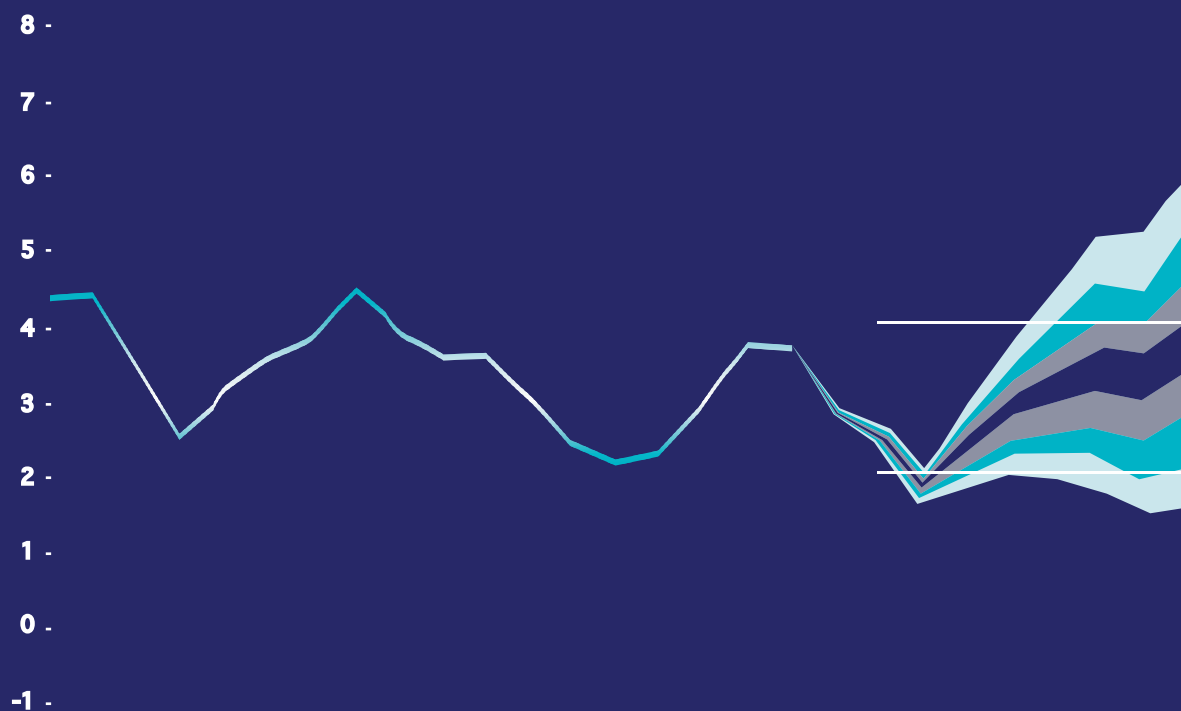


# Monetary Policy Report

MAY 2007



BANCO CENTRAL  
DE CHILE

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DE CHILE**

\*/ This is a translation of a document written originally in Spanish. In case of discrepancy or difference in interpretation, the Spanish original prevails. Both versions are available at [www.bcentral.cl](http://www.bcentral.cl)



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<sup>\*/</sup> The closing date for statistics included in this *Monetary Policy Report* was 7 May 2007.

# 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 keeping annual CPI inflation at around 3% most of the time, with a tolerance range of plus/minus one percentage point. To meet this target, the Central Bank uses monetary policy to keep projected inflation at about 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 improves economic performance and growth, while preventing the erosion of personal income. Furthermore, monetary policy's focus on inflation targeting helps to moderate fluctuations in employment and domestic output.

The main objectives of this *Monetary Policy Report* are: (i) to report and explain to the Senate, the Government and the general public the views of the Central Bank of Chile's Board on recent and expected inflation and their consequences for the conduct of monetary policy; ii) to publicly disclose the medium-term analytical framework used by the Board of the Central Bank to formulate monetary policy; and (iii) to provide information that can help guide economic agents' expectations regarding future inflation and output trends.

The *Monetary Policy Report* is published three times a year, in January, May and September, and focuses on the main factors that influence inflation. These include the international environment, financial conditions, prospects for aggregate demand, output and employment, and recent price and cost developments. The last chapter summarizes the results of this analysis in terms of both prospects and risks affecting inflation and economic growth over the next eight quarters. The *Report* also provides several boxes that offer more detailed information on issues relevant to evaluating inflation and monetary policy.

The Board approved this *Report* at its meeting on 11 May 2007 for presentation to the Senate's Finance Commission on 16 May 2007.

## The Board



# Summary

The economy regained strength in late 2006 and the turn of 2007, after the unexpected deceleration of the second and third quarters of last year, and is now on a good stand to bridge the output gaps still present in coming quarters. The impulse provided by macroeconomic policies and the favorable international scenario support this projection. The above, together with contained costs and inflation expectations in line with the target, permit to forecast that, in the most likely scenario, inflation will be at 3% at the end of the projection horizon of around two years.

News accumulated over recent months suggests that in 2007 to date output and inflation exceeded expectations in the baseline scenario depicted in January's *Monetary Policy Report*. Some of the risks identified therein have materialized, while new ones have appeared. In particular, the world price of commodities has increased again, quite strongly in the cases of copper and gasoline, and with less intensity for oil and other raw materials.

The monetary impulse increased during the first quarter of this year, reflecting the reaction of interest rates to macroeconomic developments, the change in the communication of estimates on the future course of monetary policy that the Board began implementing in a progressive fashion in September 2006, and the reduction in the monetary policy interest rate (MPR) in January. Economic activity and inflation performance in the past month drove a partial reversal of these changes. As of the statistical closing of this *Report*, financial prices implied a small increase in the MPR over the next few quarters. Nonetheless, said expectations showed, for the end of this year, an MPR running 75 and 30 basis points below those of September and December, respectively.

In the baseline scenario described in this *Report*, CPI inflation approaches 2% over the course of the second and third quarters of 2007, to later return to numbers around 3% and stay there over the rest of the relevant projection horizon of around two years. Annual output growth will fall within a 5%-6% range. This scenario, as always, is built on the basis of events considered the most likely, but there are a variety of uncertainties that might configure different outcomes. The Board considers that, in the present conjuncture, the risk balance for growth is biased upward, and even for inflation<sup>1/</sup>.

Internationally, it is worth noting the consolidation of somewhat better conditions than were foreseen in January. The projection of world growth

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<sup>1/</sup> In this context, risk means a possible positive or negative occurrence driving the economy significantly away from conditions considered in the baseline scenario.

this year and next was increased, especially for the main trade partners. In addition, part of the uncertainty around the robustness of world growth seems to have faded. Output growth in the US has lost drive, more than projected earlier, while other economic areas—in particular Europe, Japan and emerging Asia—have become more dynamic, substantially relying on domestic demand. However, the risk that growth deceleration in the US lasts longer and even goes deeper than forecast, affecting other regions in the world is still present. This risk derives from doubts around the form that will ultimately take in the US the adjustment of the real estate sector, the duration of the current strength of private consumption and poor investment in machinery and equipment.

#### Baseline scenario assumptions

	2004	2005	2006	2007 (f)	2008 (f)
	(annual change, percent)				
Terms of trade	19.7	11.3	22.5	-0.7	-8.9
Trading partners' GDP (*)	4.6	3.9	4.5	4.0	4.1
World GDP at PPP (*)	5.3	4.9	5.4	4.9	5.0
World GDP at market exchange rate (*)	4.0	3.3	3.9	3.4	3.5
External prices (US\$)	8.9	7.5	5.3	6.0	3.5
	(levels)				
LME copper price (US¢/lb)	130	167	305	290	235
WTI oil price (US\$/barrel)	42	56	66	62	61
Libor US\$ (nominal, 90 days)	1.6	3.6	5.2	5.4	5.3

(\*) For definition, see Glossary.

(f) Projection.

Source: Central Bank of Chile.

External financial conditions have improved somewhat since last January. In particular, sovereign spreads have hit record lows in several countries. The baseline scenario contemplates a gradual attenuation of these conditions over the next few years, in line with the expected evolution of both the international degree of liquidity and world economic growth. There is the risk, however, of a not-so-favorable evolution of relevant financial conditions in emerging markets. This could happen, for instance, in the event of a sudden change in investors' appetite for risk caused by an abrupt correction in a particular financial market, resulting in a major increase in sovereign spreads. Another possibility is an increase in inflationary pressures in developed economies raising interest rates above expectations. Global imbalances are also still present and, if corrected in a disorderly manner, they may have negative consequences on financial markets.

Also in the external scenario, the prices of some commodities have come as a surprise, which changes the projection for 2007's terms of trade (TOT) to a slight fall, much smaller than forecast in January. The price of copper has returned to levels above US\$3.5 per pound, significantly above those in January's baseline scenario. Underlying this increase, some supply and demand factors can be identified, but, similarly to last year's brief US\$4 per pound episode, it is difficult to fully reconcile the recent rise with changes seen in fundamentals. At any rate, and as has been mentioned before, the current macroeconomic policy framework has a more stabilizing effect on the cycle than in earlier periods, which is especially important for mitigating the effects of large swings in the copper price on the domestic economy. The baseline scenario in this *Report* considers that, during this year and next, copper prices will average US\$2.90 and US\$2.35 per pound, respectively. Both figures are higher than January's forecasts, but still assume that they will not last long. Given the recent trajectory, it is considered as a risk that the high



price of the metal remains where it is for a long time, or that it takes longer to converge to its long-term figures. The upward correction of the prices of copper and other exportable products will result in the current account of the balance of payments having a positive balance again this year.

The prices of oil and, especially, gasoline, have also exceeded January's forecasts. The present tightness in the oil market permits to forecast that high prices will be more persistent. Thus, the average oil price projection is corrected upward with respect to the last *Report*, for 2007 and 2008. It is also worth underscoring the increase in the international prices of some foods. This increase has been associated mainly to greater demand, and has had effects of different intensity on the inflation rates of various economies, Chile included.

Since the last *Report*, it is worth highlighting the stability of the Chilean economy to withstand world financial turbulences that began by the end of February. Compared with other emerging economies and with its own history, the effects on indicators such as the sovereign spread, share prices and the nominal exchange rate were much smaller this time around.

The domestic interest rate structure underwent a significant downward adjustment during the first quarter. However, after the disclosing of the latest output and inflation figures, changes showed a reversal, especially for longer maturities.

Taking the average of the two weeks prior to the statistical closing of this *Report*, the peso/dollar parity was almost 2% below the same period in January, despite the fact that in the first few days of May there was a significant peso appreciation that took it to 2006 lows. However, if measured against a currency basket, during 2007 the peso has been more stable, reflecting the US dollar's depreciation with respect to the majority of the most important currencies. Actually, the real multilateral exchange rate (RER) has shown no significant changes either. Its average for the two weeks prior to this *Report's* closing date is believed to be consistent with its long-run fundamentals, showing that the macroeconomic policy framework has been capable of absorbing the large TOT increase without creating greater imbalances.

GDP grew by 4% in 2006, according to the new Reference Compilation of the National Accounts. After a significant deceleration during quarters second and third, economic activity regained dynamism in the fourth quarter and in the first quarter of this year. Thus, annual GDP growth in the first quarter of 2007 is estimated at somewhat under 6%, more than projected in January. In this result, it is worth singling out a boost in retail trade and mining output.

The annual growth rate of domestic demand described a similar trajectory to that of GDP during 2006 and early 2007. Private consumption—both durable and non-durable—continued to grow strongly during the first quarter. Gross fixed capital formation, as was stated in January, has recovered dynamism and is showing good prospects for the year. In particular, imports of capital goods recorded annual growth rates of around 15% in current dollars during the first four months of 2007. March's listing of engineering works confirmed the dynamism that is expected for investment in construction and works this year.

