.1	0.6	1.6	2.6
Dec.02	0.6	0.4	0.5	0.3	1.0	2.8
Dec.03	0.2	0.4	-0.6	0.3	0.7	1.1
Dec.04	0.9	0.1	-0.1	0.3	1.2	2.4
Dec.05	0.8	1.0	0.3	0.2	1.4	3.7
Dec.06	0.5	0.6	-0.3	0.2	1.6	2.6
07	0.1	0.6	-0.2	0.5	1.9	2.8
Feb.	-0.1	0.6	0.0	0.7	1.4	2.7
Mar.	0.1	0.8	0.0	0.6	1.1	2.6
Apr.	0.2	1.0	0.0	0.3	1.1	2.5
May	0.2	1.2	0.0	0.3	1.2	2.9
Jun.	0.2	1.4	0.2	0.4	1.0	3.2
Jul.	0.3	1.8	0.4	0.5	0.8	3.8
Aug.	0.1	2.3	0.8	0.5	1.0	4.7
Sept.	0.4	2.6	1.0	0.6	1.3	5.8
Oct.	0.8	2.7	1.1	0.7	1.1	6.5
Nov.	1.3	2.8	1.1	0.9	1.4	7.4
Dec.	1.4	3.0	0.8	1.1	1.6	7.8
08	1.4	3.1	0.5	1.0	1.5	7.5
Feb.	1.1	3.3	0.7	1.3	1.8	8.1
Mar.	0.8	3.5	0.8	1.2	2.2	8.5
Apr.	0.2	3.7	0.8	1.5	2.1	8.3
May	0.5	4.0	0.8	1.2	2.4	8.9
Jun.	1.0	4.2	0.7	1.1	2.5	9.5
Jul.	1.1	4.1	0.4	1.1	2.8	9.5
Aug.	1.4	4.0	-0.1	1.2	2.9	9.3

Sources: Central Bank of Chile.

Other inflation indicators also showed big increases in recent months. The annual change in tradables inflation (CPIT) reversed the drop it had shown in the first quarter of the year and stood at 9.0% in August (5.6% in April). Nontradables (CPIN) have maintained a higher level of inflation than the tradables, reaching an annual 9.6% in August, despite easing in recent months (figure V.4). Inflation of goods (CPIG) and services (CPIS), like their core counterparts CPIGX and CPISX, have registered net increases in the second four-month period of the year (figure V.5). The one to note is the CPISX[1] which from April to August increased its annual change by two whole percentage points.

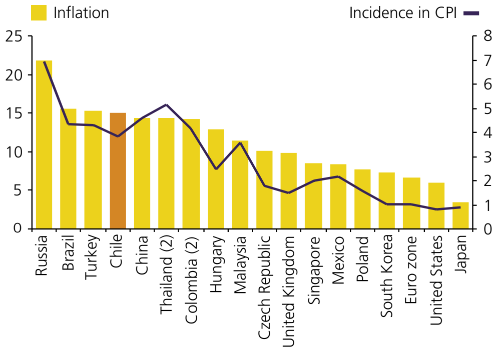
In summary, inflation in the past year has been determined by various factors, outstandingly the hefty price increases of basic foods and fuels on international markets. The rise in basic food prices has had a marked incidence on domestic food prices, which, to August 2008, account for four percentage points of the annual CPI increase.

---

[1]/ This index includes prices of services such as rents, mortgages, property taxes, domestic services, household repairs and maintenance, clothing repairs and cleaning, transport, health and education, and so on. For more details see Cordoba *et al.* (2007).

Figure V.6

Foods: annual change and incidence to July 2008 (1)
(annual change, percent, percentage points)

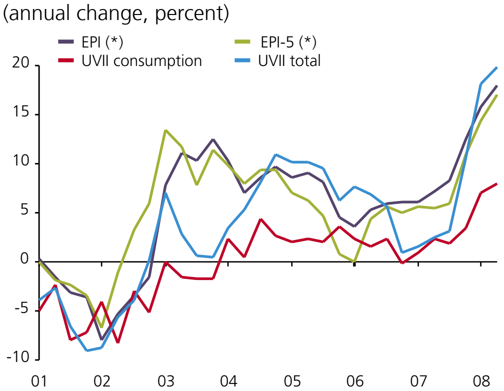


(1) Food and nonalcoholic beverages.
(2) To August 2008.

Sources: INE and CEIC data.

Figure V.7

External inflation
(annual change, percent)

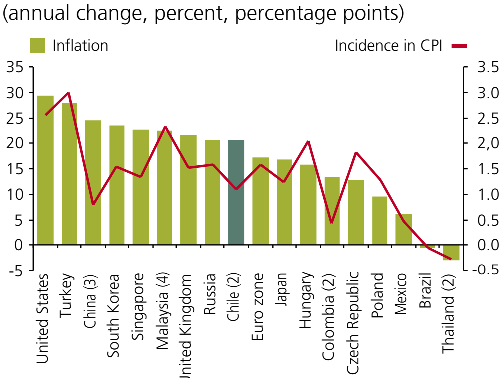


(*) See Glossary for definitions.

Source: Central Bank of Chile.

Figure V.8

CPI energy: annual change and incidence to July 2008 (1)
(annual change, percent, percentage points)



(1) Energy and household and individual transport fuels.
(2) To August 2008.
(3) Estimate of energy price contribution based on Hong Kong CPI-A weighter.
(4) Calculated from household energy and private vehicle operational expenses component of CPI.

Sources: National Statistics Bureau (INE) and CEIC data.

The oil price hike has affected differently the various derivative products, for example the outstandingly high increase in the domestic price of diesel oil, lequefied gas and kerosene component to gasoline. To a large extent, the impact of the cost to the consumer has been mitigated by various policy actions such as an excise tax cut and injecting more funds into the Fuel Price Stabilization Fund. Of year-to-August inflation, 1.4 percentage points are directly attributable to the rise in fuel prices.

There are various reasons why high international food and fuel prices have not passed through to domestic prices in the same way in different countries. There are CPI basket composition differences, (box V.1) and barriers to prevent external prices passing through to domestic prices, as well as idiosyncratic shocks that affect some countries[2]. Comparing a broad sample of developed and emerging economies, Chile stands out with one of the biggest food price hikes, 15% to August, but the incidence of foods on CPI is not among the highest (figure V.6). The foods component in CPI measurement is generally more significant in emerging economies, partly because of the way the price index is constructed to give food a greater weight in the basket[3].

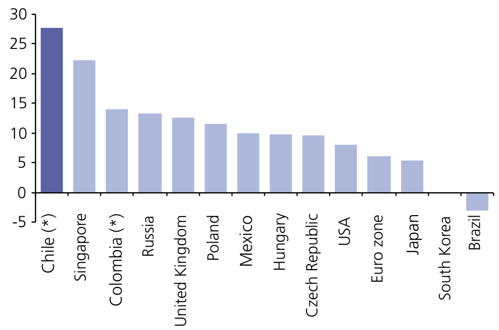
The increase in international prices in dollars of certain products has been reflected in an increase of pressures deriving from imported inflation. Annual growth of the External Price Index relevant to Chile (EPI) and the EPI-5 continued in the second quarter of this year to reach levels estimated at around 18%. The twelve-month change in the unit value import index (UVII) averaged 19% in the first half of 2008 (4.5% in 2007). The UVII for consumption, which generally reports changes of around zero or even negative, rose from annual growth of 3.5% in the fourth quarter 2007 to 7.5% in the first half this year (figure V.7). It must be pointed out that the current level of nominal exchange rate is not very different from what it was a year ago so, from that perspective, its impact on annual imported inflation is scarcely relevant.

Another factor pushing up inflation is the increasing cost of energy since mid-2007 which has largely been caused by the scarcity of hydrological resources, lack of natural gas and the high price of diesel oil. At August, the direct effect of the high electricity rates on CPI represented the equivalent of 0.6 percentage point of annual inflation. Moreover, estimates derived from the input-output matrix indicate that the higher cost of energy observed in the first half of 2008—considering the higher price of both electricity and fuels—could have implied an increase of around two percentage points in economic costs (box V.2). It is not apparent that it passed through to inflation but, for example, supposing that margins remain constant, it would be equivalent to the same two percentage points.

Figure V.9

Electric tariffs to July 2008 (1)

(annual change, percent)



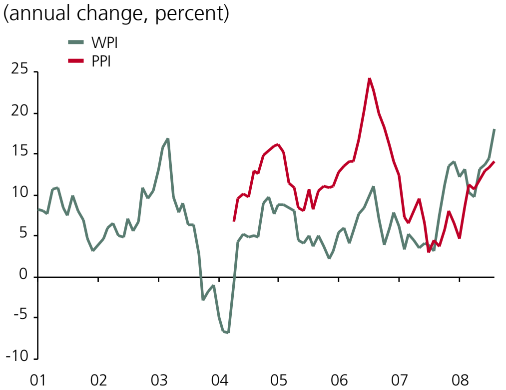
(*) To August 2008.

Sources: National Statistics Bureau (INE) and CEIC data.

Figure V.10

PPI and WPI (*)

(annual change, percent)



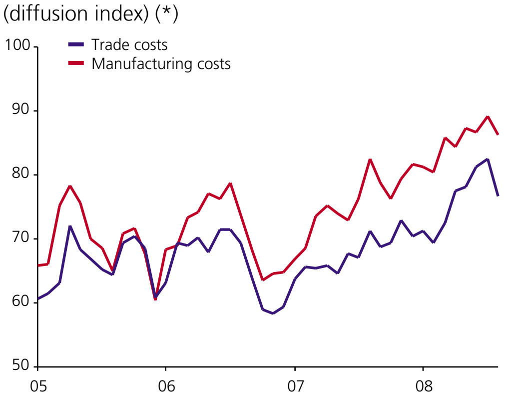
(*) Data for WPI of December 2007 was the first using new base year November 2007=100.

Source: National Statistics Bureau (INE).

Figure V.11

Monthly business confidence index (IMCE)

(diffusion index) (*)



(*) Positive/negative responses.

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

In an international comparison, unlike foods, energy has a greater weight in the CPI measurement of developed economies than in emerging economies. As at July, about 40% of total annual inflation in developed countries is due to energy components, whereas in emerging economies it accounts for about 15% on average (figure V.8). In this item, the idiosyncratic shocks can be appreciated more clearly because in most countries rising energy prices are due to higher fuel prices but in Chile and in Singapore rising energy prices respond to the higher cost of electricity (figure V.9).

Cost hikes are also reflected in the evolution of various wholesale and producer price indices. Since April to date, the annual change in the Wholesale Price Index (WPI) and in the Producer Price Index (PPI) have risen: PPI, which includes national goods and services prices, reached 14% (10.7% in April), while the WPI which includes only goods prices, national or imported, increased by 18.1% (9.7% in April) (figure V.10). At the same time, the Business Confidence Indicator (IMCE) during the past year and a half has shown expectations of rising costs in business and industrial sectors (figure V.11).

Unit labor costs (ULC) also registered higher annual growth in recent quarters. Thus, depending on which measure is used, in the second quarter of 2008, unit labor costs rose by between 7% and 9% (figure V.12). This increase is still largely accounted for by the drop in measured labor productivity which in turn is related to the dynamics of salaried employment and activity. The annual rise in nominal earnings has varied in recent months. The labor cost index went up to 7.2% in July (6.6% in March) while the earnings index went down to 8.1% (8.6% in March and 8.9% in May). AChS figures show considerable ups and downs, with growth rates of 10.9% in March, dropping to 8.0% in April and rising again to 10.8% in June.

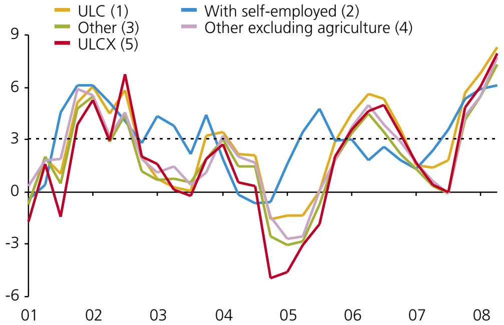
The baseline scenario for this *Monetary Policy Report* assumes that annual growth in unit labor costs will return to levels compatible with the target within the projected horizon. For this to happen, future salary rises should be moderate and not reflect the whole of past inflation but rather new contracts should consider the fundamental assumption that inflation will return to the target within a limited period of time.

Thus the greater pressures on costs, both domestic and external in an economy with less leeway than foreseen and a domestic demand growing forcibly may have favored the persistence of inflation and propagation of shocks to other prices. Based on measures of recursive estimates, persistence is evaluated as having expanded since mid-2007, led by the measure of CPI excluding foods and energy that is growing intensively since the second quarter of this year. Moreover, compared to previous periods the persistence of inflation has expanded over the past year. Looking at the proportion of firms that adjust their prices also sheds light on the changes in inflation propagation. Data reveals that the proportion of firms that adjust their prices increased, especially in the second half of 2007, combined with more frequent price increases and less frequent price reductions (box V.3).