The change in the Benchmark Compilation from base 1996 to base 2003 resulted in average growth in output for the period 2004-2006 being a few decimal points smaller. This, combined with the dynamics of capital accumulation, leads estimates in the baseline scenario for the annual GDP growth rate to around 5% for the period 2007-2009. The gap between actual and trend GDP, after becoming more negative during quarters second and third of 2006, tended to narrow by the end of last year and the beginning of this, given the acceleration of growth in actual GDP.

The labor market continues to be strong, with employment regaining dynamism and a relatively stable rate of seasonally-adjusted unemployment, still low both with respect to historical averages and compared with available estimates for the non-accelerating-inflation rate of unemployment.

The Board estimates that output growth will increase in 2007. This projection is based on still good conditions internationally, a favorable domestic financial system, and the stronger fiscal impulse. The baseline scenario considers consumption growing at an annual rate above that of 2006. Nonetheless, it cannot be ruled out that the good financial conditions and low unemployment may drive consumption to increase above projections, part of which may be shaping the solid performance that retail trade has been showing over the past several months.

As aforesaid, the baseline scenario considers that the stronger fiscal impulse—with respect to 2006—will be one of the factors underlying the increase in growth projected for this year. Also, as a methodological assumption, it considers that in 2008 the fiscal policy will continue to be guided by the structural surplus rule, with a reference price for copper, in real terms, similar to the one implicit in the budget for this year. The above is in line with the evaluation that the high prices of today will not be there for long. Any reference price for copper substantially greater than the one described might trigger a big change in the baseline scenario that might affect projected levels for inflation and the RER, as well as for the possible path of the MPR.

The baseline scenario considers that energy costs will show no additional rises of significant magnitude during this year and next. There are risks, however. On one hand, in recent months episodes of natural gas cuts have intensified in terms of both duration and magnitude. Although the effect on aggregate output in the past is considered small, the possibility of a larger than assumed impact cannot be overlooked. On the other hand, the past few years have accumulated a substantial increase in the cost of electric power (the main source of energy in the country), and it cannot be ruled out that, if increases exceed expectations, they may erode the stronger dynamism of output and affect inflation and households' disposable income materially. The actual hydrological conditions will be determinant in these effects.

The baseline scenario also assumes that capacity expansions coming into full operation in the production of commodities, mainly wood pulp, will favor increased growth. Part of it has already been observed in manufacturing and mining during the first quarter.

Overall, the baseline scenario sees GDP growing between 5% and 6% in 2007. The Board also considers that, after taking into account alternative scenarios, the balance of risks for output is biased upward.

## Economic growth and the current account

	2004	2005	2006	2007 (f)
	(annual change, percent)			
GDP	6.0	5.7	4.0	5.0 - 6.0
National income	10.1	9.2	5.1	4.7
Domestic demand	7.5	11.0	6.0	6.8
Gross fixed capital formation	9.9	21.9	4.0	8.0
Total consumption	6.8	7.5	6.6	7.0
Goods and services exports	11.7	3.5	4.2	8.1
Goods and services imports	16.9	17.7	9.4	10.7
Current account (% of GDP)	2.2	1.1	3.6	3.4
	(US\$ million)			
Current account	2,074	1,315	5,256	5,300
Balance of trade	9,585	10,805	22,213	22,300
Exports	32,520	41,297	58,116	62,800
Imports	-22,935	-30,492	-35,903	-40,500
Services	-746	-636	-922	-700
Income	-7,837	-10,645	-19,392	-19,500
Current transfers	1,072	1,791	3,356	3,200

(f) Projection.

Source: Central Bank of Chile.

In 2007 to date, annual CPI inflation has remained below 3%. However, in the first four months it was somewhat more than forecast in January, largely because of unexpected swings in specific prices originating in regulatory changes and supply shocks. Worth highlighting was the effect on the price level of the startup of *Plan Transantiago*, with a negative incidence on CPI inflation of nearly half a percentage point in the first quarter, which had not been considered in the January *Report's* baseline scenario. The price of gasoline, on the other hand, increased to significantly exceed projections, with a positive incidence on CPI inflation consistent with the change in bus fares. The evolution of the rest of the prices included in the CPIX but not in the CPIX1 (i.e. other regulated rates, indexed prices, some perishables) has not differed much from the one expected early in the year.

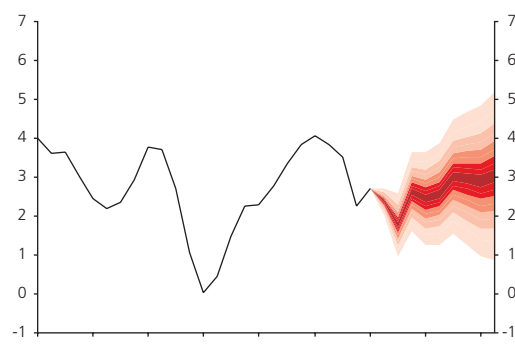
In the first four-month period, annual CPIX1 inflation—that excludes the aforesaid prices—was also higher than expected. The difference derived, to a large extent, from higher-than-expected increases in the prices of some foods, partly associated with increases in the corresponding world prices.

Inflationary pressures originating in labor costs continue to be bounded, with unit labor costs growing at moderate annual rates and with the expected acceleration not fully materialized. Annual growth in salaries has shown gradual increase, more evidently so in the latest data. All of this within a context of rapid reduction in the level of unemployment in recent quarters. On the side of imported inflation in dollars, apart from the prices of oil derivatives and some foods, no significant changes are observed. Translated into pesos, a first approximation indicates that, to the extent that the multilateral exchange rate has remained fairly constant, the decline in the nominal exchange rate offsets the larger international inflation in dollars, mainly reflecting the depreciation of the US dollar.

For the immediate future, the baseline scenario contemplates that, in the next few months, internal food prices will see no big changes with respect to those of the first four months of the year. Over a longer time span, their trajectory is projected to follow a similar path as relevant external prices, which will show a slight decline. Although for the moment these prices

## CPI inflation projection (\*)

(annual change, percent)

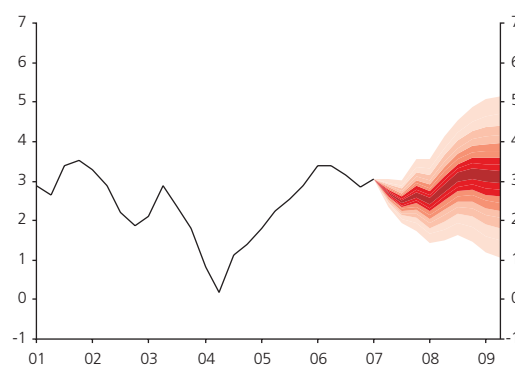


(\*) The figure shows the confidence interval for the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% are ranged around the baseline scenario. These intervals summarize the Central Bank's risk assessment for future inflation. The baseline scenario is constructed using the methodological assumption that in the coming quarters, the MPR will reach a level similar to that deduced from financial asset prices in the two weeks prior to the closing date for statistics included in this Report.

Source: Central Bank of Chile.

## CPIX inflation projection(\*)

(annual change, percent)



(\*) The figure shows the confidence interval for the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% are ranged around the baseline scenario. These intervals summarize the Central Bank's risk assessment for future inflation. The baseline scenario is constructed using the methodological assumption that in the coming quarters, the MPR will reach a level similar to that deduced from financial asset prices in the two weeks prior to the closing date for statistics included in this Report.

Source: Central Bank of Chile.

have a limited incidence on headline inflation, there is uncertainty around how persistent the rise will finally be and the second-round effects they may cause. On one hand, the rise in foreign prices originates rather in an increase in demand, which might intensify in the near future. In cases like this, however, changes in supply may bring prices to previous levels, over a limited period. Domestically, market competition conditions, combined with the belief that this phenomenon may be temporary, may lead to a transitory compression of margins to accommodate the higher prices, without causing price increases of much bigger size than those already seen.

The baseline scenario, as aforesaid, assumes that the higher price of oil will be persistent. The usual uncertainty around this prices combines at this conjuncture with doubts on the evolution of the price of gasoline, because its refining margin is at very high levels and there is no clarity regarding how fast it will return to its historical averages. While the effect of these prices on the medium-term inflation projection is limited, in the short term they can cause large deviations from the baseline scenario. In the present conjuncture, uncertainty is more severe because of doubts around both the operation of the present Fuel Price Stabilization Fund—which, in principle, should cease next July—and the way in which changes in fuel prices will affect public transport fares within the new system.

At a longer time span, the baseline scenario projects a narrowing of the output gap over the next few quarters which, combined with inflation expectations well anchored to the target, favors inflation fluctuating around 3%. One cannot rule out the possibility of the current size of the gap being smaller than estimated, or closing faster than expected if GDP growth ends up being faster. This could lead trend inflation to converge to 3% somewhat faster than considered in the baseline scenario. This scenario also assumes that annual growth in labor costs and imported inflation will converge during coming quarters to figures consistent with the 3% inflation target. It may happen, however, that this convergence takes longer, as has been the tendency of the past several quarters. Also worth noting has been the gap between inflation of underlying goods and services. Considering the larger level and persistence of services inflation, this might result in an increase in inflation somewhat faster than forecast. This risk, although still present, is limited and the difference has shrunk in recent months.

The baseline scenario uses as a methodological assumption that, over the long term, the RER will not deviate materially from the rate prevailing during the two weeks prior to the statistical closing of this Report. However, considering the weak US dollar in international markets and the usual volatility of nominal exchange rates, alternative scenarios for trend exchange rate over the projection scenario cannot be ruled out. Another methodological assumption shaping the baseline scenario is that, in coming quarters, the MPR will depict a trajectory similar to the one that derives from the prices of financial assets in the two weeks prior to the statistical closing of this Report. This is a working assumption and it involves no constraint on the future evolution of monetary policy, which will be adjusted to accommodate the evolution of the macroeconomic scenario and projections of inflation.

The Board estimates that CPIX1 inflation will continue to rise, to approach 3% over the course of the third quarter of 2007. CPI inflation, partly because of the basis of comparison deriving from oil price highs in 2006 and the

reverse effect of *Plan Transantiago* in 2007, will come close to 2% during the second and third quarters of this year. Down the line it will return to figures around 3%. Towards the end of the relevant projection horizon, around two years, the Board projects that headline inflation will be at 3%. After taking various contingencies into account, the Board estimates an even balance of risks for inflation.

#### Inflation

	2005	2006	2007 (f)	2008 (f)	2009 (f)
CPI inflation average	3.0	3.4	2.4	2.7	
CPI inflation December	3.7	2.6	2.8	3.0	
CPI inflation around 2 years (*)					3.0
CPIX inflation average	2.3	3.2	2.7	2.9	
CPIX inflation December	2.9	2.7	2.7	3.2	
CPIX inflation around 2 years (*)					3.1
CPIX1 inflation average	1.9	2.5	2.8	2.9	
CPIX1 inflation December	2.6	2.4	3.0	3.0	
CPIX1 inflation around 2 years (*)					3.0

(\*) Average inflation projected for the second quarter of 2009.

(f) Projection.

Source: Central Bank of Chile.

The Board reaffirms its commitment of conducting monetary policy to ensure that projected inflation will be at 3% over the policy horizon. Future changes in the MPR to achieve this objective will depend on incoming information and its implications for projected inflation, as well as on the evolution of the risks identified and other risks that may arise.

# Monetary policy decisions in the past three months

## Background: *Monetary Policy Report* January 2007

In January, headline and core inflation were significantly lower than projected in September. This reflected a larger than expected drop in the oil price, greater than expected idle capacity in the second and third quarters of 2006, and reduced cost pressures. In this scenario, monetary policy gradually adjusted, going from mild increases in September to a neutral approach toward the end of 2006. In January, the Board ruled to cut the monetary policy by 25 basis points in a divided vote.

In the most likely scenario, the output gap was forecast to persist for several quarters, taking longer to close than projected in September. Nonetheless, the economy was expected to bounce back in the first quarter of 2007, reflecting greater fiscal stimulus, favorable macroeconomic conditions in Chile and abroad, and good prospects for investment. Headline and core inflation should rise in the first quarter, due to the basis for comparison, before approaching 2% for several quarters this year and next, and then moving toward 3% over the projection horizon.

## Meetings from February to April

At its February meeting, the Board considered the most reasonable options to be cutting the monetary policy rate (MPR) by 25 basis points or keeping it at 5%. The world scenario and international financial conditions remained favorable, although the risk remained that the oil price could rise, given trends in the weeks prior to the meeting. Domestically, figures for the month fell within the main scenario in January's *Monetary Policy Report* and confirmed that domestic demand had picked up significantly in the fourth quarter of 2006, a trend expected to continue into the first quarter of this year. Inflation for the month, especially core, plus labor market figures revealed greater risk of higher inflation in the future. The decision to keep the MPR unchanged was partly justified by news on inflation, which as it dissipated would open the way to a more relaxed approach to monetary policy. Taking this into consideration, the Board unanimously decided to keep the MPR at 5% and await more data before making any changes.

At its March meeting, the Board again considered cutting the MPR by 25 basis points or keeping it at 5%. Externally, the main concern was turbulence on financial markets and, to a lesser degree, the higher oil price and risk of a slowdown in the US economy. Internally, both inflation and economic activity were in

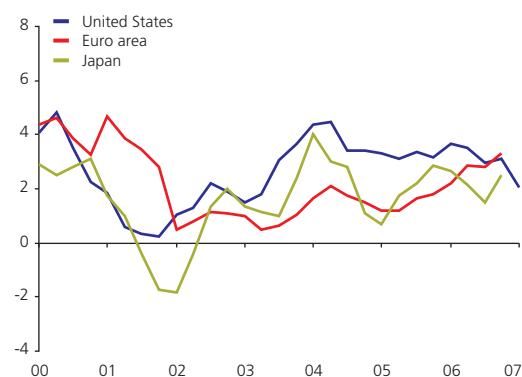
line with projections in the last *Monetary Policy Report*. Although still controlled, however, risks to inflation, mainly given the wage index, divergence between tradables and non-tradables, and cost pressures from the higher prices for some foods that weigh heavily on the CPI, had appeared. At the same time, the temporary slowdown in job creation and the possibility that first half GDP could be somewhat lower than forecast in January's *Monetary Policy Report* baseline scenario posed a risk that could have led to lower than projected inflation. In these conditions, some Board Members considered that keeping the MPR unchanged could make further cuts necessary, and make monetary policy more volatile. In light of this information, the MPR remained at 5%, but the vote was not unanimous.

At its April meeting, the Board once again considered cutting the MPR by 25 basis points or keeping it at 5% as the most feasible options. The main development abroad in the previous month was the rise in commodity prices, with oil and its derivatives higher than forecast early in the year and the copper price higher than in previous months. International grain prices were also up, posing the risk of passthrough to domestic inflation. Domestically, recent months' figures for headline inflation and economic activity remained in line with the January *Monetary Policy Report*'s baseline scenario projections. However, inflation projections for coming months were up and seemed to be showing an upward bias. Given these conditions, and taking into account that most of the correction assumed for the baseline scenario in January had already occurred with the MPR cut early in the year, and particularly the market response, which introduced significant corrections throughout the yield curve, the Board considered it prudent to accumulate more information on the true persistence of cost pressures and longer term projections that would arise from preparation of May's *Monetary Policy Report*, before changing the monetary policy interest rate. Thus, the Board unanimously decided to keep the MPR at 5%.

# I. International outlook

**Figure I.1**

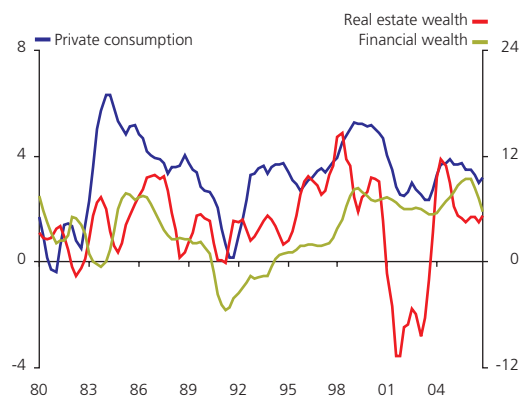
Growth in developed economies (\*)  
(annual change, percent)



Source: Bloomberg.

**Figure I.2**

US: household wealth and private consumption  
(annual change, percent)



Sources: Bloomberg and US Federal Reserve.

This chapter examines recent developments and prospects for the world economy over the next two years and describes the external scenario considered most likely for the Chilean economy.

## World growth

The US economy closed 2006 with growth in line with forecasts: 3.3%. According to early estimates, in the first quarter of 2007 the quarterly change in GDP was an annualized 1.3%, somewhat lower than expected. In the past two quarters residential and non-residential investment have been particularly weak, although the latter showed some recovery in the last quarter. Strong consumption, mostly due to job creation continuing in the service sector, was behind this growth (figure I.1).

The real estate market continued to undergo some correction. Output remained low and there was some concern about rising defaults on higher-risk mortgages. This could reinforce correction, if stricter policies for granting and executing mortgages are adopted, increasing the already large stock of housing on sale. Weak non-residential investment is more recent and has no obvious explanation, given favorable financial conditions, company cash flows, and high indices for capacity in use. The labor market, meanwhile, has continued to create new jobs apace, thereby sustaining consumption. The growth rate for real estate wealth has slowed and could stabilize, while financial wealth's growth (76% of total wealth) remains high, driving ongoing expansion of consumption (figure I.2).

The baseline scenario assumes that growth will slow in the US, falling below trend—which is about 2.75%—before bouncing back in 2008.<sup>1/</sup>

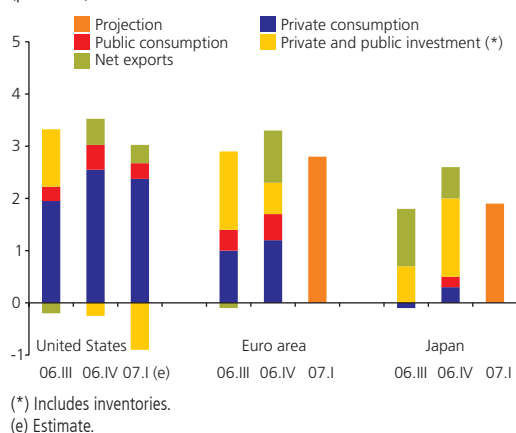
Euro zone growth has been higher than forecast, driving projections for 2007 and 2008 up repeatedly. This is true of the main economies, with growth led by stronger domestic demand (figure I.3). In Germany, a higher VAT has had limited impact on consumption, with economic activity and confidence remaining high, as elsewhere in the region. In France, consumption seems to be driving stronger growth. The impact of the slowdown in the US and euro appreciation on the region's external demand could change these prospects.

<sup>1/</sup> Using a set of economic indicators prepared as per methods developed by Estrella and Mishkin (1998) and Wright (2006), the likelihood of recession is low, with a slowdown more likely. This could mean annual growth will fall as much as 1.5 percentage points in 2007, compared to 2006.



**Figure I.3**

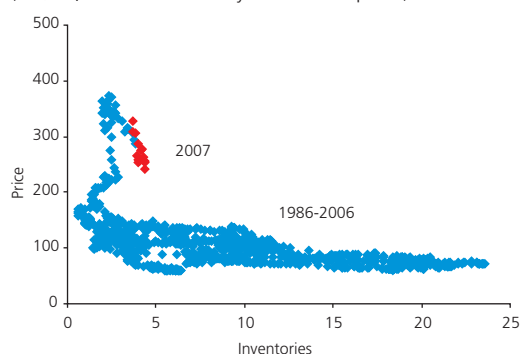
Contribution to annual GDP growth  
(percent)



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

**Figure I.4**

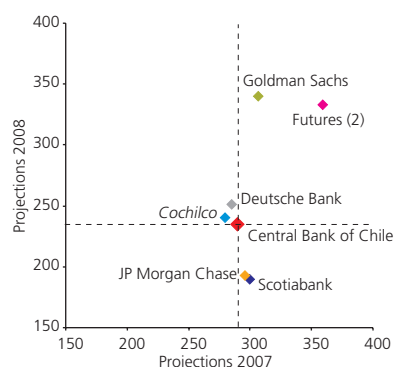
Copper price and inventories  
(US\$/lb, inventories in days of consumption)



Source: Bloomberg.

**Figure I.5**

Copper market: dispersion of price projections (1)  
(US\$/lb, annual average)



(1) Includes projections from 12 April to 7 May 2007.

(2) According to average for the 10 days prior to 7 May 2007.

Sources: Central Bank of Chile, Bloomberg, Cochilco 2007, Deutsche Bank 2007, Goldman Sachs 2007a, JP Morgan Chase 2007a, Scotiabank 2007.

In recent months, doubts about domestic demand and consumption in Japan have eased somewhat. The economy is performing better, with consumption gradually responding to better news from the labor market, while business expectations are buoyed up by a more favorable outlook for investment. In any case, growth should continue to depend on strong external demand, particularly in emerging Asia.

Emerging Asia has also seen its prospects improve. China is performing particularly strongly, with 11.1% annual growth for the first quarter of 2007, forcing authorities to apply measures to cool down the economy. India, meanwhile, is growing at almost 9%. Other Asian countries are enjoying a strong performance from their external sectors, thanks to strong intra-regional links and domestic demand.

Latin America has continued to enjoy the strong growth that began in 2004, averaging 5.4% in 2006. This was driven primarily by domestic demand and high commodity prices. The region has taken advantage of good conditions to improve fiscal positions and restructure debt, and with it reduce its vulnerability to external events. Moreover, with some exceptions, inflation has dropped steadily. Several countries are, however, spending a significant portion of their better terms of trade. On the region's main economies, in Brazil growth has been driven by favorable credit and labor market conditions, fiscal stimulus and less restrictive monetary policy. In Mexico, private consumption has been the main driving force of growth, while high oil prices permit to maintain fiscal stimulus. However, signs of second-round shocks from food prices led the Mexican Central Bank to increase the monetary policy rate.

Growth of several commodity exporting economies has remained relatively stable over the projection horizon. Australia and New Zealand dynamism continued thanks to strong domestic demand and high commodity prices. High current account deficits, which in New Zealand's case stands at 9% of GDP, make some caution advisable.

Thus, consensus growth projections are better for 2007 and 2008 than they were last January. The baseline scenario assumes that the slowdown in the US is being more than offset by stronger economies elsewhere, particularly in Europe, Japan and other Asian economies. The risk remains that the slowdown in the US could affect world growth overall. However, economies are depending less on external demand, thus reducing this effect. How the China transition to more sustainable growth rate will unfold and what effect this will have on commodity prices and the growth of other economies remains to be seen (table I.1).

## Commodity prices

The copper price has surprised everyone again, rising significantly to trade at around US\$3.50 per pound, more than 40% higher than when the January *Monetary Policy Report* closed and well above the value assumed in the baseline scenario at that time. While it is hard to explain all of this increase, supply and demand factors have tightened the market. On one hand, actual and expected demand from China is higher, both for consumption and to keep up strategic inventories, while investment funds are back in the market. On the supply side, there is a lag in investment in



**Table I.1**

World growth  
(annual change, percent)

	Average 1990-99	Average 2000-05	2006 (e)	2007 (f)	2008 (f)
World (*)	3.2	4.1	5.4	4.9	5.0
World at market nominal exchange rate (*)	2.4	2.9	3.9	3.4	3.5
United States	3.1	2.6	3.3	2.3	2.9
Euro area	2.2	1.8	2.8	2.4	2.2
Japan	1.5	1.6	2.2	2.2	2.2
China	10.0	9.4	10.7	10.0	9.6
Rest of Asia (*)	5.4	4.8	5.3	4.9	5.2
Latin America (*)	2.8	2.9	5.4	4.8	4.3
Commodity exporters (*)	2.7	3.1	2.6	2.6	3.0
Trading partners (*)	3.2	3.2	4.5	4.0	4.1

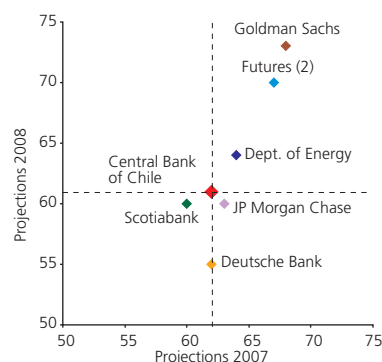
(e) Estimate.