Figure V.12

Unit labor cost

(annual change, percent)



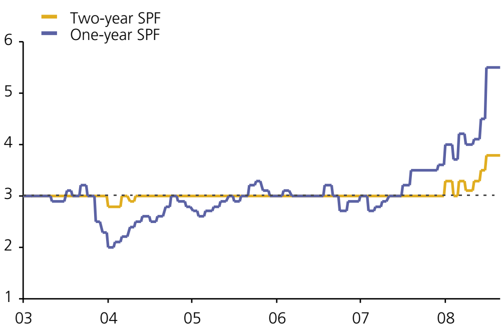
(1) Total nominal labor cost, effective salaried hours worked, salaried employment and total GDP.
(2) Analogous to total ULC, replacing salaried employment by national employment.
(3) Other LC, other salaried employment, other GDP (without EGW, mining and fishing) and effective salaried hours worked.
(4) Analogous to Other, excluding the agricultural sector in other salaried employment and in other GDP.
(5) See Glossary for definitions.

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

Figure V.13

Inflation expectations

(percent)

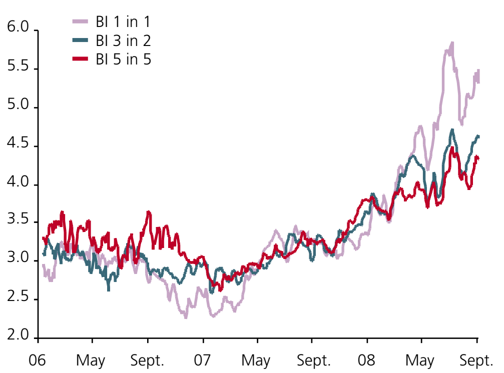


Source: Central Bank of Chile.

Figure V.14

Average forward breakeven inflation from swap rates

(moving weekly average, percent)



Source: Central Bank of Chile.

Inflation expectations

In the midst of this inflationary scenario, the various measures of expectations continue to rise. August's data was the latest available before the close of this *Report*. The Central Bank's economic expectations survey (SPF, Survey of Professional Forecasters) showed that expected inflation was higher for all horizons. In August, economic agents anticipated inflation in December reaching 8.0% (whereas in May they had expected 4.7%) and that in December 2009 it would reach 4.5% (from 3.5% expected in May) and in two years' time, inflation would be 3.8% (instead of 3.3%) (figure V.13). Measures of breakeven inflation have also, after undergoing sizeable fluctuations, reached higher levels than at the close of the previous *Report*. At the statistical close of this *Report*, the forward breakeven inflation rate of one year in one, calculated using swap rates, contemplates an inflation of 5.4% (4.4% in May). At longer horizons, breakeven inflation rates increase less: 3 in 2 went from 4.1% to 4.6% and 5 in 5 went from 3.9% to 4.3% (figure V.14). Finally, non-financial private agents' perception of inflation is also interesting to note, for example Adimark's IPEC (Perception of the Economy Index) registers a decrease in the percentage of respondents who believe that inflation "will go up a lot" in the next twelve months, even though it is still high (around 70%), while the business confidence indicator (IMCE) showed entrepreneurs' inflation expectations twelve months ahead up from 5.5% to 8.0% between May and August.

Box V.1: **Measures of core inflation**

Inflation over the past year has been characterized by a sustained increase of not only the CPI but also the set of trend inflation indicators and of measures that exclude the most volatile prices or those prices most affected by external shocks. The same has been true in a number of countries, both developed and emerging. However, direct comparison of Chile's inflation with that of other countries is not possible because of significant differences in the construction of these indicators. This box illustrates these differences.

Core inflation is computed by discounting from the CPI the prices that are relatively more volatile and/or whose behavior is determined by factors other than domestic supply and/or demand, as are the prices of fresh fruit and vegetables, fuels and regulated prices. Although this is a theoretic definition, in practice the excluded prices vary from country to country (table V.2).

The usual indices used in Chile are the CPIX and the CPIX1[4]. They differ from the indices of other countries in the products excluded and in their weight within the total CPI basket. Core inflation indices may vary from 92% of the total basket (as in the case of Chile's CPIX) to 67% (as in the case of Poland's index). The set of products excluded is also different, for example, some countries not only exclude fruit and vegetables and fuels but also other types of food, electric power, etc.

Thus, one to one comparison of Chilean and foreign underlying indices is not possible. The case most discussed at the moment is the comparison between the underlying CPI used in the United States which, unlike the index used in Chile, excludes almost all foods and energy[5]. Considering a comparable index for the Chilean CPI, a high level of inflation results, although lower than that recorded by the CPIX and the CPIX1 (figure V.15).

Table V.2

International comparison: definition of core inflation

(items excluded fro the CPI basket for core inflation calculation percent) (1).

	Foods			Energy				
	processed	Agriculture and livestock						
		Fruit and vegetables	Livestock	Fuels	Electricity	Regulated tariffs	Education	Weight in total CPI (percent)
Mexico		X	X	X	X	X	X	70
USA (2)	X	X	X	X	X			77
Canada	X	X	X	X	X			74
Argentina		X		X	X	X		71
Brazil	X	X	X	X	X	X		69
Chile CPIX		**X**		**X**				**92**
Euro zone		X	X	X	X			83
Spain		X	X	X	X			82
Italy		X	X	X	X			85
Poland	X	X	X	X	X			67
Switzerland	X	X	X	X	X			78
Philippines	X	X	X	X				82
Japan	X	X	X	X	X			68
Thailand		X	X	X	X			75

(1) Some countries use various measures of core inflation, this table reports the measures that exclude groups of products.

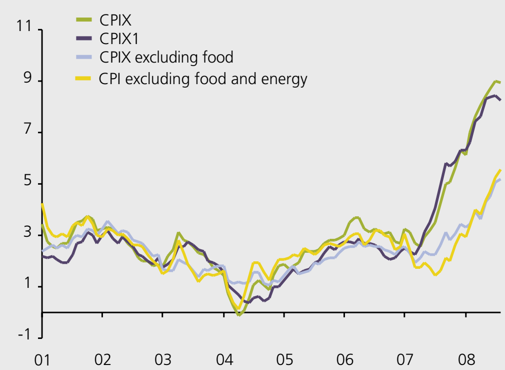
(2) Excludes food in and out of the home.

Source: Bank of Mexico (2007).

Figure V.15

Core inflation measures (*)

(annual change, percent)



(*) See Glossary for definitions.

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

[4]/ See Grunwald and Orellana (2003) for a description of these indices and their construction.

[5]/ See "BLS Handbook of Methods" chapter 17, available at http://www.bls.gov/.

Box V.2: **Energy costs**

In recent years, rising energy costs have affected the world economy, and Chile has been no exception. Oil prices have multiplied manifold, added to which the domestic economy has faced a significant increase in electricity rates. A description of the rising energy costs and an estimation of their possible effects on costs and inflation follows.

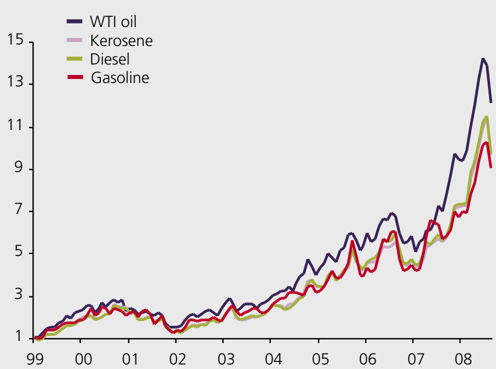
The costs shock

Oil prices have multiplied almost ten-fold in nominal terms since December 1998 when the WTI barrel cost around US$11 whereas at the statistical close of this *Report* it was about US$110 and on some days of July had even reached US$145. Prices of oil derivatives—gasoline, kerosene and diesel oil—have risen accordingly (figure V.16). From mid-2007, the oil price soared at a pace incomparable to the previous eight years, doubling in just one year. In Chile, these oil price hikes have not fed through to gasoline prices at the same rate, thanks to the injection of funds into the Fuel Price Stabilization Fund and to the excise tax cut for gasoline. Prices of other fuels have risen much more.

Figure V.16

Price of oil and derivatives on international market

(deflated by multilateral dollar; index, December 1998=1)

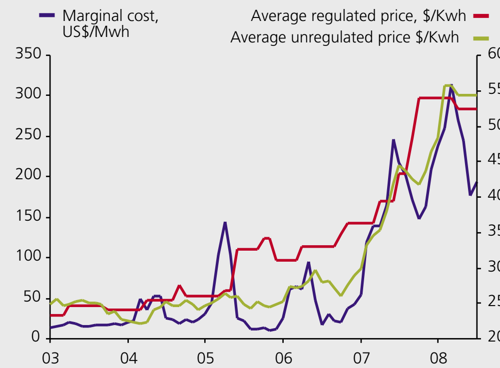


Source: Bloomberg.

The power sector was also hit in 2007 by a set of adverse climatic conditions, particularly drought, which affected hydroelectric power generation. The failure of Argentine natural gas supplies meant that thermoelectric power had to be generated and this is significantly more expensive because of the increasingly high price of diesel oil (figure V.17).

Figure V.17

Central grid electricity (SIC) generation cost



Source: National Energy Commission.

Effect on prices and costs

These cost hikes affect inflation both directly and indirectly. On one hand, there is the direct impact on the CPI, measurable in the price of fuels and electricity rates. In August, 1.4 percentage points of the annual inflation rate are attributable to the higher price of fuels and 0.6 percentage point to higher residential electricity rates (table V.3).

Table V.3

Effects of increased energy costs on CPI

	Weight in the CPI (percent)	To August 2008	
		Annual change (percent)	Incidence in CPI (percentage points)
1. Fuels (1)	4.01	17.6	1.4
2. Private transport (2)	5.42	7.4	0.5
3. Electricity	1.64	27.7	0.6

(1) Corresponds to natural gas, liquefied gas, gasoline, coal and kerosene.
(2) Corresponds to bus, taxi, collective taxi, school transport, rail fares, interurban bus fares, and air fares.

Sources: National Statistics Bureau and Central Bank of Chile.

On the other hand, the indirect effects include, firstly, the impact of higher prices of oil and its derivatives on services included in the CPI basket whose main input is fuel. For instance, private transport—urban and interurban transport—suffered price increases in annual terms of 7.4% at August with an incidence on annual inflation of half a percentage point. Although fuel is a relevant input in this transport, some portion of the price increase could correspond to other costs such as wages. It must also be kept in mind that the impact of this cost increase was attenuated to some extent because public transport fares in Santiago have been frozen.

An alternative way to review the impact of high energy prices on costs is through the input-output matrix (I-OM) of the National Accounts 2003 Benchmark Compilation[6]. Cobb, Saavedra and Soto (2008) estimate this impact using the intersectoral relations of that matrix. A change to any of an activity's inputs (in this case, the oil price and electricity rates) will immediately affect that activity and will feed through to sectors that use said activity as an input. In turn, prices of those sectors' products will be affected to a greater or lesser extent, depending on that input's weight to the cost structure.

According to the I-OM, electricity represents 2.3% of the total costs in the economy. However, this includes the electricity generating sectors so when they are discounted, electricity's relative importance drops to 1.2%. It is important to note that these figures are all calculated on the basis of 2003 prices when the current energy shock did not exist so it cannot be considered an exact reflection of the current importance of this input on today's costs. Cobb *et al.* show that an increase in electricity prices of around 50% would push economic costs up by about 1%. This increase in the price of electricity is equivalent to the rise in the first half-year of both the average price paid by central grid (SIC) customers and the rate applied to nonresidential users computed by the Producer Price Index (PPI) published by INE.

It is also possible to use the I-OM to estimate the effect of electricity on the sectors represented in the CPI[7]. If the CPI basket weights are assigned to the I-OM sectors, the impact of the same 50% rise in electricity is equivalent to 0.7% of total costs.

A similar exercise can be done with increased prices of oil and derivatives, considering the direct impact on costs and on related activities, such as transport. In this case, the I-OM yields that the item fuel accounts for 2.5% of economic costs. An increase of 25% in the price of diesel oil—that is, the true variation occurred in the first half of 2008—causes an increase of 1.3% in economic costs. Calculated on the basis of sectors represented in the CPI, the effect is slightly lower: 1.2%.

Thus, using the I-OM, it is possible to estimate that the impact of rising energy cost in the first half of 2008 is about two percentage points over total economic costs. The effect of this increase on inflation depends on several factors, among them margins and spare capacity. If the direct effect already analyzed is added—1.4 percentage points for fuels and 0.6 percentage point for electricity—the result could be about four percentage points of higher inflation, provided that margins remain constant.

In summary, the sharp rise in energy costs in the past year has had a significant impact, both direct and indirect, on inflation. The baseline scenario for this *Monetary Policy Report* does not foresee any significant easing of costs in the coming quarters but neither does it contemplate any dramatic hikes like those of the past year. Meanwhile, higher prices have boosted investment in the electricity sector, as is at least partly true in the investment figures for this year to date and in the available data from the survey of investment in engineering works.