(f) Projection.

Sources: Central Bank of Chile, Consensus Forecast and International Monetary Fund.

**Figure I.6**

Oil market: dispersion of price projections (1)  
(US\$/barrel, annual average)



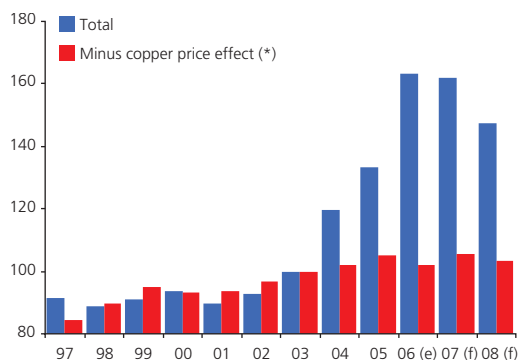
(1) Includes projections reported from 10 April to 7 May 2007.

(2) Average for the 10 days prior to 7 May 2007.

Sources: Central Bank of Chile, Bloomberg, US Department of Energy 2007, Deutsche Bank 2007, Goldman Sachs 2007a, JP Morgan Chase 2007b, Scotiabank 2007.

**Figure I.7**

Terms of trade  
(2003=100)



(\*) Terms of trade minus copper price effect estimated using as reference the 1996 copper price in the London Metal Exchange. Does not examine other potential effects on price and quantity.

(e) Estimate

(f) Projection.

Source: Central Bank of Chile.

the industry, higher energy-related costs, and projects that are just starting up have posted lower than expected ore grades. Although inventories have increased slightly, they remain close to all-time lows, able to sustain just five days of world consumption<sup>2/</sup> (figure I.4). The baseline scenario assumes that demand should fall off in the medium term and that supply should increase, and therefore projects a gradual decline in the price, to average US\$2.90 in 2007 and US\$2.35 per pound in 2008 (figure I.5).

Oil is posting prices of over US\$60 per barrel again, driven by a significant risk premium and high demand. In the northern hemisphere, the weather kept demand for heating fuels high at a time when crude oil was needed for distilling gasoline. With world demand still strong, particularly in China, and cuts to OPEC production combined with limited growth in the supply from other producers, the world market is tighter than forecast. Projections have therefore been corrected upward, with any decline in the price expected to be very gradual, so it should average US\$62 per barrel in 2007 and US\$61 in 2008.

The gasoline market has been affected by a rise in refinery costs, reflecting unexpected maintenance downtime at refineries and accidents in some of them. This has taken Gulf Coast gas prices up more than 50% compared to early January. For the future, refinery margins are expected to drop gradually, in line with experience in similar episodes in the past, when high prices have not persisted for long. Scarce idle capacity in this market and its recent behavior, however, suggest that margins could return to normal more slowly or even remain higher than in the past (figure I.6 and box I.1).

The reference price for NBSK wood pulp has continued to rise and has now reached all-time highs of around US\$770 per metric ton. This reflects the closure of production capacity in the northern hemisphere and strong demand from both China and Europe. For the medium term, the price is expected to fall somewhat, given lower growth in world demand and a slight increase in production. Fishmeal prices have risen slightly over the previous *Monetary Policy Report* and the tighter market has persisted. This reflects rising demand from China and low catches in Peru, the main exporter, which have not been offset by producers elsewhere in the world. The molybdenum price is up, most recently, given limits imposed by authorities in China, which produces 10% of world supply, and lower production everywhere else. The lack of substantial projects over the projection horizon suggests the market will continue to be tight.

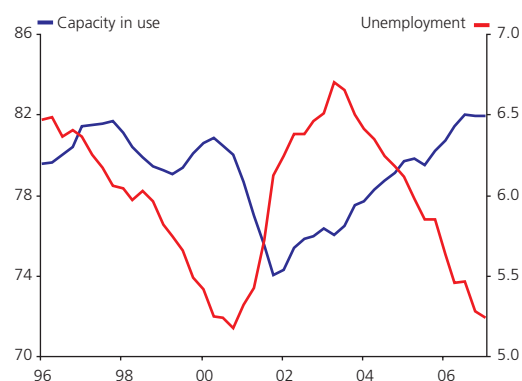
Some food prices, especially for corn, wheat and powdered milk, have risen significantly in international markets, along with other commodities (box I.2).

The baseline scenario foresees a slight drop in the terms of trade in 2007, but significantly smaller than forecast in January. Commodity price projections are subject to enormous uncertainty and could fall or rise over the projection horizon, especially copper and gasoline (figure I.7).

<sup>2/</sup> The industry considers four weeks of consumption a normal inventory.

**Figure I.8**

Market slack factor in developed economies (\*)  
(percent)



(\*) Figures for the US, euro area and Japan weighted for their share of world GDP at PPP.

Sources: Bloomberg and International Monetary Fund.

**Table I.2**

World inflation (\*)  
(average annual change in local currency, percent)

	Average 1990-99	Average 2000-05	2006	2007 (f)	2008 (f)
United States	3.0	2.7	3.2	2.1	2.2
Euro area	2.3	2.2	2.2	1.8	1.9
Japan	1.2	-0.5	0.2	0.1	0.5
China	7.8	1.2	1.5	2.6	2.8
Australia	2.5	3.3	3.5	2.6	2.6
New Zealand	2.1	2.5	3.4	2.3	2.4
Argentina	253.7	8.6	10.9	10.3	12.7
Brazil	854.8	8.4	4.2	3.5	4.1
Mexico	20.4	5.7	3.6	3.9	3.5
EPI	1.9	3.8	5.3	6.0	3.5

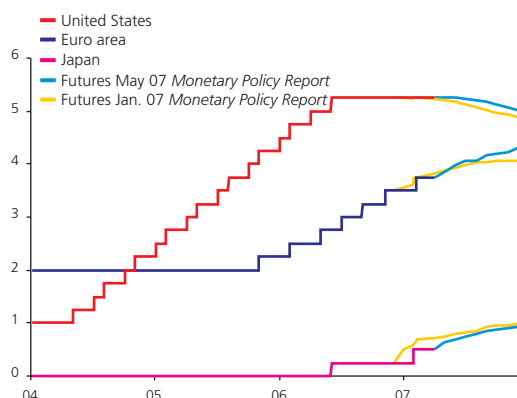
(\*) For definition, see Glossary.

(f) Projection.

Sources: Central Bank of Chile, Consensus Forecast and International Monetary Fund.

**Figure I.9**

Monetary policy rate expectations in developed economies (\*)  
(percent)



(\*) Prepared by the Central Bank of Chile, based on interest rate futures.

Source: Bloomberg.

## World inflation

Inflation remains a source of concern in the main developed economies. Core inflation measures are still high in the US and Europe. Tight factor markets in these economies could generate additional inflationary pressures (figure I.8). Low unemployment rates and unit labor costs in the US in recent quarters also point in this direction. The same is occurring in the euro area, where wage increases combined with a rise in fuel and some food prices could pressure inflation (table I.2).

Thus, in the relevant external baseline scenario, the external price index (EPI) should reach 6.0% in 2007 and 3.5% in 2008. This rise in projections since January mainly reflects higher producer inflation in developed economies and assumes some additional depreciation of the US dollar in international markets.

## Developed financial markets

In the US, interest rate movements reflect markets that are more concerned about lower growth in the short and medium term than inflation. Thus, federal fund rates are still expected to drop and medium-term rates have fallen. Meanwhile, bonds maturing in ten years or longer reflect more balanced risks to growth and inflation, with long-term rates similar to January's. In the euro area, long-term interest rates have risen in line with economic strength and monetary policy normalization. Both the euro area and Japan have boosted their monetary policy rates by 25 basis points since January. The market expects both economies will continue to increase rates by another 25 basis points toward mid-year (figures I.9 and I.10). The risk persists that limited idle capacity in some developed economies will end up boosting inflationary pressures, requiring a more restrictive response from monetary authorities.

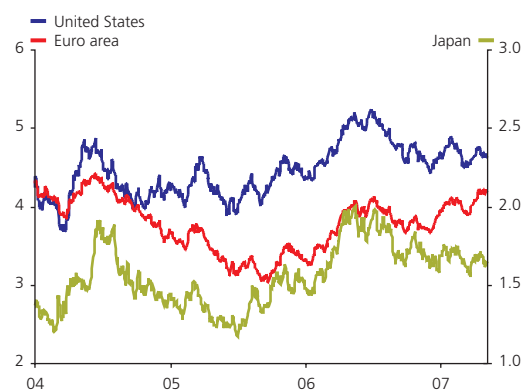
One relevant event in international financial markets was late February's turmoil. This pushed up the prices of the safest bonds in developed economies and reduced investment in riskier assets, as was reflected in the prices of assets in both developed and emerging markets. This didn't last long, with these trends turning around very quickly and to date investors are preferring higher-yield instruments again (box I.3). In short, for emerging economies financial conditions are now more advantageous than they were in January. This strong confidence in hedging markets represents some risk, however, to the degree that these instruments have not been put to the test in periods of extreme turbulence.

The US dollar has continued to depreciate internationally, in particular against the euro and the currencies of some commodity-exporting economies. The exception has been the yen, affected by carry trade operations.<sup>3/</sup> The weak dollar partly reflects lower growth in the US compared to the rest of the world and is consistent with expected shifts in interest rates. In any case, dollar trends and the growth gap between the US and the rest of the world have

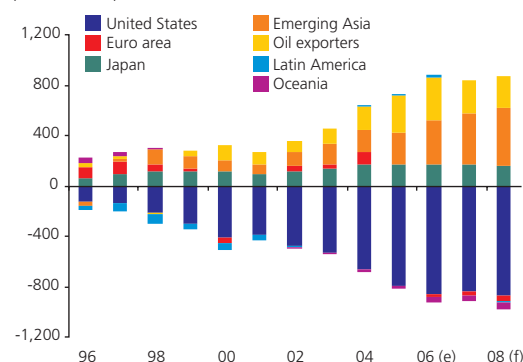
<sup>3/</sup> These are operations in which investors acquire debt in economies with low interest rates to invest in more profitable economies, generating pressures on the first economy's currency to depreciate.

**Figure I.10**

Long-term interest rates  
(percent)

**Figure I.11**

Current account balances (\*)  
(US\$ billion)



Source: International Monetary Fund.

**Figure I.12**

Sovereign risk premiums (\*)  
(basis points)



Sources: Bloomberg and JP Morgan Chase.

helped to reduce the US current account deficit (6.5% of GDP). Although it is expected to remain high over the projection horizon, these factors help to mitigate the risk of a more abrupt correction to this imbalance. This remains a relevant risk if financing sources correct sharply, but seems likely to be smoother than in the past (figure I.11).

## Emerging financial markets

Several emerging economies have made significant progress toward reducing their vulnerability to events abroad. In Russia, Turkey, Brazil, Mexico, and increasingly in other Latin American economies, an active debt management policy has become evident. They have lengthened maturities and continued to issue sovereign bonds in local currencies, thus reducing their exposure to exchange-rate risk. This is therefore generating a healthier composition of borrowing and deeper debt markets.

Keeping risk premiums low is reflected in the search for yields and perceptions that emerging economies should perform better than they have in recent decades. Nonetheless, recent volatility revealed that the risk of favorable financial conditions turning around remains. Moreover, the fact that some sovereign premiums are at all-time lows generates more pressure in the event of any reduction in the appetite for risk (figure I.12). Note also that, although commodity prices have recovered, any significant change could affect public finance in some emerging economies and agents' willingness to continue investing in these markets.

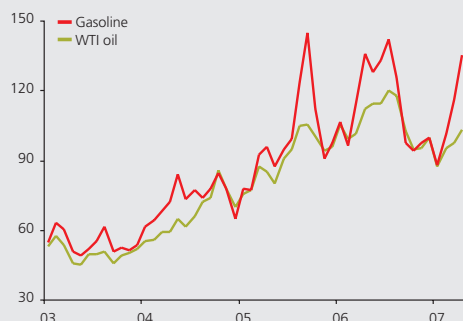
In some specific economies, some points of financial instability could appear in response to their own dynamics. The high current-account deficit in the Baltic economies stands out, for example, along with economic measures applied in some Latin American countries and, more recently, political uncertainty in Turkey.

## Box I.1: Recent trends in US oil refinery margins

The oil price rose again in recent months, averaging, during the two weeks prior to the closing date for this *Report*, almost 10% more than it did in the two weeks prior to the January *Report*. This rise has been much higher in the case of gasoline, up somewhat more than 50% in the same period, the result of less favorable refinery conditions (figure I.13). This has taken the refinery margin for producing these derivatives to record highs, more than double their average in recent years. How temporary or persistent this rise will be is relevant to projecting inflation, especially in the short term. This box offers a description of the factors leading to the increase in gasoline refinery margins and explores its persistence and future trajectory.

**Figure I.13**

WTI oil and gasoline prices in dollars  
(December 2006=100)



Source: Bloomberg.

Fuel refining involves producing both gasoline and heating fuels, so measuring the oil refining margin involves use of a technical measure called crack spread.<sup>4/</sup> Its recent rise can be associated to both supply and demand factors. The former include unscheduled maintenance or downtime in refineries, which could be associated with problems arising from hurricanes that have hit facilities in the Gulf of Mexico, or accidents. Demand for gasoline and heating fuels is seasonal, a factor that has gained importance in recent years, given tight refining capacity in the US.<sup>5/</sup>

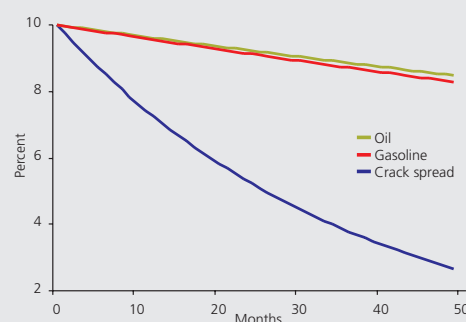
An analysis of the persistence of a 10% shock to oil and gasoline prices and refinery margins reveals that it fades much more quickly in the latter's case (figure I.14). In fact, 18 months later, almost half the rise in the crack spread has faded.<sup>6/</sup> This reveals seasonal factors' relevance in determining the crack spread.

This result is consistent with trends in refinery margins implicit in futures contracts. Although these rise in the short term, possibly reflecting seasonality, they plunge after mid-year (2007). This partly reverts toward 2008 (figure I.15).

It should be noted that this rise in the crack spread was not foreseen in January. Although January futures suggested a rise, associated with the seasonal nature of gasoline, this was much lower than the actual increase.

**Figure I.14**

WTI oil and gasoline real price persistence and crack spread for a 10% shock (\*)  
(percent)



(\*) The persistence of prices' response to a shock is evaluated using an AR (1) regression and evaluating response stimulus.

Source: Central Bank of Chile.

**Figure I.15**

Crack spread and futures (\*)  
(US\$/barrel, WTI oil)



(\*) Futures according to average for 10 working days prior to 9 January and 7 May 2007, respectively.

Source: Bloomberg.

<sup>4/</sup> Based on technological parameters, the crack spread is calculated as the difference between the sum of 2/3 of the gasoline price and 1/3 of the heating oil price and the price of a barrel of oil.

<sup>5/</sup> The seasonal nature of each fuel relates with intensity of use according to reflects how the amounts used vary depending on the season in the northern hemisphere.

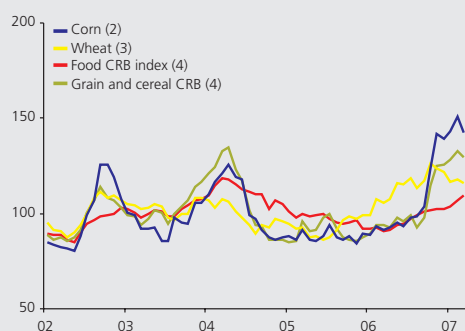
<sup>6/</sup> To evaluate persistence, monthly prices for gasoline and WTI oil are used, for 1972-2007. For the crack spread, 1995-2007 is used.

## Box I.2: Recent trends in international agricultural prices

Some food prices have risen significantly in the past year. Real prices for wheat rose 17% and corn 37% between September 2006 and March 2007,<sup>7/</sup> as did other foods included in the Commodity Research Bureau (CRB) indices (figure I.16).

**Figure I.16**

Real food and grain prices (1)



- (1) Average monthly prices deflated using the US producer price index  
 (2) Real price index for corn (Yellow N° 2, fob Gulf, US).  
 (3) Real price index for wheat (Soft Red Winter N° 2, fob Gulf, US).  
 (4) Food and grain and cereal index calculated by the CRB.

Sources: Bloomberg and Odepa.

These recent increases are thought to reflect several factors. In the first place, growth in emerging economies and a shift in their preferences toward higher quality foods, such as meat, have boosted the use of grain in animal feed. Second, specific events have affected supply,<sup>8/</sup> reducing the production of some grains and affecting meat and milk prices too. Finally, higher oil prices<sup>9/</sup> combined with growing environmental concern and the political/strategic need expressed by some countries to reduce their dependency on oil imports, have favored the use of grains to produce biofuels and ethanol.<sup>10/</sup>

The impact of higher demand for biofuels on farm commodities operates along two channels. On one hand, it acts directly by pushing up prices for crops used to produce these alternative fuels, such as soya beans and rapeseed. Ethanol inputs are products that can be turned into sugar, such as cane, corn or sugar beets. On the other hand, substitution effects between crops raise demand for other agricultural products, as is the case with wheat, for example.

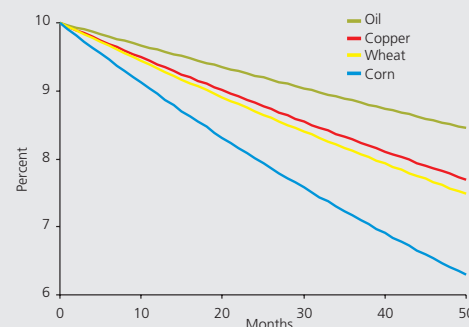
### Persistence of past increases in prices

An analysis of the persistence of a 10% shock<sup>11/</sup> on the real price of wheat, corn, copper and oil indicates that its effect on the price of grains dissipates more quickly than it does in copper and oil. The

average length of the corn shock is 75 months, while for the oil price it lasts more than 200 months (figure I.17). This is consistent with the nature of copper and oil production, as compared to wheat and corn production. For the former, planning horizons are long term, while wheat and corn are annual crops, where land use is easily changed.

**Figure I.17**

Real price persistence, 10% shock (\*)  
 (percent)



(\*) The persistence of prices' response to a shock is evaluated using an AR (1) regression and evaluating response stimulus.

Source: Central Bank of Chile.

Under current conditions, the interaction between the above elements (supply factors and demand for biofuels) adds to the uncertainty about the persistence of these shocks. In particular, they could be more persistent than in the past if biofuels become a factor permanently driving grain prices.

<sup>7/</sup> Deflated using the US Producer Price Index.

<sup>8/</sup> Mainly weather-related, due to drought in Australia and a hot climate in Europe and North America, which reduced wheat supply.

<sup>9/</sup> Should the oil price remain high, its correlation with the prices of agricultural commodities is expected to rise.

<sup>10/</sup> Since 2004, demand for ethanol has risen, driven by the US and China (in their search for a gasoline substitute). Their potential demand for corn, along with that of other major gasoline users, is enormous and growing. Goldman Sachs (2007b) estimates that the use of corn to produce ethanol in the US and China will triple toward 2015, accounting for 15% of world consumption. However, the lack of arable land (immediately available) in both countries, limits their ability to increase corn crops.

<sup>11/</sup> To evaluate persistence, in the case of the corn and wheat prices, monthly data for 1990-2007 was used. For copper and oil, monthly data for 1970-2007 was used.

## Box I.3: Financial turbulence abroad and its impact on Chile

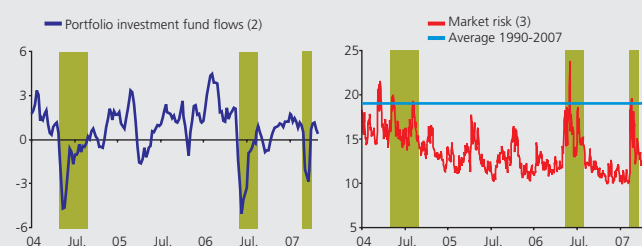
Between late February and early March, international financial markets experienced significant fluctuations, which also affected the Chilean economy. This box presents some of the characteristics of this and other recent episodes of external turmoil and compares their impact on financial variables in Chile and other emerging economies.

### Characteristics of recent episodes

The behavior of investment funds dedicated to emerging economies signal three recent episodes of asset sell-offs (figure I.18).

**Figure I.18**

Characteristics of recent episodes (1)



- (1) Shaded areas represent the selected turbulent episodes.  
 (2) Expressed as a percentage of total stock, moving month.  
 (3) The volatility implicit in options contracts for the S&P500 share index (US), expressed as an annualized percent.

Source: Bloomberg and Emerging Portfolio Fund Research.

Episodes are considered systemic or idiosyncratic, depending on their causes. The May 2004 episode falls into the first category and is associated with expectations that the US will begin the process of interest rate normalization ahead of time. Their effects were spread across all markets and asset classes, although their intensity varied by region. In contrast, the 2006 episode, associated with instability in economies in emerging Europe (Turkey and Hungary), was idiosyncratic and its great effects were felt in similar asset classes and economies. Finally, this year's episode can be considered systemic, since it combined the instability of an emerging economy, China, with uncertainty in the US high-risk mortgage market, with more global, albeit smaller, effects.

The 2007 event was less significant in terms of both duration and magnitude, while the other two were similar. Thus, the loss of value in a portfolio dedicated to emerging markets during the 2007 episode was almost 5%, over a one-month period.<sup>12/</sup> Meanwhile, investors' portfolios fell by 7% in 2004

and 14% in 2006, during periods lasting five months in 2004 and four months in 2006.<sup>13/</sup>

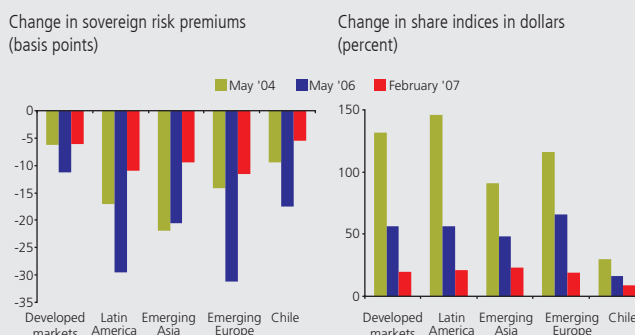
The more general effects from systemic episodes are associated with the flight to quality phenomenon, in which funds move from riskier assets to low-risk bonds, such as US Treasury papers.

### Effect on Chilean financial variables

An analysis of the impact on financial variables reveals that these episodes of turbulence have affected Chile less than other emerging economies, even those of a systemic nature (figures I.19).