[6]/ See "2003 Benchmark Compilation", Central Bank of Chile (2007).

[7]/ Mining and construction are clear examples of economic sectors that are not representative in the CPI. In both these sectors the cost of electricity is higher than in most other sectors but the final price of their products is not considered in the CPI.

Box V.3 **Inflation propagation**

The inflationary shocks of 2007, and probably until the beginning of this year, in a large measure were not considered, to judge by monetary policy's reaction up until ealy-2008, a threat to convergence to the inflation target within the two-year horizon. But, recent months' rising inflation shows that shocks are feeding through and jeopardizing convergence to target in the next two years. This could be due to greater cost pressures, domestic and external, a tighter economy than foreseen and domestic demand that continues to grow strongly.

Inflationary shocks are difficult to measure but various elements reveal their propagation. Firstly, a generalized price increase in the different measures of CPI, including core inflation and the categories that exclude some components. In particular, annual CPI inflation excluding food and energy and the CPIX1 inflation without foods that currently exceeds 5% (figure V.2). Moreover, and perhaps more indicative of the change that has occurred in recent months following the relative stability between end-2007 and early-2008, the velocity of CPI expansion has increased significantly since June (figure V.18).

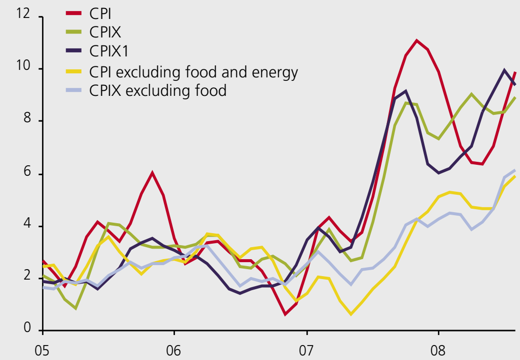
Trend inflation indicators have followed the same path, for example the mean pruned average (MPA), which trims the most volatile components (TMVC), the breakdown between goods and services, and between tradables and nontradables (figures V.4 and V.5). Also, more CPI items have gone up in price month-to-month, and fewer have diminished.

The persistence of inflation should also be considered. Studies of inflation persistence[8] proxied through lag coefficients of recursive estimates for different measures show that inflation has been more persistent since mid-2007, outstandingly the CPIX1 and the trend inflation indicators TMVC and MPA (figure V.19). The analysis of recent inflation compared to previous periods shows that in the past year persistence has intensified with an average duration of about three years[9] (figure V.20). Similarly with the CPI inflation that excludes food and energy, the average duration of the shock extends from one year to almost four years. Also, the magnitude of the maximum impact of recent inflationary shocks has been greater than in the past. In fact, the shocks go through a process of being amplified before they begin to dissipate and this can more than duplicate their initial direct effect.

Figure V.18

Inflation expansion velocity

(annualized change, moving quarter, percent)

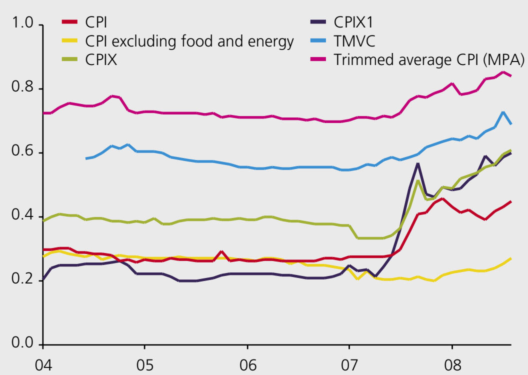


Sources: Central Bank of Chile and National Statistics Bureau (INE).

Figure V.19

Monthly seasonally adjusted measures of inflation persistence

(AR coefficient of recursive estimates)



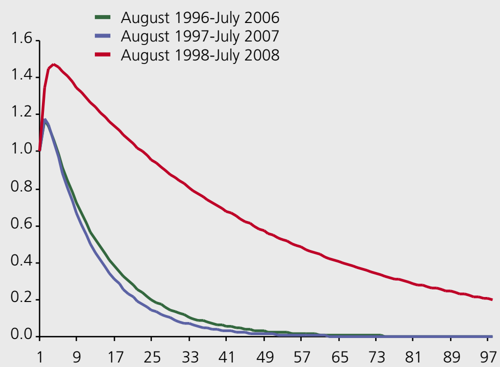
Source: Central Bank of Chile.

[8]/ See Pedersen (2008) who calculates the lag coefficients in recursive estimations.

[9]/ Average life is defined as the number of months required for original inflation to be halved. The analysis compares the average life of three periods: August and July of 1996-2006, 1997-2007 and 1998-2008. For more details see Pincheira (2008).

Figure V.20

Impulse response functions to a unitary CPI inflation shock

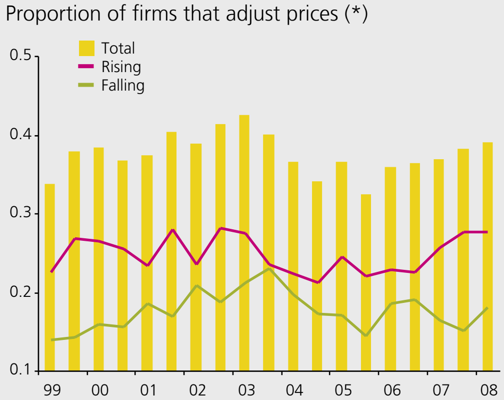


Source: Pincheira (2008).

Information about the proportion of firms that adjust their prices also sheds light on changes in inflation propagation. Data at the establishment level reveals that the proportion of firms that adjust prices has increased, especially in the second half of 2007, and more firms are raising prices and fewer firms are lowering prices[10] (figure V.21). This implies that changes in relative prices in the face of an inflationary shock occur because of generalized price rises, contrary to what might be expected in a situation where shocks are smaller and demand does not allow all cost increases to be transferred. On the other hand, the greater proportion of firms that adjust prices could indicate that increased costs are translating into higher inflation (steeper Phillips curve).

Figure V.21

Proportion of firms that adjust prices (*)



(*) 2008 figure corresponds to January-April.

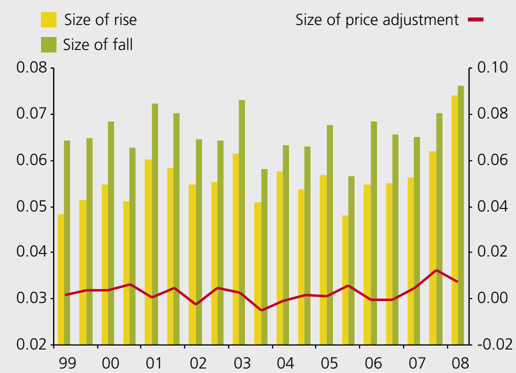
Source: Medina, Rappoport and Soto (2008).

[10]/ See Medina, Rappoport and Soto (2008).

There has also been a notable increase in the size of adjustments up or down. But the increased size of adjustments downwards is more than offset by the reduced number of firms making downward adjustments (figure V.22).

Figure V.22

Size of price adjustment (*)



(*) 2008 figure corresponds to January-April.

Source: Medina, Rappoport and Soto (2008).

Another interpretation of the propagation and persistence of high inflation can be drawn by looking at the trend of inflation expectations. Financial asset prices as well as surveys show that in recent months expectations of high inflation have increased, including at horizons longer that two years (figures V.13 and V.14).

A fundamental part of monetary policy based on inflation targeting is that price setting is based on inflation expectations consistent with achieving the inflation target. It is normal for a shock to propagate to other prices. That is why monetary policy adopts a two year base, because it recognizes that certain events create waves that do not dissipate quickly but that do not warrant substantial neutralization by the monetary authorities[10]. However, it is monetary policy's job to avoid an unexpected and undesirable increase in inflation persisting and propagating and this is what the Board considers when it makes decisions. Consequently, if the propagation of inflationary shocks is still thought to jeopardize convergence to target within the two-year horizon, then the Board will necessarily take additional monetary policy actions to correct these imbalances.

[10]/ One of the reasons for this monetary policy behaviour is that the interest rate has a lagged effect on inflation and to give it more volatility is not desirable, given its effects on other variables such as growth and employment. See Central Bank of Chile (2007).

VI. Inflation scenarios

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 of 4 September 2008. 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 above the one that can be derived from various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report*. 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 output and inflation is also included.

External scenario

In the baseline scenario, built on the basis of market players and analysts' consensus opinion, the world economy will not help to widen the gaps in the domestic economy. International output growth for the period 2008-2009 will fall within projections in May's *Report*, averaging 3.9% annually. For 2010, the baseline scenario considers that world growth will increase again, to 4.4%. A large part of this consensus opinion is based on the persistence of the decoupling of growth in emerging economies from developed ones. Developed economies, in particular the United States and the euro zone, will show persistent slowdown in the next few quarters, resuming dynamism only by mid-2009, while emerging economies will continue to grow strongly.

Based on futures data and the analysis of the determinants of the currently tight markets, the prices of both oil and foodstuffs are forecast to hover around their present levels over the next two years, so they will not be a source of inflation in the projection horizon, but neither will they help to reduce costs. The price of one barrel of WTI oil is projected to average US$115 in 2008, US$116 in 2009 and US$115 in 2010. The price of copper will expectedly average US$3.5, US$3.1 and US$3.0 per pound in 2008, 2009 and 2010, respectively. Both trajectories run above those forecast in May.

In this context, the terms of trade (TOT) are forecast to begin normalizing this year—part of which already occurred in the first half—, falling more than 17% in the period 2008-2010. Imported inflation, partly because of higher prices in dollars, is corrected upward from May for the whole projection horizon, particularly this year. The external price index (EPI) in dollars will rise 14% this year, compared with 7.1% projected last January, and 12.5% in May. For 2009, the EPI is assumed to post an increase of 3.3%, more than the 2.1% and 2.2% of January and May of this year.

Credit conditions relevant to emerging economies have worsened in recent months, showing increased risk premiums due to financial instability risks in developed economies. The baseline projection assumes that international financial conditions will not deteriorate further.

As usual, there are risks surrounding the international economy. Worth noting are doubts about the combination of high global inflation, decoupled growth between emerging and developed economies and financial volatility and instability in several countries. In the developed world, in particular in the United States, prospects are based on projections that its slowdown will drive inflation down. Emerging economies, meanwhile, with strong dynamism, have chosen to reduce the momentum of their monetary policy to ensure convergence of inflation to their respective targets. In terms of risks, on one hand, it is possible that the decoupling of emerging and developed economies finishes, shaping a scenario of reduced world output that will take pressure off commodity prices and inflation. On the other, global inflation—especially in developed economies—may be more persistent, requiring sharp adjustments in interest rates to control inflation, with disruptive effects on emerging economies' access to credit.

Aggregate demand

In the first half of this year, aggregate demand increased 3.8% y-o-y, with domestic demand growing 9.6% and exports and imports of goods and services increasing by 0.6% and 14.5% y-o-y, respectively. The main reason behind the strength of domestic demand has been the robust expansion of investment, particularly in machinery and equipment. Also worth noting has been the resilience of private consumption to the inflationary shock of the past year, with some slowdown in the last few quarters, but not as bad as was forecast. The baseline scenario assumes that domestic demand will rise by 9.1% this year, exceeding May's projections. The main source of change is investment. This component is forecast to grow 19.3% y-o-y in 2008, with an investment to GDP ratio of 29.5% and 24% in base-year pesos and current pesos, respectively.

Toward 2009, the baseline scenario assumes that aggregate demand will slow down, and that the necessary gaps will be created for the convergence of inflation to the target in a two-year horizon. Domestic demand will reduce its annual growth rate to 3.9% in 2009. Private consumption will continue to decelerate, investment will reduce its annual growth rate, and public spending will also grow at a slower pace than this year, in line with recent announcements by the Ministry of Finance and the limits imposed by the structural surplus rule in force.

For private consumption, a slowdown is projected, in line with the recent and expected evolution of some of its fundamentals, particularly financial conditions and monetary policy. Private investment is forecast to remain as strong over the second half of 2008 as it was in the first half, driven by mining and energy investment projects, both favored by the high prices prevailing. In 2009 and 2010, as these projects advance, said drive will fade out, which, together with the already high basis for comparison and the restrictive monetary policy in place, will reduce investment's annual growth rate. The baseline scenario of this *Report* forecasts that in 2009 gross fixed capital formation will reduce its annual growth rate to 2.9%. However, with respect to GDP, investment will remain around 29% and 24% in real and nominal terms, respectively.

The baseline scenario of this *Report* foresees that net external demand will have a positive effect on aggregate demand growth starting in 2009, in line with continuingly high world growth and the normalization of domestic demand growth. For 2008, exports of goods and services are projected to grow by 2.1%, with shipments of goods growing around 1% y-o-y in real terms. This latter figure is below May forecasts, largely due to mining exports—which are actually forecast to drop in real terms during this year—affected by labor conflicts in the sector and less ore content in extracted minerals. For 2009, volume exports of goods and services are projected to grow by 3.8%, with sales of goods growing around 3.5% y-o-y. By categories, it is worth noting the upturn of mining exports, partly due to installed capacity extensions in the sector and the low basis for comparison.