**Figure I.19**

Effects on financial variables



Source: Bloomberg.

The latest episode affected Chile less than previous ones, and below the average for emerging economies, at levels very similar to developed markets. This is partly associated with yield-seeking investors differentiating between countries. Another factor is external investors' positive evaluation of Chile's macroeconomic policies.<sup>14/</sup>

<sup>12/</sup> The hypothesis of a low perception of market risk among investors has been put forward, and could partly explain the short duration and reduced impact of recent turbulence. For alternative measures for risk appetite, see Illing and Aaron (2005).

<sup>13/</sup> The duration of each episode is the number of months that the negative effects are apparent in investment funds, once the event begins.

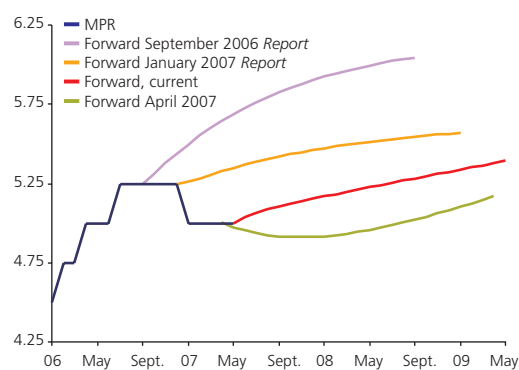
<sup>14/</sup> According to reports from the Institute for Management Development (2007) and the World Economic Forum (2006).



## II. Financial markets

**Figure II.1**

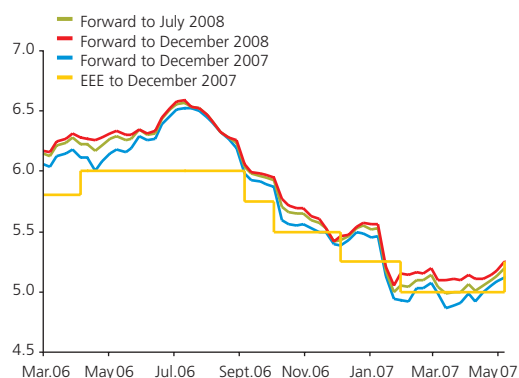
MPR and forward curve  
(percent)



Source: Central Bank of Chile.

**Figure II.2**

Expected MPR for indicated periods: forward curve and survey  
(weekly data, percent)



Source: Central Bank of Chile.

This section reviews recent trends in financial markets' main variables from a monetary policy perspective.

### Monetary conditions

In late 2006, markets gradually accommodated the possibility of changes to monetary policy, in part due to macroeconomic news and communications from the Board regarding the monetary policy rate (MPR) (figure II.1). This shifted from an approach involving gradual increases to a neutral bias in November and December 2006 and a 25-basis-point cut in January. This shift reflected the broadening of the output gap and an unexpected decline in inflation in the last four months of 2006, amidst controlled cost pressures. Thus, early in the year the outlook for inflation two years' hence was corrected downward, making an increase in monetary stimulus recommendable, since failing to do so could pose a risk to compliance with the inflation target.

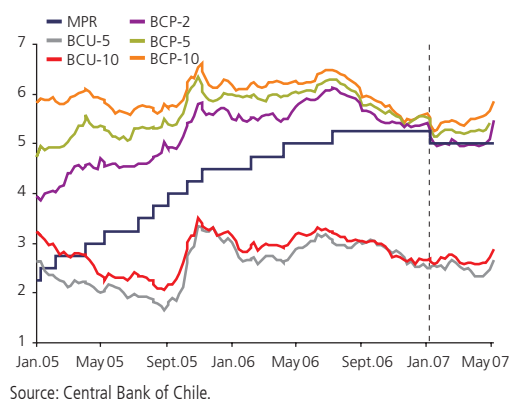
In the first quarter of 2007, market expectations regarding the future MPR continued to flatten, bottoming out in March. By late April and early May, news on the economy and inflation had turned this around. Financial prices as this *Report* closed suggested a slight rise in the MPR in coming quarters. According to the May Expectations Survey, market analysts expect that by December of this year the MPR should reach 5.25% (5% in the three previous months). Overall, expectations for the MPR by the end of this year suggested by the forward curve are 75 basis points lower than in September and 30 basis points lower than in December 2006 (figure II.2).

In 2007, interest rate shifts on Central Bank documents have mainly reflected idiosyncratic factors that do not necessarily mirror trends in developed economies, even considering the turbulence in late February. After the MPR was cut in January, local rates fell significantly, but this turned around as new information came in and the perception that the economy was picking up again consolidated, with inflation expected to be somewhat higher than forecast early in the year, which became even stronger in May. Thus, yields on these documents have been higher than forecast based on figures at the closing of the January *Monetary Policy Report* (figure II.3).

Even considering the close in the gap between the MPR and the estimated neutral MPR, the annual rise in growth of monetary aggregates over late 2006 and strong credit conditions reveal financial conditions remained favorable (figure II.4).

**Figure II.3**

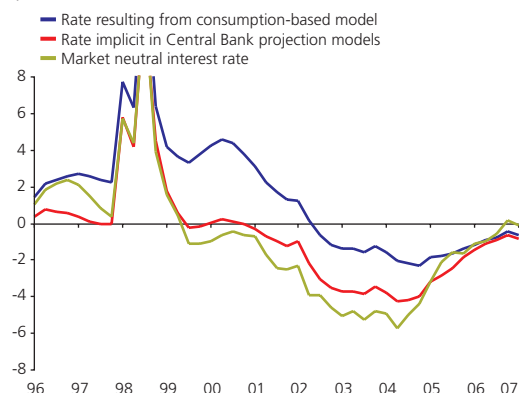
MPR and interest rates on Central Bank instruments  
(weekly averages, percent)



Source: Central Bank of Chile.

**Figure II.4**

Real interest rate gaps: real MPR (\*) minus indicated neutral interest rate  
(percent)

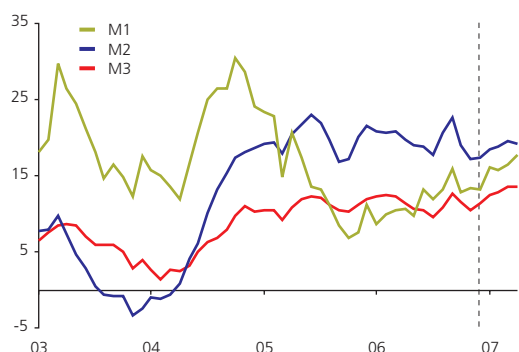


(\*) Calculated as the nominal MPR minus expected inflation, from Central Bank of Chile surveys.

Source: Central Bank of Chile.

**Figure II.5**

Monetary aggregates  
(nominal annual change, percent)



Source: Central Bank of Chile.

## Monetary aggregates

In the early months of 2007, monetary aggregates rose higher and faster than in late 2006, as did their expansion velocity (figures II.5 and II.6). This was more than could be explained by the cut to the MPR and output growth.

Greater M2 growth over the end of last year also drove growth rates for time deposits and a strong rise in mutual funds, according to preliminary information, during the early months of the year. In M3's case, deposits in foreign currency also contributed to the recovery in growth rates.

## Household and corporate credit conditions

Growth in total credit weakened somewhat in recent months, reaching around a nominal 17% annually by April, according to provisional data. By component, and during the same period, annual growth in personal loans fell slightly, given a minor but persistent decline in the growth rate of consumer credits (around 40% of total personal loans). These dropped from 27% annually in mid-2006 to 20% more recently. Meanwhile, annual growth in mortgages, in line with stronger sales, rose somewhat more than 18%, recovering from a downward slide apparent in late 2006 (figure II.7).

Bank credit costs saw rates on consumer credits rise modestly, taking into consideration their usual seasonal behavior, while interest rates on mortgage bills trading on the secondary market continued on a slightly downward trend (table II.1).

**Table II.1**

Lending rates  
(base 360 days, percent)

	MPR	Consumption		Rates LCH (3)		Commercial	
		TPP (1)	Credit cards (2)	Rate 4-5% and Duration: 5-6	Rate 5-6% and Duration: 5-6	Prime (4)	TPP (1)
2004 Average	1.87	24.3	33.4	4.0	4.4	1.6	7.4
2005 Average	3.44	26.0	34.1	3.7	4.3	3.4	9.7
2006 Average	5.02	27.2	37.3	4.1	4.3	5.1	10.7
2006 Jan.	4.50	27.3	34.4	4.3	4.5	4.8	10.8
Feb.	4.66	28.5	36.0	4.1	4.3	4.9	11.2
Mar.	4.75	25.5	36.5	4.1	4.3	4.9	10.5
Apr.	4.88	27.1	36.9	4.1	4.4	4.9	11.1
May	5.00	27.7	36.6	4.2	4.4	5.1	11.1
Jun.	5.00	27.7	36.8	4.3	4.5	5.0	10.4
Jul.	5.14	27.4	36.8	4.1	4.4	5.2	10.4
Aug.	5.25	26.8	38.1	4.0	4.2	5.1	10.4
Sept.	5.25	26.7	39.1	4.0	4.1	5.3	10.5
Oct.	5.25	27.1	38.8	3.9	4.1	5.2	10.7
Nov.	5.25	27.1	39.1	3.8	4.2	5.2	10.6
Dec.	5.25	27.3	39.2	3.8	4.2	5.3	10.4
2007 Jan.	5.09	28.1	39.5	3.7	4.2	4.8	10.0
Feb.	5.00	28.9	40.5	3.7	4.1	5.0	10.0
Mar.	5.00	27.2	41.4	3.6	4.1	5.0	9.7
Apr.	5.00	27.8		3.5	4.0	4.9	9.8

(1) Average weighted rate.

(2) Series published by the SBIF, for peso operations maturing in more than 90 days, worth up to UF200.

(3) Mortgage rates for the issue indicated.

(4) Rate charged preferred clients or those with the best credit rating (calculated as the monthly average minimum rate reported by banks daily).

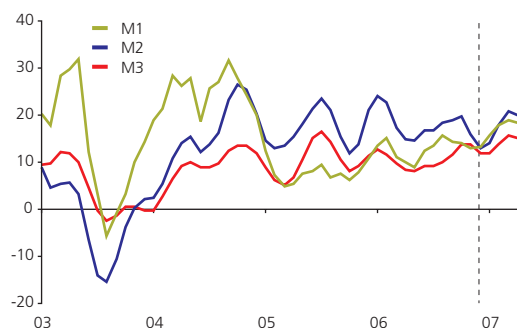
Sources: Central Bank of Chile, Santiago Chamber of Commerce and Superintendency of Banks and Financial Institutions.



**Figure II.6**

## Monetary aggregates

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

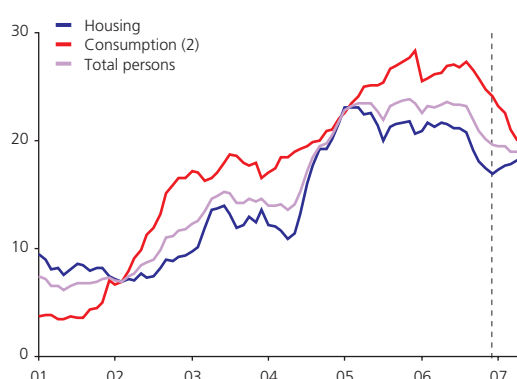


Source: Central Bank of Chile.

**Figure II.7**

## Personal loans (1)

(nominal annual change, percent)



(1) April figures are provisional.

(2) As of January 2004 individuals' overdrafts are included.

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

**Figure II.8**

## Corporate loans (1)

(nominal annual change, percent)



(1) April figures are provisional.

(2) In dollars, using the nominal exchange rate on the last working day of the corresponding month.