Imports of goods and services are forecast to growth 12.6% in real terms this year, declining to 4.1% in 2009. This is consistent with the normalization of the rate of growth in domestic demand assumed in the baseline scenario. In the case of goods imports, this smaller growth rates affect every category, particularly consumer and capital goods, which are expected to grow less than average. The slower annual expansion of goods imports is also based on reduced fuel requirements, since the baseline scenario assumes that the unfavorable hydrological conditions of 2007 and early 2008 will not be replicated.

Considering all the variations in quantities described above, and the projected drop in the TOT, export value will decline in 2009 with respect to this year, while import value will increase. The baseline scenario projects exports to amount to US$74.7 billion this year, and US$72.5 billion in 2009. Valued purchases, meanwhile, will amount to US$58.4 billion this year, and US$62.4 billion in 2009. Accordingly, the current account of the balance of payments will accumulate an expected deficit of 1.1% of GDP. This figure will rise to 2.7% of GDP in 2009. Measured at trend prices, the negative balance of the current account will be an expected 5% of GDP during this year[1]/.

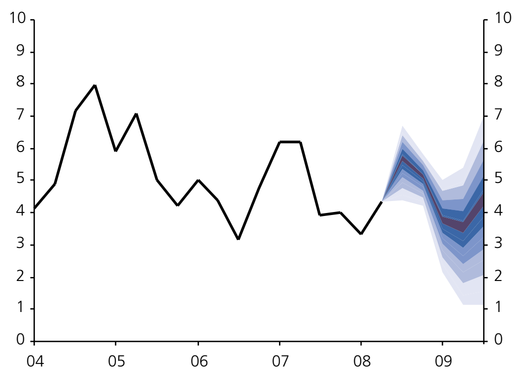
[1]/ This calculation considers corrections to prices and not volumes, so it is affected by the high growth in investment and low growth in exports. Long-term prices used are US$1.60 per pound of copper and US$75 per barrel of oil.

Output and gaps

Figure VI.1

Scenarios for quarterly GDP growth

(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% are included for the baseline scenario. These confidence intervals summarize the Board's evaluation on growth risks. The projection scenario incorporates as a methodological assumption that the MPR will follow a short-term path that will run above the one that can be derived from various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report.*

Source: Central Bank of Chile.

The baseline scenario maintains last May's evaluation of trend economic growth, that is, in the range of 4.5% to 5.0% y-o-y over the next two years. This continues to be affected by the higher cost of energy and its performance assumed over the policy horizon[2]/. The 4.9% figure projected by the Committee of Experts summoned by the Ministry of Finance to define the structural parameters to be used in determining the budget for 2009 is consistent with this range.

In recent months, new information has been made available on the capital stock by economic activity for the period 2004-2005[3]/, allowing for new estimations of the economy's productivity and capital by sector. These estimations, combined with the evolution of effective GDP in the second quarter of this year and re-estimations of first quarter figures, indicate that gaps will be smaller than projected[4]/. Actually, in the first half of 2008, output resumed quarterly expansion rates of around 7%. In addition, smaller gaps are in line with labor market conditions, that is, employment growing at annual rates of 3% during several quarters and seasonally adjusted unemployment within the range of estimates for the Nairu. As usual, there is the risk of both effective and trend growth not meeting projections.

For the second half of 2008, the baseline scenario projects a slowdown of quarter-on-quarter activity. However, annual GDP growth will outperform the first half. Aside from the greater number of working days in the period, the low basis for comparison in the same period of 2007 and the level already achieved by output in the first half, this evaluation is grounded, on the one hand, on a recovery of natural resource related sectors, due mainly to improved hydrological conditions and the startup of new mining projects; on the other hand, on the services sectors continuing their strength of the first half, considering the estimated evolution of investment, and despite projected slowdown in private consumption. Furthermore, third-quarter information available is consistent with prospects that in the second half of 2008 the economy will grow substantially more than in the first. Accordingly, the baseline scenario projects economic growth for this year in the range of 4.5% to 5.0%.

The convergence of inflation to the target within the two-year horizon is based on a slowdown of the economy, which will grow nearly one percentage point below the trend over the projection horizon. This is consistent with GDP expanding between 3.5% and 4.5% in 2009, with a balance of risks that, after taking into account the possible alternative scenarios, is biased downward. (figure VI.1).

[2]/ For further detail, see Box VI.1, in May 2008's *Monetary Policy Report*.

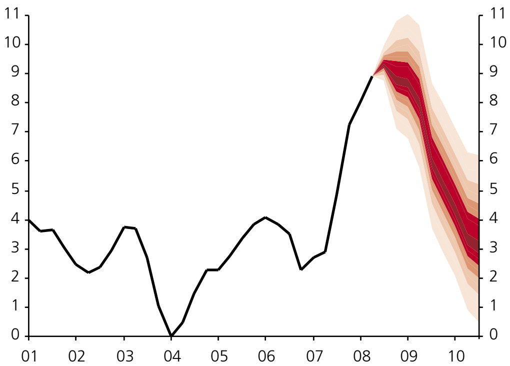
[3]/ For further detail on the methodology and results, see Henríquez (2008).

[4]/ Fuentes, Gredig and Larraín (2008) provide details on various methodologies to estimate the output gap.

This trajectory, determined by the impact of a contractionary monetary policy and the normalization of demand growth, considers that the activity of natural resources sectors will outperform the rest of the economy. This is based, on one hand, on scheduled production capacity increases in the mining sector and, on the other, on the low basis for comparison applicable to the electric power generation matrix corresponding to the first half of 2008.

Figure VI.2

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

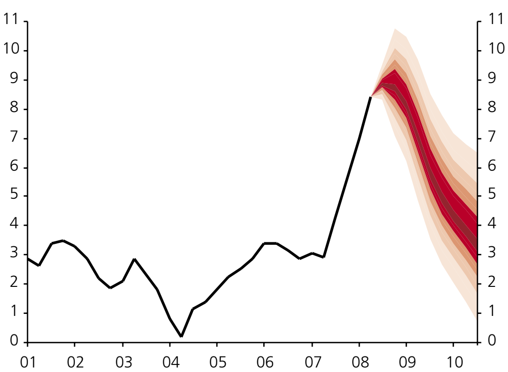


(*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% are included for the baseline scenario. These confidence intervals summarize the Board's evaluation on inflation risks. The projection scenario incorporates as a methodological assumption that the MPR will follow a short-term path that will run above the one that can be derived from various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report*.

Source: Central Bank of Chile.

Figure VI.3

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% are included for the baseline scenario. These confidence intervals summarize the Board's evaluation on inflation risks. The projection scenario incorporates as a methodological assumption that the MPR will follow a short-term path that will run above the one that can be derived from various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report*.

Source: Central Bank of Chile.

Cost pressures

The baseline scenario assumes that imported inflation in dollars will exceed forecasts along the whole projection horizon, the main source of the change being higher global inflation and not movements in currency parities. The risks in this scenario depend critically, as aforesaid, on the evolution of the world economy, particularly the resolution of the inflationary problem at the global level. As a working assumption, the baseline scenario considers a long-term real exchange rate (RER) around its present level, with short-term dynamics consistent with monetary policy actions.

Recent information reveals increased inflation persistence, and propagation of various shocks to other prices (box V.3). This may have been favored by a combination of higher cost pressures—both domestic and external—in an economy with smaller gaps than by earlier forecasts, and with domestic demand steadily growing. The baseline scenario assumes that inflation expectations and the future wage dynamics will be consistent with target compliance. However, should the Board consider that the propagation of past inflationary shocks continues to threaten the convergence of inflation to the target in the two-year policy horizon, it will necessarily take additional monetary policy actions to correct these imbalances.

Inflation scenario

The baseline scenario of this *Report* assumes that annual CPI inflation will remain high for the rest of the year, to begin descending over the course of 2009 and reach the 3% target in 2010[5]/. After considering possible alternatives, the Board believes that the risk balance for inflation is biased upward in the short term, but unbiased in the projection horizon (figures VI.2 y VI.3).

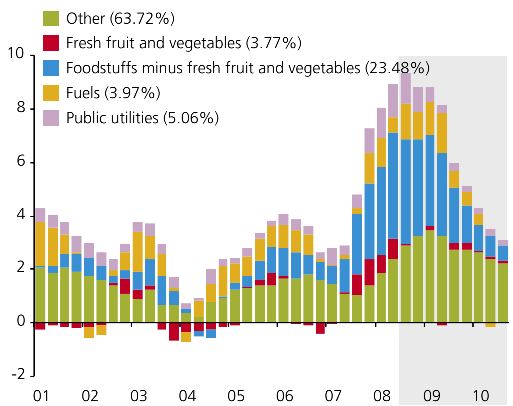
In the short run, this projection considers that monthly inflation at the end of the year will be milder than it was in the past few months. However, this scenario contains a set of assumptions that indicate that the risk balance is biased upward. Among other factors, it is worth singling out that inflation propagation, although still high, will not increase at the same pace it has been doing in recent months, that the price of gasoline will decline as a result of the tax cut that affects it, that electric power rates will remain fairly unchanged and that the prices of perishables will replicate historic patterns. Therefore, monthly inflation swings of late 2007 and early 2008 will also cause drastic changes in the annual inflation rate in coming months.

---

[5]/ This projection assumes that methodological changes that the INE may implement for calculating the CPI will have no material effects in measured inflation.

Figure VI.4

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



(1) From third quarter 2008 onwards, the gray area denotes projected inflation decomposition on the baseline scenario.
(2) Weight in CPI in parentheses.

Source: Central Bank of Chile.

As aforesaid, the medium-term expected inflation trajectory is grounded on a slowdown of output, growing one percentage point below trend during the projection horizon. This creation of internal gaps will be determined by the contractionary monetary policy and the normalization of demand growth. Estimates suggest that the world growth scenario relevant to Chile will not contribute to create internal gaps, and that the prices of foodstuffs and commodities will not be a source of inflation in the projection horizon, but neither will they help to reduce costs. In addition, inflation expectations and future wage dynamics will behave in line with compliance with the target. Accordingly, the Board reaffirms that, if macroeconomic indicators drift away from the baseline scenario, jeopardizing compliance with the inflationary objective, it will further tighten the monetary policy. Conversely, if capacity gaps widen, and inflation expectations and wage dynamics behave in consistency with meeting the target, it will not be necessary to incur additional costs to drive inflation to converge to the 3% target in two years' time.

Thus, the baseline scenario projects that the CPI will end 2008 with a year-on-year variation of 8.5%, which, with swings—especially in the first quarter of 2009—will descend to 4.9% by year's end. Annual CPI inflation will continue converging to the target throughout 2010, and by the third quarter it should be meeting the 3% target. This trajectory of the CPI assumes that propagation of inflationary shocks will be relatively persistent; in fact, toward the end of the projection horizon, the main source of inflation will be the part of the CPI that leaves out the prices of foods and energy (figure VI.4).

These projections consider, as a methodological assumption, that the MPR will describe a short-run trajectory that will run above the one that can be derived from the various measures of private-sector expectations prevailing in the two weeks prior to the statistical closing of this *Report*. The Board reaffirms its commitment to conduct monetary policy so as to reduce the currently high rate of annual inflation to 3% over the policy horizon. This is essential to align inflation dynamics with the price stability objective. The future path of the MPR contemplates additional adjustments to ensure convergence of inflation to the target, at a pace that will depend on incoming information and its implications on projected inflation.

Box VI.1: **Changes in the baseline scenario**

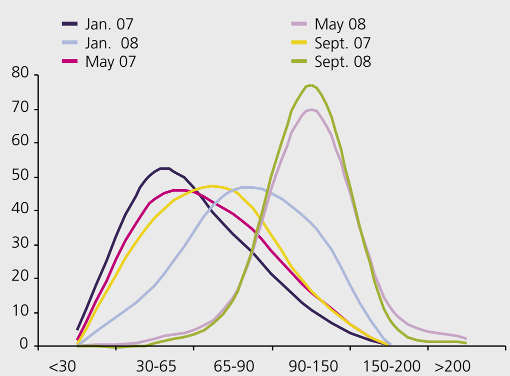
The Chilean economy is facing an inflation scenario that has worsened drastically in recent months. Already in August 2007, annual CPI inflation had soared well above the upper limit of the target range, but in recent months it climbed to a peak of 9.5% and this *Monetary Policy Report* considers that it will remain at high levels for several more months. It will begin to fall during 2009 and will reach the target level in 2010. This box describes the changes in the baseline scenario over the past twelve months and reviews the factors that have modified the inflation outlook and the recent and most probable course of the MPR.

Over the past year and a half, a series of new circumstances have substantially changed the world and the Chilean inflationary outlook, exerting more powerful external pressures on the domestic economy. Prices of some commodities have soared to levels unsuspected a year or more ago, particularly for oil (figure VI.5).

Figure VI.5

Distribution of probabilities for oil price at December 2008

(percent)



Source: Deutsche Bank.