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

Growth in loans lined up with results from the Central Bank's March Survey of Bank Credits, which revealed that most banks continued to apply similar standards for approval and perceptions of demand as they had during the previous quarter. Personal credits saw approval standards remain largely unchanged, while banks' perception regarding demand varied more. More banks saw some strengthening in demand for mortgage bills, as well.

Corporate loans continued to grow apace. Nonetheless, commercial credits (around 85% of total credits to companies) such as those for foreign trade in dollars grew at rates somewhat lower than in late 2006 (figure II.8), although interest rates on commercial loans were down somewhat from January levels. This contrasted with the Central Bank's March Survey on Bank Credit results, which suggested that credit conditions had become less restrictive in terms of maturities and more restrictive in terms of interest rate spreads, risk premiums and the guarantees required.

As for non-bank financing sources open to companies, should all corporate bonds announced this year be issued, totals should reach peaks similar to those posted in 2001. In the first four months of the year, corporate bond issues totaled UF28 million, up by 4.8% over issues during the same period in 2006. In the stock market, total share issues as of March were down from the same period in 2006. In contrast, after falling in January, daily trading on the exchange posted higher averages than during the first months of last year.

The local stock market (measured by changes in the IPSA) has performed well so far in 2007, showing outstanding resilience to financial turbulence in world markets in late February. After starting the year at new historic highs, in mid-February local prices corrected downward and fell further after world markets declined by month's end (figure II.9). The Chilean stock exchange then rose, more than offsetting previous losses. Thus, compared to the closing figures from the January *Monetary Policy Report*, the IPSA rose 19.9% in pesos and 25.8% in dollars. This rise is similar to other exchanges in the region, which rose 20.4% in the same period, more than world exchanges overall, which grew 9% (figure II.10). This solid performance from stock exchanges was based on still favorable macroeconomic and financial forecasts both in Chile and abroad, and sound performances from companies during the first quarter, according to the information available.

## Exchange rate

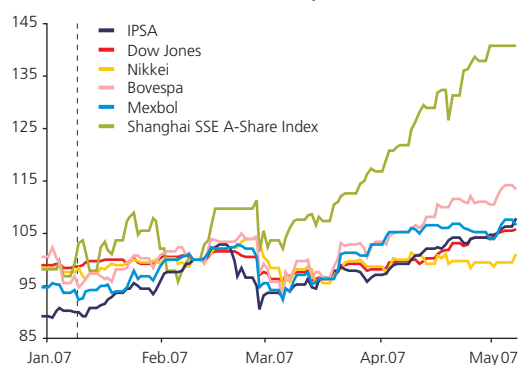
Peso/dollar parity has fallen almost 2% since January, when the average for the two weeks prior to this *Report's* closing date is used. Nonetheless, in early May the peso appreciated significantly against the dollar, returning to levels similar to lows in 2006. Note that the peso did so amidst dollar depreciation worldwide, a significant hike in the copper price, appreciation of other commodity-exporting economies' currencies, and a stronger performance from the Chilean economy.

Measured against a basket of currencies, the peso has remained more stable than the US dollar, which has depreciated against most of the main currencies (figure II.11). The real exchange rate hasn't changed much either, standing

**Figure II.9**

Stock indicators

(10 Feb. 2007=100, local currency)

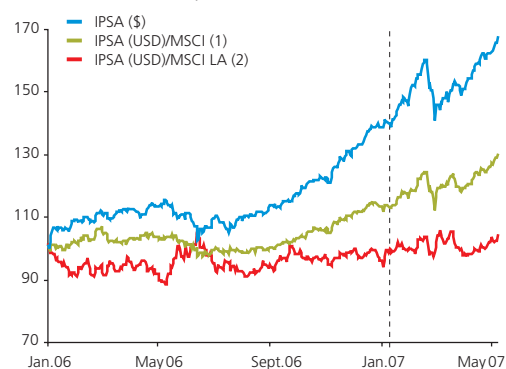


Sources: Central Bank of Chile and Bloomberg.

**Figure II.10**

Stock indicators

(02 Jan. 2006=100, percent)



(1) World share index, Morgan Stanley Capital International.

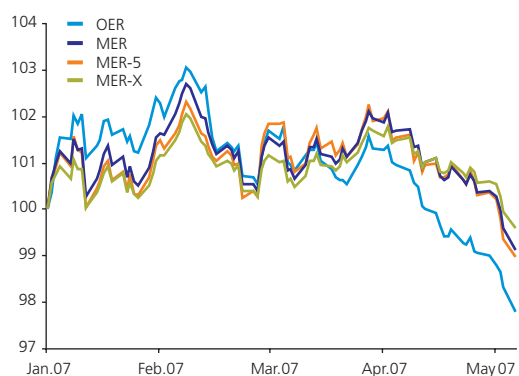
(2) Latin America share index, Morgan Stanley Capital International.

Sources: Central Bank of Chile and Bloomberg.

**Figure II.11**

Nominal exchange rate (\*)

(02 Jan. 2007=100)



(\*) For definitions, see Glossary.

Source: Central Bank of Chile.

at 95.0, in the case of the real exchange rate (RER) and 83.7, in the case of the RER-5, in April (table II.2). The average RER for the past two weeks is considered consistent with long-term fundamentals and reveals that the current macroeconomic policy approach has been able to absorb a strong increase in the terms of trade without producing any major imbalances.

**Tabla II.2**

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

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

	Dec.06	Jan.07	Feb.07	Mar.07	Apr.07	May 07 (2)
OER	527.58	540.51	542.27	538.49	532.30	523.85
MER	104.13	106.00	106.65	106.39	106.11	104.74
MER-5	131.72	133.49	134.19	134.44	133.78	131.91
MER-X	100.42	102.03	102.74	102.62	102.60	101.36
RER (3)	93.38	94.18	95.53	95.26	94.99	
RER-5 (3)	82.18	82.67	84.04	84.47	83.74	

(1) For definition, see Glossary.

(2) Average through 7 May.

(3) Provisional figures.

Source: Central Bank of Chile.

# III. Aggregate demand

**Table III.1**

Aggregate demand

(weight within GDP, real annual change, percent)

	Weight	2005	2006				Year
	2006	Year	I	II	III	IV	
Domestic demand	104.1	11.0	7.8	6.2	3.6	6.6	6.0
GFCF (Gross fixed capital formation)	24.1	21.9	9.5	2.0	1.8	3.3	4.0
M&E (Machinery and equipment)	10.5	38.7	17.4	-0.4	1.7	1.0	4.3
C&O (Construction and other works)	13.6	11.5	4.2	4.0	1.9	5.2	3.8
Other	80.0	8.0	7.3	7.5	4.1	7.6	6.6
Private consumption	66.6	7.9	7.7	7.5	6.7	6.7	7.1
Durable	7.4	27.8	22.0	22.9	17.3	12.3	18.2
Non-durable	29.4	6.3	6.1	6.7	5.8	6.8	6.4
Services	29.8	5.9	6.6	4.9	5.0	5.1	5.4
Government consumption	11.9	5.3	3.9	3.5	3.5	3.4	3.6
VE (change in inventories, % of GDP) (*)		1.3	1.4	1.5	1.2	1.4	1.4
Goods and services exports	37.8	3.5	5.5	3.0	6.2	2.3	4.2
Goods and services imports	41.9	17.7	12.9	8.7	8.2	8.3	9.4
GDP		5.7	5.0	4.0	2.6	4.3	4.0

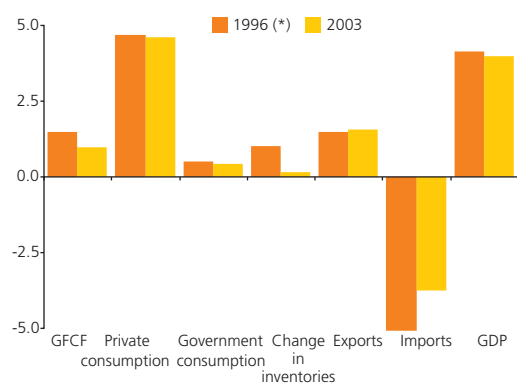
(\*) Change in inventories over GDP accumulated over four quarters.

Source: Central Bank of Chile.

**Figure III.1**

Benchmark compilations, 1996 and 2003 for 2006

(impact on GDP growth, percentage points)



(\*) Estimate included in the January *Monetary Policy Report* 2007.

Source: Central Bank of Chile.

This section reviews recent trends in domestic and external demand, as well as short-term prospects, to explore possible inflationary pressures arising from goods and services markets, and the likely behavior of output.

## Aggregate demand

During the fourth quarter of 2006 and the first of 2007, the economy performed better than in the third quarter of 2006, resuming annual growth at a rate just under 6% in 2007. Domestic demand followed a similar pattern. After a sudden and surprising plunge in its annual growth rate during the first half of 2006, gross fixed capital formation bounced back. Partial indicators for this component are promising for this year. Private consumption continued to rise strongly, both its durable and non-durable components (table III.1).

The change in the National Accounts Benchmark Compilation (box IV.1) involved some differences in the contribution from each component of demand within GDP in 2006 compared to estimations in January of this year (figure III.1). The main changes are apparent in inventories, gross fixed capital formation and imports of goods and services. This means that, according to the new benchmark compilation, the annual change in domestic demand in 2006 was 6%, less than the 7.3% estimated in January using the 1996 benchmark compilation. Consumption and investment trends in 2006 have not changed much, however, with the change in inventories explaining the downward correction.

## Private consumption<sup>1/</sup> and inventories

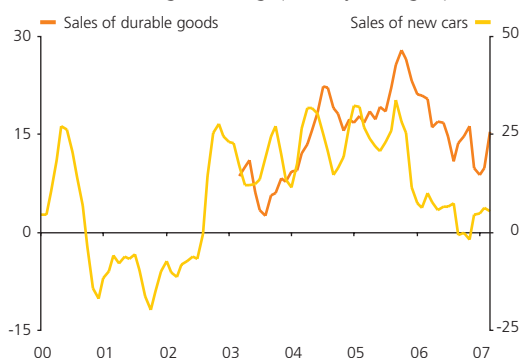
Private consumption rose steadily throughout 2006, posting annual growth similar to previous years, 7% to 8% between 2004 and 2006. The information available for 2007 indicates that this trend has continued, reflecting good access to credit, favorable financial market conditions, and strong employment, which have been behind the positive trend of consumption.

By type of good, durables consumption has risen strongly. According to partial indicators, it rose a real 15% annually in the first quarter of 2007

<sup>1/</sup> The components of private consumption (2006 weights) are: durables (11%), non-durables (44%) and services (45%). Non-durable consumption includes non-durable goods and services.

**Figure III.2**

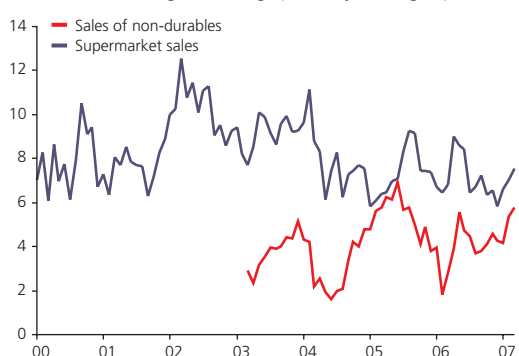
Durable consumption  
(real annual change, moving quarterly average, percent)



Sources: Asociación Nacional Automotriz de Chile and National Statistics Bureau.

**Figure III.3**

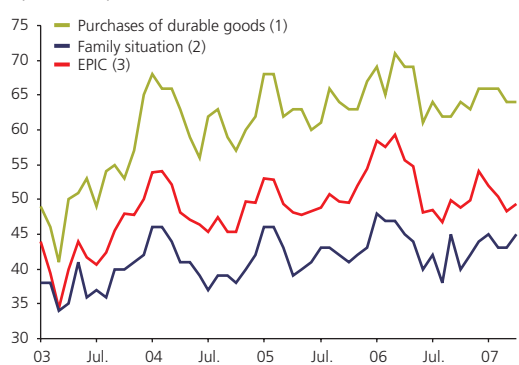
Non-durable consumption  
(real annual change, moving quarterly average, percent)



Source: National Statistics Bureau.