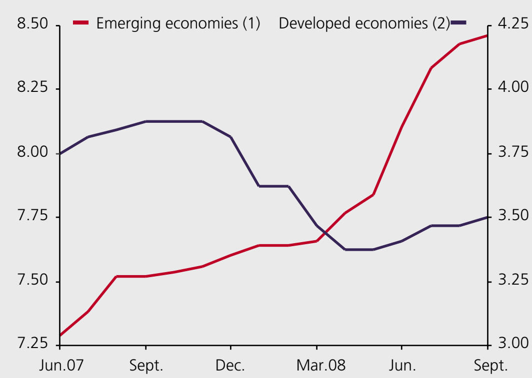
This has reflected on the prices of basic foods, pushing them up on world markets. Some prices of cereals have multiplied several times in the space of 12 to 18 months. In Chile, food price hikes account for four percentage points of annual inflation accumulated to August. This increase responds chiefly to the impact of external prices but possibly some part of it is due to the sharp increase in costs that the economy has suffered, especially because of the prices of oil and electricity (figures V.6, V.8 and V.9).

These price increases, together with the dynamism of the world economy, generated strong inflationary pressures in several economies, pushing up both effective inflation and expected inflation (figures I.1, I.2 and I.3). This has occurred despite developed economies facing financial crisis deriving from problems in the subprime mortgage market. The Federal Reserve restored calm by rescuing Bear Stearns in March but fears flared again in July when the serious problems of Fannie Mae and Freddie Mac, two huge mortgage agents with implicit state guarantees[6], became known. These circumstances have caused developed economies' central banks, unlike those of emerging economies, to keep monetary policy rates unchanged or to raise them very slightly (as in the euro zone) over recent months, despite their inflation rates and inflation expectations that have been rising hand in hand with those in emerging economies (figure VI.6).

Figure VI.6

Monetary policy rates

(percent)



(1) Simple averages of reference rates of Brazil, Colombia, South Korea, Chile, China, Hungary, India, Israel, Mexico, Peru, Poland, Czech Republic, South Africa and Turkey.

(2) Simple averages of reference rates of Canada, United States, Japan, Norway, United Kingdom, Sweden, Switzerland and the euro zone.

Sources: Central Bank of Chile and Bloomberg.

[6]/ The U.S. government announcement that it would intervene these corporations came after the statistical close of this *Report*.

The most likely scenario, according to general consensus, does not see the external environment contributing to easing the tightness of the domestic situation. Although global activity in 2008-2009 should be less than foreseen in September 2007, there will be smaller changes than predicted in January 2008, with growth of developed economies being weaker and emerging economies getting stronger. This degree of discrepancy is unheard of, so there are well founded doubts as to how sustainable this situation will be (figure I.5). The world activity scenario is coherent with a panorama in which commodity and food prices remain around their current levels for the next two years. The average oil price for 2008 and 2009 that this *Report* assumes is 65% higher than what was foreseen a year ago, while the expected average copper price has gone up by 28%. In the same period, the projection of external inflation relevant to Chile for 2008 is more than four times what it was (table VI.1).

Table VI.1

Main assumptions on international scenario

	Sept. 07	Jan. 08	May 08	Sept. 08
World GDP at PPP (v. annual, percent)				
2008	4.7 (*)	4.2 (*)	3.8	4.0
2009	4.5 (*)	4.5 (*)	3.8	3.7
Trade partners GDP (v. annual, percent)				
2008	4.3 (*)	3.9 (*)	3.4	3.5
2009	3.9 (*)	4.0 (*)	3.3	3.1
WTI oil price (US$/barrel)				
2008	70	93	110	115
2009	69	88	109	116
LME copper price (US¢/lb)				
2008	270	295	350	350
2009	245	250	300	310
Terms of trade (v. annual, percent)				
2008	-7.9	-11.0	-7.2	-5.9
2009	-4.6	-7.0	-8.9	-7.2
External prices in US$ (v. annual, percent)				
2008	3.0	7.1	12.5	14.1
2009	2.3	2.1	2.2	3.3

(*) These figures do not correspond to those published in the respective *Monetary Policy Reports* because they have been adjusted for ease of comparison by a new methodology using moving two-year weights and to April 2008 weights.

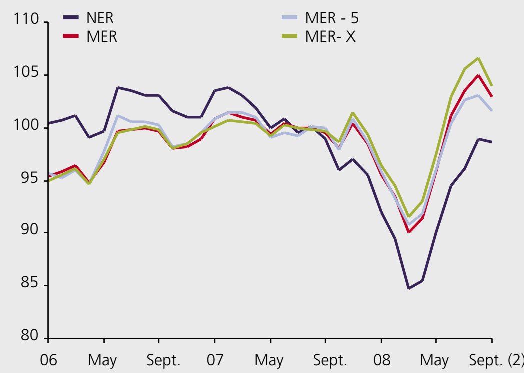
Source: Central Bank of Chile.

On the domestic scene, the nominal exchange rate has fluctuated considerably during the past year, dropping as low as 430 pesos to the dollar prior to the Central Bank's announced intervention in the market in April[7]. After that, and following a series of domestic and external events, the exchange rate rose about 90 pesos, not all of which can be attributed to the Bank's intervention. The nominal exchange rate is at levels almost 13% higher than at the close of the May *Report*, while the multilateral exchange rate (MER) has depreciated 11% since then. The nominal exchange rate is currently only about 1% (approximately 5 pesos) below what it was in September 2007 (figure VI.7).

Figure VI.7

Nominal exchange rate (1)

(average index 2007=100)



(1) See Glossary for definitions.

(2) Corresponds to average to 5 Sept. 2008.

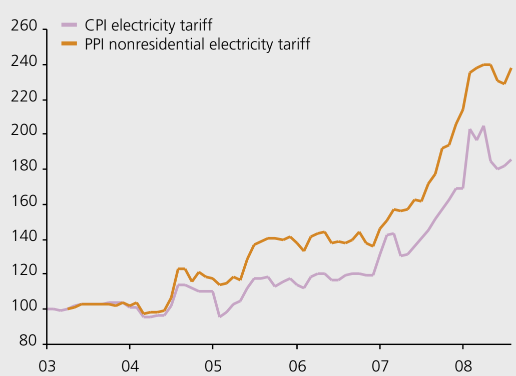
Source: Central Bank of Chile.

Over the past year there has been a substantial rise in the cost of electricity, on one hand due to scarce hydro resources and lack of gas for generating electricity and, on the other, the high cost of alternative sources for generation because of the high oil price. Electricity rates included in the CPI went up by 56% from end-2006 and August 2008 (figure VI.8).

Figure VI.8

Electricity cost

(index, April 2003=100)



Source: National Statistics Bureau (INE).

[7]/ See *Monetary Policy Report*, May 2008, p.13-14, box "The foreign-exchange intervention."

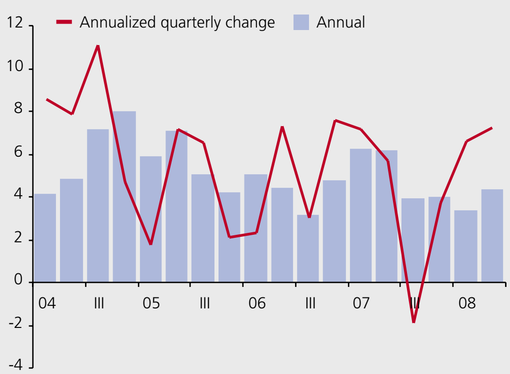
Using the Input-Output Matrix, the increased cost of energy in the first half of this year is estimated to represent around two percentage points in the economy's cost structure (box V.2). The transfer of this increase to inflation depends on several factors, among them the margins and capacity gaps. This, combined with the direct effect of these higher prices on the CPI—1.4 percentage point for fuels and 0.6 percentage point for electricity—could bring around four additional percentage points of inflation, provided that margins remain constant.

In the light of more dynamic output in the second quarter, and new official data on sectoral capital and productivity, the review to capacity gaps reveals a decline compared with earlier estimates. In fact, in the first half of 2008 economic activity returned to quarterly expansion of around 7%, well above the estimate for annual trend growth: 4.5% to 5.0% (figure VI.9).

Figure VI.9

Gross domestic product

(change, percent)



Source: Central Bank of Chile.

This increased dynamism in the first half led to a more favorable outlook for economic growth for 2008 compared to what had been envisaged in the May *Report*. Thus, although the predicted range for growth this year is lower than what was expected in September 2007, it is in the upper part of the range forecast in May (table VI.2). Domestic demand growth has also been stronger than foreseen a year ago, especially in investment which is expected to increase at rates more than three times what was forecast then.

Table VI.2

Economic growth and current account for 2008

	Sept. 07	Jan. 08	May 08	Sept. 08
	(annual change, percent)			
GDP	5.0 - 6.0	4.5 - 5.5	4.0 - 5.0	4.5 - 5.0
Balance of activity risks	Falling	Falling	Falling	-
Domestic demand	6.9	6.2	7.6	9.1
- Total consumption	7.1	5.6	5.4	5.6
- Gross Fixed Capital Formation	5.7	8.4	12.8	19.3
	(percentage of GDP)			
Current account	2.6	-0.5	-0.5	-1.1

Source: Central Bank of Chile.

Increased cost pressures, both domestic and external, in an economy with less leeway than foreseen and with a strongly growing domestic demand may have favored the persistence of high inflation and the propagation of various shocks to other prices. Compared with the CPI inflation projected a year ago—4.4% on average for 2008—the effective data and greater persistence of inflation account for 2.5 percentage points of the average inflation increase projected in this *Report*, averaging 8.8% for 2008 (table VI.3). At the same time, half a percentage point of this higher inflation is estimated to derive from higher external inflation, whereas in May this accounted for only 0.1 percentage point. To this imported inflation we must add the rise in fuel prices in pesos—0.4 percentage point between September this year and last—although in this case the effect on inflation was attenuated by the injection of funds into the Fuel Price Stabilization Fund and the reduction in the specific tax on fuels.

Table VI.3

Changes in average 2008 CPI inflation projection

(percentage points)

	Jan. 08	May 08	Sept. 08
Initial projection (1)	4.4	7.1	6.9
Sources of changes in projection:			
Effective data and persistence of CPIX1 inflation	1.3	0.1	1.1
Change in the gap	-0.2	-0.2	0.2
Fuels	0.7	-0.6	0.3
Imported inflation	0.4	-	0.1
Other prices (2)	0.4	0.5	0.2
Final projection (3)	7.1	6.9	8.8

(1) Corresponds to projection in previous *Monetary Policy Report*.
(2) Includes effect of effective inflation on projections.
(3) Corresponds to projection included in respective *Monetary Policy Report*.

Source: Central Bank of Chile.

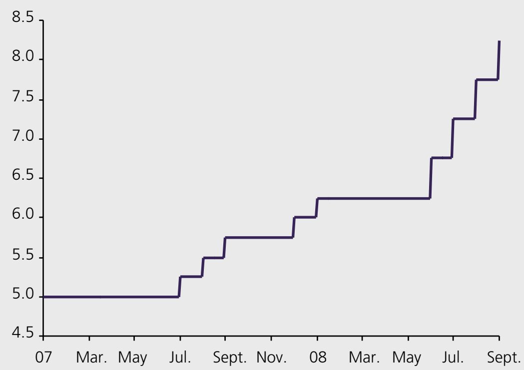
The economy's greater dynamism and its effect on capacity gaps have forced up the change in inflation estimated between May and September: 0.2 percentage point of the increase in inflation can be attributed to these factors. Nonetheless, the tighter conditions currently estimated have a greater impact on the change in inflation projected for 2009.

In the midst of this inflationary scenario, the MPR has been raised by 325 basis points since July 2007 and its future course considers additional rises to ensure convergence to target (figure VI.10).

Figure VI.10

Monetary policy rate

(percent)



Source: Central Bank of Chile.

The baseline scenario of this *Report* assumes that annual CPI inflation will remain high for the rest of the year and will start to descend during 2009 to reach the target of 3% in 2010. This forecast is based on economic activity losing strength and growing at about one percentage point below trend during the projection horizon.

This creation of gaps will be achieved by a restrictive monetary policy and the normalization of demand growth. Moreover, inflation expectations and the progress of salaries and wages will be in accordance with meeting the target.

Finally, the Board reaffirms its commitment to conducting monetary policy so as to reduce the current high inflation to 3% within the policy horizon. This is essential to bring inflation in line with the Bank's objective of price stability. Additional adjustments to the MPR will be required to ensure convergence to the inflation target and the pace of those adjustments will depend on incoming information and its implications on projected inflation.

Appendix A: Central Bank of Chile Balance

This appendix presents the situation and projections of the main components of the Bank's financial statements and how they relate to the policies adopted.

In 2007 the Bank stopped servicing Treasury bonds in dollars and in 2008 it will receive the final payment of Treasury bonds denominated in UFs. Also during 2008, it stopped servicing exchange-rate linked debt bonds in pesos (BCD). Consequently, assets are mainly composed of foreign-exchange reserves, while liabilities are the monetary base and internal debt instruments issued to finance, by non-inflationary means, part of the banking salvage scheme of the 1980s, the accumulation of foreign reserves in the 1990s and the purchase of foreign currency programmed for 2008 (table A.1).

Apart from any fluctuations that might be observed in the short run, the trend of Central Bank profits and losses depends on the level and composition of the assets and liabilities on its balance sheet. In particular, given the greater size of liabilities and the composition of the balance, the inflow-outflow account registers a deficit. With economic growth and a moderate rate of inflation, this situation should be reverted in the long run. It is normal in emerging economies, like Chile, that the cost of Central Bank bonds exceeds international interest rates, but it should be pointed out that, as from 2008, the scenario for interest rates is particularly adverse. On one hand, international interest rates have dropped because of the financial upheavals in the United States and problems in some European countries and, on the other, domestic rates have been pushed up by inflation.

It must be emphasized that the Bank's deficit corresponds to a quasi-fiscal deficit which, from a macroeconomic viewpoint, should be considered as an outflow from the consolidated public sector.

The currency mismatch in the balance sheet translates into accounting results being highly sensitive to exchange rate variations, as can be seen by the accounting losses registered for 2007 which are largely explained by the drop in the exchange rate that year. The Central Bank's foreign currency asset position reflects the accumulation of foreign reserves which, at the same time, is beneficial because it acts as a safeguard at times of instability. This is the intention behind the ongoing reserves accumulation program[1].

The expected evolution of this balance sheet considers assumptions compatible with this *Report*'s forecasts. The interest rate on reserves moves according to external rates while the rate on Central Bank promissory notes depends on the evolution of the MPR and on the rate in UF on index-linked Central Bank bonds (BCU). Indexed instruments are likewise supposedly the main means of sterilizing exchange operations. This projection also includes the demand for monetary base. Treasury deposits are assumed will remain at the current minimum levels; as is well known, the Treasury's financial surplus is not invested in the Central Bank in conformity with the provisions in the 2006 ruling on fiscal accountability. Banking sector deposits in the Central Bank are similarly expected to remain at the levels of recent months. Projections for 2008 and 2009 include further capital contributions by the government, similar to those made in 2006 and 2007 to improve the balance between foreign-currency assets and liabilities. Lastly, PDBC (Central Bank discountable promissory notes) transactions are expected to be the variable that clears any excess or loss gap.

Treasury capital contributions increase foreign-currency assets without a counterpart in the liabilities, that is, they improve the foreign-currency position. The yield generated from the reserves is constantly added to the result.

The balance sheet size will increase in 2008 thanks to the international reserves hoarding program already mentioned. However, according to the working assumption that in 2009 no foreign exchange transactions will be carried out, the

[1]/ See *Monetary Policy Report*, May 2008, p. 13-14, for more details on the reserves hoarding program.

amount of Central Bank assets and liabilities will be a marginally smaller proportion of GDP (table A.1).

Higher inflation, the domestic and external interest rate situation, and foreign-currency purchases will revert the downward trend of the nominal deficit observed in the past few years (table A.1). The nominal deficit foreseen for 2008 is greater than it was in 2007, mainly because the results of this year and next will be influenced by the interest rate differential caused by the drop in external interest rates, which lowers the yield on foreign-currency reserves, and the rise in domestic interest rates, which raises the cost of debt certificates issued.

Calculation of the nominal position includes domestic-currency corrections (variation in the UF), administration expenses and interest rates as such. That is, it considers nominal interest on operations in pesos. It does not include gains or losses due to exchange rate variation nor revaluation of fixed assets. Income excludes interest and monetary correction accrued from assets with a non-defined servicing program.

Taking a long-term outlook, it is to be hoped that, if fiscal soundness is upheld, the interest rate gap should tend to normalize around the country risk premium observed in recent years. The nominal deficit should, therefore, descend.

With the recently implemented reforms made to the technical reserve requirement, banks' liquidity demands are rather in response to the evolution of economic activity and of interest rates (tables A.1 and A.2). Consequently, the monetary base has returned to behaving more in line with macroeconomic variables. The Central Bank provides the required liquidity by means of exchange operations and open market operations. To a lesser extent, money supply is affected negatively by subordinated debt service and by Treasury promissory notes, although, as mentioned above, this latter servicing is to end in 2008.

Since the servicing of Treasury bonds in dollars has ended, and Treasury and banking-sector foreign currency deposits have been normalized, any changes in foreign reserves, excluding interest capitalization and variations in exchange rates, is basically due to foreign exchange operations and to government capital contributions (table A.2).

Table A.1

Central Bank of Chile Balance: summary of balances and results
(percent of GDP)

	2004	2005	2006	2007	Jun. 08	2008 (f)	2009 (f)
Assets	25.5	20.3	17.8	12.8	13.2	17.0	16.6
Foreign-currency reserves	15.4	13.1	13.4	9.8	11.1	14.8	14.5
Fiscal promissory notes and other credits to government	5.7	3.2	1.8	1.0	0.9	0.9	0.9
Monetary policy instruments	1.7	1.7	1.2	0.7	0.0	0.0	0.0
Other assets	2.7	2.3	1.5	1.3	1.2	1.3	1.2
Liabilities	27.6	24.0	20.6	15.3	14.8	18.4	18.2
Secondary market promissory notes	20.8	15.5	11.1	9.1	9.3	13.0	13.4
Policy instruments with banks	1.9	3.0	2.8	1.4	0.6	0.6	0.0
Other liabilities with banks	0.1	0.6	0.7	0.1	0.1	0.1	0.1
Other liabilities except monetary base	0.8	0.5	1.6	0.5	0.5	0.5	0.4
Monetary base	4.0	4.4	4.4	4.3	4.2	4.2	4.2
Equity (A+B)	-2.1	-3.6	-2.8	-2.5	-1.6	-1.4	-1.6
A. Initial restated equity	-1.0	-1.9	-3.2	-2.7	-2.4	-2.5	-1.4
B. Net result	-1.2	-1.7	0.0	-0.3	0.7	0.6	-0.7
Nonfinancial	0.0	0.0	-0.1	-0.1	0.0	-0.1	-0.1
Net interest and UF variation	-0.5	-0.3	-0.6	-0.2	-0.1	-0.5	-0.5
Exchange rate gains/losses	-0.6	-1.4	0.6	-0.3	0.8	1.0	-0.2
Capital restatement	0.0	0.1	0.1	0.2	0.1	0.2	0.1
C. Capital contribution	0.0	0.0	0.4	0.5	0.0	0.5	0.5
Memorandum							
Nominal result (1)	-0.6	-0.5	-0.2	-0.3	-0.2	-0.7	-0.6
Payment position in foreign currency (2)	16.4	9.6	9.6	9.3	10.7	14.5	14.1
Valued position in foreign currency (3)	13.3	8.9	9.0	9.1	10.7	14.5	14.1

(1) Includes administration costs and net costs for interest and UF adjustment. Does not include gains or losses for exchange rate variations, interest and restatement accrued on assets with nondefined servicing, capital and fixed asset revaluation for monetary correction.
(2) Assets less liabilities payable in foreign currency.
(3) foreign-currency position less foreign-currency liabilities indexed to exchange rate.
(f) Projection.

Source: Central Bank of Chile.

Table A.2

Central Bank of Chile balance flows (1)
(billions of pesos)

	2004	2005	2006	2007	Jun. 08	2008 (f)	2009 (f)
1. Foreign-currency reserves	-329	691	688	-2,045	1,148	4,260	471
2. Policy instruments in domestic currency	2,899	3,130	654	333	-850	-3,668	317
2a, of which: indexed to exchange rate	1,887	1,327	81	230	199	199	0
3. Central Bank dollar promissory notes	-1,319	117	1,293	0	0	0	0
4. Other domestic-currency operations except monetary base (2)	-74	-92	-21	-109	-114	-125	-32
5. Other foreign-currency operations (3)	-942	-3,246	-2,137	2,051	119	-210	-471
Monetary base (Change= 1+2+3+4+5)	235	599	477	230	303	257	285
Memorandum							
Payable position in foreign currency (exchange operations=1+3+5)	-2,589	-2,439	-156	6	1,267	4,050	0
Valued position in foreign currency (=1+2a+3+5)	-702	-1,112	-75	236	1,465	4,248	0

(1) Correspond to exchange flows. The corresponding balances are also affected, should it be the case, by interest, price changes and restatement.
(2) Servicing of UF-denominated fiscal promissory notes, subordinated debt and other domestic-currency operations.
(3) Fiscal and banking sector deposits and other foreign-currency operations.
(f) Projection.

Source: Central Bank of Chile.

Appendix B: Foreign-exchange reserve management

The foreign-exchange reserves are the liquid assets in foreign currency that the Central Bank of Chile maintains to support its policies. These reserves must be efficiently managed to ensure access to international liquidity and to safeguard the Bank's financial equity, in conformity with article 38, Title III of the Bank's Basic Constitutional Act[1].

Reserves are grouped into two main portfolios: the investment portfolio and the liquidity portfolio. The former includes short-term foreign currency assets, comprising bank deposits and money market instruments maturing in less than one year, and long-term assets, comprising nominal and indexed bonds maturing, mainly, within one to ten years. The liquidity portfolio is intended to cover funding requirements, foreseeable in the short term and comprises bank overnight and term deposits and money market instruments. A smaller part of the investment portfolio is under external management and comprises long-term portfolios that may include the whole variaty of eligible instruments.

Internal management investment policy was revised in February 2008, updating the benchmarks for comparison, the distribution of credit risk and the duration of the internal management investment portfolio in order to better deal with international financial market volatility, and to protect and improve the Bank's balances. The reference structure was changed, reducing banking risk from 37% to 30% and increasing sovereign risk from 63% to 70%. At the same time, the maximum limit for banking risk investment was brought down from 45% to 35%. The minimum credit rating of banks chosen was raised from A- to A and the proportion of investment portfolio permitted to be invested in banking institutions with a credit rating of A to A+ was cut to 5% (table B.1).

The short-term/long-term distribution within the investment portfolio was changed from 70%/30% to 65%/35%, respectively, and the duration was extended from 11.3 months to 12.5 months. The currency composition of 59% in U.S. dollars and 41% in euros was maintained along with the permitted deviation margin of +/- 5% (table B.2).

In the first half of 2008, the annualized return achieved by foreign-exchange reserve management was 3.7%, measured according to the referential basket of currencies of the investment portfolio. The return differential from the reference structure was 0.15% (table B.3).

In order to strengthen its foreign-currency liquidity position in the face of international volatility, the Bank announced on 10 April 2008 a program of foreign-exchange reserves purchases amounting to US$8.0 billion to be implemented between 14 April and 12 December 2008[2]. The total foreign currency purchased at 30 June 2008 as part of this program was US$2.7 billion.

At 30 June 2008, foreign-exchange reserves amounted to US$20.25 billion, US$3.34 billion more than at end-2007 (figure B.1). Of the total, 95.2% was in the investment portfolio[3], 3.5% in the liquidity portfolio and 1.3% in other assets. A 60.3% was invested in U.S.dollars, 38.7% in euros and the remaining 1.1% in other currencies (table B.4).

Moreover, the proportion of the investment portfolio invested in banking risk went down from 34.6% at end-2007 to 30.4% at end-June 2008 and the proportion with sovereign risk increased from 56.2% to 64.8% in the same period. At end-June 2008, banking deposits for the most part were in banks with a credit rating of AA-. Banking credit risk, measured daily as the weighted average of deposits held by a risk classification numeral index[4], has gone down in this year. (figure B.2).

---

[1]/ See Central Bank of Chile (2006a).

[2]/ See *Monetary Policy Report*, May 2008, p.13-14, box "The foreign-exchange intervention."

[3]/ Includes internal and external management portfolios.

[4]/ The numeral index assigns a value of 10 to the AAA rating, a value of 9 to the AA+, of 8 to the AA and so on successively to 5 for the A rating.

Table B.1

Investment portfolio referential structure by risk and comparison factor (*)

Structure	Credit risk	Previous participation (percent)	Previous benchmark	Current participation (percent)	Current benchmark
Short-term portfolio	Banking	37	6-month Libid deferred 3 months dollar 6-month Libid deferred 3 months euro	30	Merrill Lynch indices: 6-month Libid average dollar and euro
	Sovereign, agency and supranational	33	6-month Fixbis deferred 3 months dollar 6-month Fixbis deferred 3 months euro	35	Merrill Lynch indices: US Treasury bills German Government Bill Index
Long-term portfolio	Sovereign, agency, supranational and banking	27	JPMorgan bond index at different maturities between 1 and 10 years in the U.S. and Germany	31.5	JPMorgan bond index at different maturities between 1 and 10 years in the U.S. and Germany
	Tips	3	Barclays bond index for 1-10 year maturities in the U.S.	3.5	Barclays bond index for 1-10 year maturities in the U.S.
Total portfolio		100		100	

(*) See Central Bank of Chile (2006a) for definitions.

Source: Central Bank of Chile.

Table B.2.

Currency, term and duration structure of internal administration referential portfolio (*)

		U.S.dollar		Euro		Total	
		Participation (percent)	Duration (months)	Participation (percent)	Duration (months)	Participation (percent)	Duration (months)
Short-term portfolio	Banking sector	17.7	3	12.3	3		
	sovereign. agency and supranational	20.7	3	14.4	3		
	Subtotal	38.4	3	26.7	3	65	3
Long-term portfolio	Nominal bonds Maturities						
	1-3 years	12.0	20.8	10.0	20.5		
	3-5 years	3.4	42.9	2.9	41.8		
	5-7 years	0.9	62.1	0.7	60		
	7-10 years	0.9	80.5	0.7	81.9	35	30.1
	Subtotal	17.2	30.3	14.4	29.8		
	Indexed bonds Maturities between 1 and 10 years	3.5	30.5				
Total portfolio		59	12.6	41	12.4	100	12.5

(*) See Central Bank of Chile (2006a) for definitions.

Source: Central Bank of Chile.

Table B.3

Foreign-exchange reserves absolute returns, benchmark and return differential

(percent)

Period	In foreign currency Foreing-exchange reserves	Benchmark	In dollars Foreing-exchange reserves	Benchmark	Differential
2008 (*)	3.47	3.33	10.15	9.99	0.15
2007	4.81	4.78	8.86	8.83	0.03
2006	2.45	2.39	6.84	6.78	0.06
2005	2.90	2.85	-1.72	-1.77	0.05
2004	1.84	1.95	4.08	4.20	-0.11
2003	2.31	1.78	6.64	6.12	0.53
2002	5.25	4.69	9.34	8.78	0.57
2001	5.57	5.27	3.90	3.60	0.30
2000	6.88	6.65	4.84	4.61	0.22

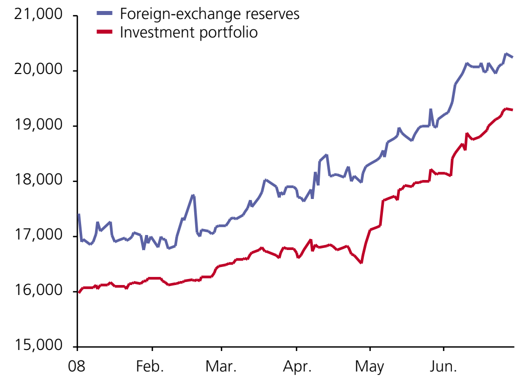
(*) First-half annualized returns.

Source: Central Bank of Chile.

Figure B.1

Foreign-exchange reserves

(US$ million)



Source: Central Bank of Chile.

Table B.4

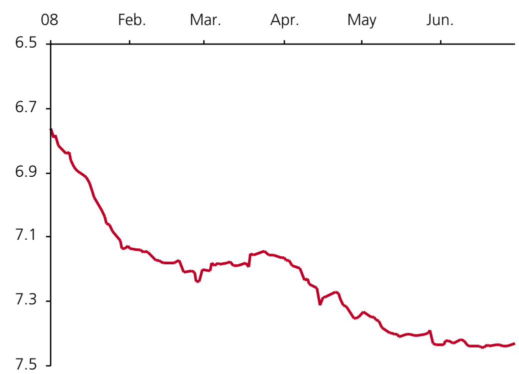
Composition of foreign-exchange reserves

Type of portfolio	Currency	2007 Dec.	Percent	2008 Jun.	Percent
Investment portfolio		15,355.0	90.8	19,273.7	95.2
Currencies and deposits	Dollar	3,338.9	19.7	3,520.6	17.4
	Euro	2,504.7	14.8	2,612.9	12.9
	Other	0.4	0.0	21.2	0.1
Securities	Dollar	5,791.5	34.2	7,876.2	38.9
	Euro	3,707.7	21.9	5,214.9	25.8
	Others	11.8	0.1	27.9	0.1
Totals	Dollar	9,130.4	54.0	11,396.8	56.3
	Euro	6,212.4	36.7	7,827.8	38.7
	Other	12.2	0.1	49.1	0.2
Liquidity portfolio		1,340.3	7.9	708.7	3.5
Currencies and deposits	Dollar	1,340.3	7.9	708.7	3.5
	Euro				
	Other	0.0	0.0	0.0	0.0
Securities	Dollar				
Totals	Dollar	1,340.3	7.9	708.7	3.5
	Euro				
	Other	0.0	0.0	0.0	0.0
Other currencies		214.9	1.3	268.0	1.3
Monetary gold	Other	5.4	0.0	6.6	0.0
IMF SDRs	Other	53.4	0.3	62.0	0.3
IMF reserves position	Other	88.4	0.5	103.3	0.5
Reciprocal credit agreements	Dollar	67.6	0.4	96.2	0.5
Total foreign-currency reserves		16,910.1	100.0	20,250.5	100.0
Totals	Dollar	10,538.2	62.3	12,201.7	60.3
	Euro	6,212.4	36.7	7,827.8	38.7
	Other	159.5	0.9	220.9	1.1

Source: Central Bank of Chile.

Figure B.2

Central Bank of Chile's banking credit risk index



Source: Central Bank of Chile.

Appendix C: Main policy measures of the Central Bank of Chile in 2008

January

03 In accordance with article 35 of its Basic Constitutional Act, the Central Bank of Chile decided to reduce from 30 to 7 consecutive days the minimum term applicable to the general public's funds deposited at banks in any form of non-indexed instrument in any currency; and, for term deposits in national currency, indexed to the US dollar exchange rate and that of other currencies authorized by the Bank. The minimum term of 90 days was maintained for term deposits in UFs or any other indexing system that the Bank permits for banks' money credit operations in national currency. This decision forms part of the Bank's modernization of the regulations on deposits and financial intermediation implemented as from 2007 which considers the legal and regulatory framework subject to SBIF (Superintendency of Banks and Financial Institutions) supervision with regard to solvency and operation including banks' policies on liquidity and controlling financial risk, considering the experience of other countries. The new minimum terms will come into effect as from 26 February 2008.

04 The Central Bank of Chile presented its program for tendering open market securities in 2008. The program continues with the practice of tendering these debt instruments in one auction a month for both 2-year and 5-year BCPs (Central Bank of Chile peso-denominated bonds) and 5-year and 10-year BCUs (Central Bank of Chile bonds in UFs).

It also informed about the Ministry of Finance's request for the Bank to act as fiscal agent in the placement and management of Treasury debt certificates during 2008, according to the respective legal authorization on borrowing pursuant to the Budget Law (*Ley de Presupuestos*).

10 At its monthly monetary policy meeting, the Board of the Central Bank of Chile decided to raise the monetary policy interest rate by 25 basis points to 6.25% annually.

17 The Board of the Central Bank of Chile by Resolution 1385-04-080117 and in conformity with the legal attributes conferred on it by Law 20.190 (amending the existing bankruptcy law) that contains the second capital market reform, known as MKII, gave its corresponding recognition to the framework agreements on derivatives contracts "1992 ISDA Master Agreements" and "2002 ISDA Master Agreement" which refer to compensation agreements in case of bankruptcy. According to which, the parties to a contract of those recognized by the Bank are authorized to compensate their reciprocal derivative transaction obligations contracted under said agreement in the case of one of the parties being declared bankrupt according to Chilean law.

It must be noted that said recognition in no way involves authorizing or approving derivative transactions and that it is not applicable to banking companies established in Chile given its subjection to the special forced liquidation procedure pursuant to the General Banking Law, except in the case of the counterpart being subject to bankruptcy. The Central Bank of Chile stated that by separate agreement it would draw up the rule referring to the aforementioned recognition and jointly with that the general terms and conditions applicable to the framework agreements mentioned to which any banking entity established in Chile or any other institutional investor is party, under the corresponding economic public norm.

This measure is of special importance with respect to the legal validity of the derivative transactions' counterpart risk mitigation mechanism consisting in the application of the referred agreements of voluntary compensation in case of bankruptcy or forced liquidation with regard to framework agreements of derivative product contracts recognized by the Central Bank of Chile, according to article 69 of the bankruptcy legislation contained in Book IV of the Commercial Code and article 136 of the General Banking Law.

This Resolution was published in the Official Gazette on 23 January 2008.

17 Board Resolution 1385-01-080117 amended the ruling on the Board's functioning to require the favorable vote of at least three of its Members to adopt resolutions relating to determining or modifying the Bank's Annual Budget.

February

21 By Resolution 1390-01-080221, and in conformity with the provisions in articles 6, 7 and 12 of Decree Law 211 of 1973, which established the Norms on Defense of Free Competition, currently contained in DFL 1 of the Ministry of Economy, Development and Reconstruction, the Board of the Central Bank of Chile opened the process and approved the terms of reference for public competition to propose to the President of the Republic the three names corresponding to each of the appointments of two positions of Titular Minister and two positions of Alternate Minister of the Defense of Free Competition Tribunal, one lawyer and one economist in each case, in order to replace the ministers whose assigned term ends on 12 May 2008.

22 The Central Bank of Chile decided to resume the process of selling on the Stock Exchange the remaining options corresponding to share subscription rights to Banco de Chile's capital increase adopted at an Unscheduled Shareholders' Meeting of said bank on 17 May 2007, which were not acquired in the previous sale process held in November 2007. Said subscription options correspond to Bank of Chile shares held by SAOS S.A. forfeited to the Central Bank of Chile in guarantee of payment of its subordinated debt. Said stock market process, terminated on 5 March 2008, the Central Bank of Chile having instructed the sale of said options by auction in the Santiago Stock Exchange in lots of 30 million options at a minimum price of 1.36 pesos per option, under the auction terms and conditions informed by SAOS S.A. and the placement agent of the Santiago Stock Exchange. Said auction produced for the Central Bank of Chile the sum of 163.5 million pesos imputed to the payment of the next installment of subordinated debt due on 30 April 2008.

28 Board Resolution 1392-01-080228 made the Board the fiscal agency for the placement of Treasury bonds in the local capital market, including the servicing of said bonds at their respective maturity dates.

28 By Resolution 1392-02-080228, the Board agreed to accept to be the fiscal agent, as established by the Law on Fiscal Accountability relating to the administration of the funds of the Social and Economic Stabilization Fund and the Pensions Reserve Fund and to receive the annual remuneration to which it would therefore be entitled.

March

17 Board Resolution 1396E-01-080317 extended the period for convocation and reception of relevant documentation for the public competition described in Resolution 1390-01-080221 adopted at the meeting on 21 February 2008.

20 The Central Bank of Chile updated the list of international risk rating agencies contained in Chapter III B.5 on "Banking Entities' Financial Investments and Credit Operations abroad or cross-border" of the *Compendium of Financial Regulations*. The Canadian agency Dominion Bond Rating Service (DBRS) was added to the list.

24 The Central Bank of Chile announced its decision to update the design of Chilean banknotes as part of the celebration of the Bicentenary of the Republic, as it considers this to be a propitious moment to renew the artistic design and improve the security measures incorporated in the banknotes. In this way the population will have a more secure and more easily recognizable legal tender.

April

03 The Central Bank of Chile increased the Pension Funds' maximum limit of foreign securities investment to 45% as part of the gradual raising of said limit carried out by the Bank in the exercise of its powers granted by article 45 of DL 3500 of 1980, amended by Law 20,210. The new limit is in force as from 24 April 2008.

10 The Board announced its decision to intervene the foreign exchange market to strengthen the Chilean economy's international liquidity position. The Board considered that increasing foreign-exchange holdings on the agreed terms would enable the country to face any further abrupt and severe deterioration of the external situation on a better footing. The foreign-exchange holdings are to be increased by US$8.0 billion by the purchase of currency by interactive auction as from 14 April until 12 December 2008. The Bank will announce its foreign-exchange purchase programs opportunely, being able to revise them according to market conditions, setting for this purchase the conditions corresponding to the period 14 April to 9 May inclusive. At the same time, it was decided that the monetary effects of this measure were offset so that the provision of liquidity in pesos in the market should be consistent with the monetary policy rate.

11 The Central Bank of Chile announced its updated open-market operations calendar from 9 April to 8 May 2008. This calendar covers the following operations: 7-day liquidity deposit at monetary policy rate; 30-day, 90-day, 180-day and 360-day PDBC (Central Bank discountable promissory notes); and purchase of 7-day currency swaps.

17 Board Resolution 1402-03-080417 appointed Mr. Beltrán de Ramón Acevedo for six months as from 21 April, as the Central Bank of Chile's representative before the Board of the Chilean Copper Commission (Cochilco), in conformity with article 4 of DL 1349 of 1976.

21 The Central Bank of Chile announced that, within its plan to increase foreign-exchange holdings, the time for purchasing dollars would be changed from 10.00 to 10.30 AM in order to make the daily bidding process more flexible and also to have better information of the day's exchange market prices. The Bank reserves the right to change the time for purchasing dollars without giving previous notice.

23 The Central Bank of Chile announced to the Minister of Economy, Development and Reconstruction the names on the lists of applicants for the two positions of Titular Minister of the Defense of Free Competition Tribunal, one lawyer and one economist, according to the public presentation of relevant documentation convoked by Board Resolution 1390-01-080221. The corresponding lists of three names were given according to Board Resolutions 1404E-01-080423 and 1404E-02-080423.

May

07 The Board decided to change the debt program calendar announced in January this year in order to compensate the monetary effects of the foreign-exchange purchasing program announced on 10 April 2008. The issue of Central Bank bonds was increased by US$ 1.0 billion a month to complete US$3.0 billion over the three-month period of 9 May to 8 August, comprising 2-year, 5-year and 10-year BCP and 2-year, 5-year, 10-year and 20-year BCUs. The program for the remaining period, 9 August to 12 December, will be announced shortly.

07 The Central Bank of Chile announced to the Minister of Economy, Development and Reconstruction the three names on the lists of applicants for the two positions of Alternate Minister of the Defense of Free Competition Tribunal, one lawyer and one economist, in accordance with the public competition called by Board resolution 1390-01-080221. The corresponding lists were resolved by Board Resolutions 1405E-01-080423 and 1408E-01-080507.

09 The Central Bank of Chile announced that in its second program of monthly reserve purchases for the period 12 May to 6 June 2008 it would maintain the daily purchase of US$50 million as per its first program.

14 By Resolution 1410-02-080515 the Board appointed one titular member and one alternate member of the Investment Technical Council, according to its legal powers conferred by the Law on Previsional Reform 20,255, which amends DL 3500 of 1980 on Pension Funds.

June

06 The Central Bank of Chile announced that, in its third program of monthly reserve purchases for the period 9 June to 8 July 2008, it would maintain the daily purchase of US$50 million in the same terms as its previous programs.

10 At its monthly monetary policy meeting, the Board decided to raise the monetary policy interest rate by 50 basis points to 6.75% annually.

July

08 The Central Bank of Chile announced that in its fourth program of monthly reserve purchases for the period 9 July to 8 August 2008 it would maintain the daily purchase of US$50 million the same as under its previous programs.

08 The Board of the Central Bank of Chile, by Resolution 1421-04-080703, accepted to act as Fiscal Agent for the placement and administration of Treasury bonds on the domestic capital market, reopening the series of BTU20 and BTU30 bonds resolved by Supreme Decree 708 of the Ministry of Finance, dated 22 May 2008.

08 By Resolution 141-03-080703, the Board of the Central Bank of Chile decided to flexibilize the regulation referring to the procedure for tendering Central Bank debt instruments in order to increase by 25% or decrease by 20% the total offer of PDBC (Central Bank discountable promissory notes) or of BCP, BCU, BCD and BCX bonds tendered in order to reduce the possibility of said tenders being declared empty and to bring the accepted prices in line with secondary market prices.

10 At its monthly monetary policy meeting, the Board decided to raise the monetary policy interest rate by 50 basis points to 7.25% annually.

17 The Board of the Central Bank of Chile decided on a new calendar for the debt program to come into force on 9 August 2008. In the two months from 9 August to 8 October, the additional offer of US$1.0 billion a month of Central Bank bonds will be maintained, plus the amounts of the debt plan defined at the beginning of 2008 for a monthly value of US$250 million. This program contemplates the issue of 2-year, 5-year and 10-year indexed bonds and it suspends the issue of nominal bonds and 20-year UF bonds during this period.

August

07 By resolution 1427-02-080807 the Board decided, with reference to the resolution adopted at Session 1385-04-080117,

to extend the recognition conferred then to the compensation agreements contemplated in framework agreements on general conditions of those derivatives contracts to which a banking entity established in Chile is party, whose authorization has been revoked by the SBIF (Superintendency of Banks and Financial Institutions), providing that the debts compensated arise from a derivatives transaction duly authorized by the Central Bank of Chile.

The same resolution also establishes by way of general terms and conditions of said framework agreements to which any banking entity established in Chile or any other institutional investor is party, that said entities can consider when they subscribe any of the recognized framework agreements or when they agree to any specific derivatives operations in accordance with those agreements by way of anticipated return that gives rise to the referred debt compensation originating from the respective agreement.

This resolution was published in the Official Gazette on 11 August 2008 and it refers to counterpart risk mitigation in derivatives transactions that will deepen the derivatives market, safeguarding the Bank's function of overseeing the normal functioning of the payments system and the exercise of faculties conferred upon the economic Superintendencies with respect to the entities subject to their supervision.

08 The Central Bank of Chile announced that in its fifth program of monthly reserve purchases for the period 11 August to 8 September 2008 it would maintain the daily purchase of US$50 million the same as in its previous programs.

14 At its monthly monetary policy meeting, the Board decided to raise the monetary policy interest rate by 50 basis points to 7.75% annually.

21 By Resolution adopted at its meeting on 21 August 2008, the Board of the Central Bank of Chile acknowledged the Ministry of Finance Regular Notice 840, of the same date, notifying that, in accordance with the faculty conferred by article 11 of Law 20,128, during the course of the present year it would effect a specific equity contribution totaling the equivalent of 428,199,135,000 pesos, contributing on this date the sum of US$400 million equivalent to 208,316,000,000 pesos. The same Regular Notice stated that the following contributions would be duly informed to the Bank in conformity with the provisions in Ministry of Finance Decree 600 dated 25 April 2008.

September

04 At its monthly monetary policy meeting, the Board decided to raise the monetary policy interest rate by 50 basis points to 8.25% annually.

04 By Resolution 1433-01-080904 the Board decided to modify its ruling on Pension Fund maximum investment limits and related matters, according to the provisions in Law 20,255, published in the Official Gazette on 17 March 2008, amending DL 3500 of 1980. The main changes refer to i) setting limits on maximum investment abroad, overall and by fund, relative to the value of the funds administered. Consistently with previous decisions made on this matter, said limits are gradually raised during the coming months; ii) setting the maximum limit of investment in unhedged foreign currency, raising said limit according to a gradual and explicit program and; iii) setting the maximum limit for each fund on investment in instruments of greater relative risk.

This Resolution, by broadening the scope of Pension Funds, will contribute to obtaining adequate profitability and security for these pension savings. It should be noted that, as on previous occasions, the Central Bank of Chile, aware of fulfilling its legal mandate, considers the developments in financial markets, always attentive that any adjustments to Pension Fund investment portfolios may be made without affecting the normal functioning of domestic and external payments or the adequate implementation of monetary policy. The new regulation was published in the Official Gazette on 8 September and comes into effect as from 1 October.

Index of Tables and Figures

Tables

Figures

Glossary

CDS: credit default swap is a way of ensuring coverage against non-payment of debt.

Commodity exporters: Australia, Canada, New Zealand.

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

CPINT: Nontradable goods consumer price index.

CPISX: Services price index excluding basic services and public transport fares, leaving 35.5% of the total CPI basket.

CPIT: Tradable goods consumer price index.

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

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

EMBI Global: is a broader emerging markets debt benchmark, useful for measuring the difference between the return on emerging economies dollar-denominated sovereign debt and the return on U.S. Treasury bonds.

EMBI: emerging markets bond index.

EPI: External Price Index, calculated using the Wholesale Price Index (WPI), or CPI if 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, United States, Japan, United Kingdom and Euro zone.

Expansion velocity: For monthly data, it is the annualized monthly change in the moving quarterly average. For quarterly data, it is the annualized change in the seasonally-adjusted series.

GDP other: corresponds to the sectors: agriculture, livestock and forestry, manufacturing, construction, trade, transport and communications, financial and business services, home ownership, personal services and public administration.

GDP, NR: GDP natural resources, corresponds to electricity, gas and water (EGW), mining and fishing.

High yield: developed markets corporative bonds with a risk rating below investment grade (CCC to BB), according to Standard & Poor's classification.

IREM: wages index.

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

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

LC: labor cost.

LCX: LC minus communal, social and personal services, (EGW) electricity, gas and water) and mining.

MER: multilateral exchange rate. It represents a measure of the nominal value of the peso against a broad basket of currencies, weighted the same as for the RER. For 2008 the countries considered are: Germany, Argentina, Belgium, Brazil, Canada, China, Colombia, South Korea, Ecuador, Spain, United States, France, Holland, Italy, Japan, Mexico, Peru, United Kingdom, Sweden, Taiwan and Venezuela.

MER-5: MER considering the currencies of Canada, United States, Japan, United Kingdom and Euro zone.

MER-X: MER excluding the United States dollar.

Oceania: Australia and New Zealand.

Onshore rate: local interest rate in dollars implicit in forwards prices of usual exchange coverage transactions in the domestic market and the external market.

RER: Real exchange rate represents a real value of the peso against a basket of currencies of the same countries used to calculate the MER.

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

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

Swap rate: corresponds to the fixed interest rate that is exchanged for the mean observed interbank interest rate on an amount of capital for a specific period in the future.

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

Trading partner's growth: growth of Chile's main trading partners weighted by their share of total exports in two moving years. The countries used in this calculation represent the destination of 94% of total exports.

Trimmed average CPI: measure of CPI that excludes extreme price changes, that is, it excludes articles with the smallest and biggest monthly price changes.

ULC: unit labor cost.

ULCX: ULC considering only salaried employment and wages and output excluding natural resource sectors.

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 PPC published in the IMF's World Economic Outlook (WEO, April 2008). World growth projections for 2007-2009 are calculated from a sample of countries that represent about 86% of world GDP. The growth of the remaining 14% is estimated at 5.7%.

Abbreviations

BCP: Central Bank bonds in pesos
BCU: Central Bank bonds in UFs
BTP: Treasury bonds in pesos
MPR: Monetary policy rate
AChS: Chilean Association for Occupational Safety and Health
SBIF: Superintendency of Banks and Financial Institutions

References

Banco Central de Chile. *Informe de Política Monetaria*. Varios números.

Banco Central de Chile. 2006a. *Gestión de Reservas Internacionales del Banco Central de Chile*. Septiembre.

Banco Central de Chile. 2006b. *Cuentas Nacionales de Chile. Compilación de Referencia 2003*. Noviembre.

Banco Central de Chile. 2007. *La Política Monetaria del Banco Central de Chile en el Marco de Metas de Inflación*. Enero.

Banco de México. 2007. *Informe sobre Inflación Julio* - Septiembre 2007. Octubre.

Barclays Capital. 2008. *The Commodity Investor*. Agosto.

Cobb M., C. Saavedra y C. Soto. 2008. "*Shock Energético y Costos*". Mimeo. Banco Central de Chile. Agosto.

Consensus Forecast. 2008. *A Digest of International Forecast*. Varios números.

Córdova F., C. Grünwald y I. Magendzo. 2007. "Inflación de Bienes y Servicios". Economía Chilena 10(2): 81-96. Banco Central de Chile. Agosto.

Deutsche Bank. 2008a. *Global Economic Perspectives*. Agosto.

Deutsche Bank. 2008b. *Focus Europe*. Agosto.

Deutsche Bank. 2008c. *Emerging Markets Monthly*. Agosto.

Deutsche Bank. 2008d. *Dollar Bloc Weekly*. Agosto.

Deutsche Bank. 2008e. *Asia Economics Monthly*. Agosto.

Deutsche Bank. *Commodities Weekly*. Varios números.

Fondo Monetario Internacional. 2008a. *World Economic Outlook Update*. Julio.

Fondo Monetario Internacional. 2008b. *World Economic Outlook*. Abril.

Fuentes R., F. Gredig y M. Larraín. 2008. "La Brecha de Producto en Chile: Medición y Evaluación". Economía Chilena 11(2): 7-30. Banco Central de Chile. Agosto.

Grünwald, C. y E. Orellana. 2004. "Medidas Alternativas de Inflación Subyacente". Economía Chilena 7(1): 93-101. Banco Central de Chile. Abril.

Henríquez, C. 2008. "Inversión por Actividad Económica en Chile Período 2004-2005". Estudios Económicos Estadísticos N°65. Banco Central de Chile. Junio.

JP Morgan Chase. 2008. *Global Data Watch*. Septiembre.

Lehman Brothers. 2008. *Global Weekly Economic Monitor*. Agosto.

Medina J., D. Rappoport y C. Soto. 2008. "Frecuencia de ajustes de precios con datos micro". Mimeo. Banco Central de Chile. Agosto.

Moreno, D. y A. Pistelli. 2008. "Inflación de Alimentos y Energía, Incidencia y Grados de Traspaso en Muestra de Países". Mimeo. Banco Central de Chile. Julio.

Pedersen, M. 2008. "Persistencia y propagación en la inflación chilena". Mimeo. Banco Central de Chile. Agosto.

Pincheira, P. 2008. "Evolución reciente de la persistencia inflacionaria en Chile". Mimeo. Banco Central de Chile. Agosto.

Scotiabank. 2008. Global Economic Research. *Weekly Trends*. Septiembre.

Villena, B. 2008. "Self employment and market-tightness in Chile". Mimeo. Banco Central de Chile. Septiembre.

Juan Esteban Laval Z.
Legal representative

CENTRAL BANK OF CHILE
Institutional Affairs Management
Publications Department
September 2008

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