**Figure III.4**

Consumer expectations  
(positive over negative replies; over (under) 50 indicates optimism (pessimism))



(1) Question: Would you say that this is a good or bad time for buying household items?  
(2) Question: Would you say that the economic situation and that of your family is better, worse or the same as one year ago?  
(3) Total index, constructed as the simple average for the five questions, including the two shown in this figure.

Source: Adimark.

(figure III.2). The annual growth rate for non-durable consumption (again using partial indicators) does not appear to have changed much in the first quarter, reaching a real rate of around 6% (figure III.3).

Consumers' perceptions have grown less favorable in 2007. Measured using the Economic Perception Index, these declined to slightly below the neutral level: 49.4 in April. Nonetheless, perceptions on the convenience of the economic timing of decisions about consumption and on personal conditions have not changed materially (figure III.4).

In 2006, inventories totaled 1.4% of GDP, measured at constant prices, similar to 2005. These figures are lower than estimated using the 1996 benchmark compilation. The information available for the first quarter of 2007 suggests inventories will fall, particularly given the rise in manufacturing and mining export volumes and production trends.

## Gross fixed capital formation<sup>2/</sup>

Annual growth in investment has rebounded since the last quarter of 2006. Thus, gross fixed capital formation closed 2006 up 4%, almost 24% of GDP at constant prices<sup>3/</sup> (figure III.5). Thus, the investment to GDP ratio for 2006, measured at constant prices, was one of the highest in recent decades, as previously concluded.

In the first quarter of 2007, investment's solid performance, apparent toward the end of last year, held. Capital goods imports resumed annual growth rates of around 15% in current dollars, during the first four months, reaching peaks compared to previous years (figure III.6). The investment list for engineering works, prepared by the *Corporación de Desarrollo de Bienes de Capital* in March, confirmed the favorable scenario expected for this year, at the same time as it corrected upward investment forecast for 2008 and 2009 compared to last December's list (figure III.7).

The prospects for investment were also improved by greater liquidity flows in companies and access to financing under favorable terms. In 2006, the profitability of companies reporting using the *Fecu* forms was higher than in previous years: 18.7%, led by mining (figure III.8). The results to date for the first quarter also signal positive results. These join announcements of company bond issues for the rest of 2007, which, if effected, should be similar to those in 2001. At the same time, business expectations (IMCE) have bounced around but overall remain optimistic.

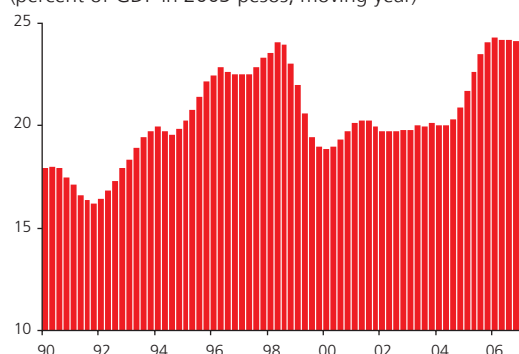
Investment in construction and engineering works also looked good in early 2007. Construction rose more than in 2006 and more than the aggregate rate for the economy as a whole. At the same time, the number of new homes

<sup>2/</sup> GFCF components (2006 weights) are: construction and other works (56%) and machinery and equipment (44%). Likewise, components of construction and other works are: building and engineering works (56%) and other works (44%).

<sup>3/</sup> The 2003 benchmark compilation reviewed the investment rate at both constant and current prices, which in both cases are now lower compared to the 1996 benchmark compilation. Part of this change reflects changes in relative prices that have no implications for investment's contribution to economic growth (*Monetary Policy Report*, January 2007, box III.2, pp. 33-34). The correction for other reasons (reclassification of goods and measures) does have implications of this nature, although in this case changes are minor.

**Figure III.5**

Gross fixed capital formation (\*)  
(percent of GDP in 2003 pesos, moving year)

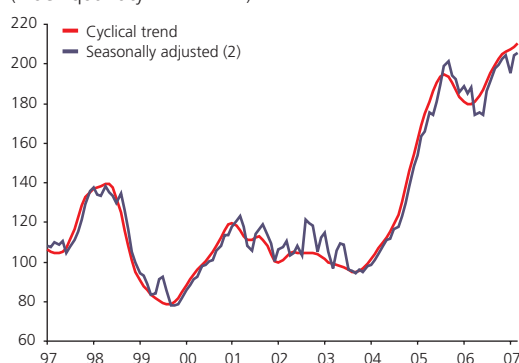


(\*) Data prior to 2003 reflects a splice using rates of change for data in the 1996 and 2003 benchmark compilations.

Source: Central Bank of Chile.

**Figure III.6**

Capital goods imports (1)  
(index quantity 2003=100)



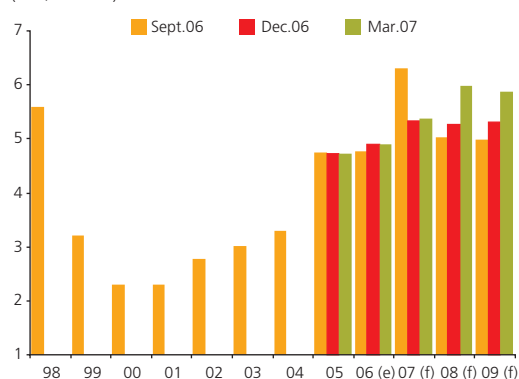
(1) Data prior to 2003 reflects a splice using rates of change for data in the 1996 and 2003 benchmark compilations.

(2) Moving quarterly average.

Source: Central Bank of Chile.

**Figure III.7**

Investment list (\*)  
(US\$ billion)



(\*) Minus telecommunications and real estate sectors.

(e) Estimate.

(f) Projected.

Source: Corporación de Desarrollo Tecnológico de Bienes de Capital.

also rose, thereby reducing the months of stock available and the annual growth rate for housing loans (figure III.9).

## Fiscal policy

As of March 2007, implementation of the total Central Government budget<sup>4/</sup> yielded a total surplus for the year of 8.2% of GDP, up from 7.7% at the end of 2006. With the information available on the closing date for this *Report*, expenditure is estimated to grow around a real 9% in 2007, in terms of a budget to budget comparison. The rise in expenditure should increase fiscal stimulus within the economy and will be a relevant factor in the increased growth projected for this year. So far in 2007, expenditure has not varied much from historic averages.

As a methodological assumption, this *Report's* projections assume fiscal policy will continue to obey the structural surplus rule and a reference copper price for 2008 similar, in real terms, to that implicit in the 2007 budget, and in line with the assumption that current high prices will not last. Fiscal policy's expansionary approach over the next year will depend on the final reference price, among other factors. Inflation scenarios are provided using a fan chart of figures that offer different options for the reference price, which in turn will involve different effects when projecting different macroeconomic variables. In any case, note that as in other circumstances, the more expansionary fiscal policy is, the greater the pressure will be on the peso to appreciate and the higher the necessary interest rate to ensure the inflation target is met.

## Exports and imports

The trade surplus closed 2006 at almost US\$22.2 billion, more than in previous years thanks to better export prices. Unlike in previous years, net exports' share of GDP in the first quarter of 2007 seems to have been slightly positive.

The value of fob exports reached US\$58.12 billion in 2006, up 41% for the year, mostly reflecting the higher copper price and that of other commodities. Annual growth in export volumes reached 2.3% in 2006, down from 2005 (table III.2). This lower growth in volumes occurred across different export categories, although it was led by a decline of almost 30% in fishmeal export volumes (due to the scarcity of these resources) which negatively influenced the manufacture aggregate. Non-commodity export manufacturing sectors,<sup>5/</sup> in contrast, averaged significant annual growth in export volumes (figure III.10). In any case, the rise in productive capacity in the wood pulp sector could involve a significant rise in manufacturing shipment volumes this year.

In the first quarter of the year, annual growth in export volumes was somewhat more than in the last quarter of 2006, reflecting a larger increase

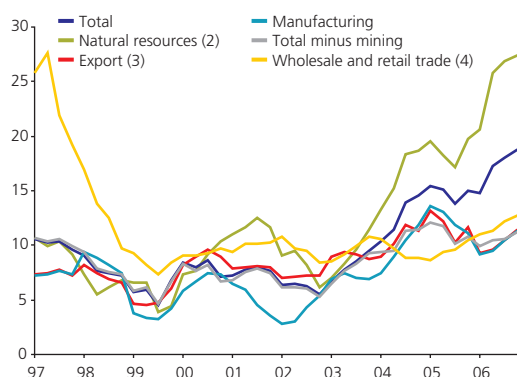
<sup>4/</sup> Includes Central Government budgetary and extra-budgetary.

<sup>5/</sup> Non-commodity manufacturing shipments account for 63% of the total, and exclude fishmeal, salmon and trout, wood pulp and wood.

**Figure III.8**

Company profitability (1)

(moving annual average, percent)



(1) Return on equity.

(2) Includes electricity, forestry, mining, water treatment and gas.

(3) Includes food, forestry and manufacturing.

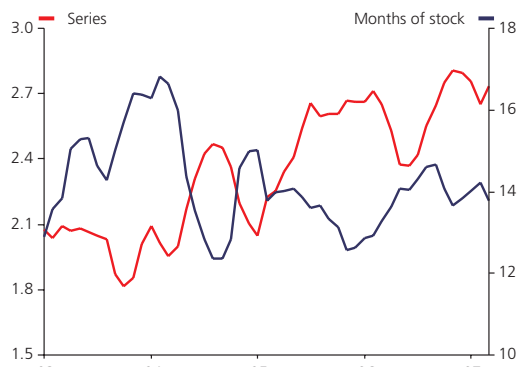
(4) Includes retail and supermarkets.

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

**Figure III.9**

Sales of new housing

(thousands of units, seasonally adjusted series)

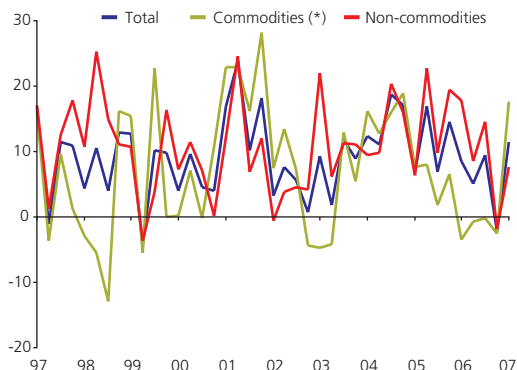


Sources: Central Bank of Chile and Cámara Chilena de la Construcción.

**Figure III.10**

Manufacturing exports

(real annual change, percent)



(\*) Includes: Fishmeal, salmon and trout, wood pulp and wood.

Source: Central Bank of Chile.

in mining and agricultural shipments. Non-commodity manufacturing shipments also averaged almost 8% again.

**Table III.2**

Foreign trade

**Exports**

	US\$ million	Annual change, percent								
		Total Value	Total Volume	Total Price	Mining Value	Mining Volume	Mining Price	Manufacturing Value	Manufacturing Volume	Manufacturing Price
2005 Year	41,297	27.0	5.0	20.9	36.6	-0.6	37.4	17.4	11.2	5.6
2006 Year	58,116	40.7	2.3	37.5	57.9	-0.9	59.4	19.1	5.1	13.3
2006 I	13,621	43.9	7.4	34.0	70.5	6.9	59.5	16.7	8.6	7.4
II	15,140	48.8	0.2	48.5	73.0	-5.8	83.6	18.5	5.1	12.7
III	15,679	54.1	5.7	45.8	73.9	2.6	69.5	27.3	9.4	16.4
IV	13,677	19.2	-3.6	23.6	22.4	-6.8	31.3	14.0	-2.1	16.5
2007 I	15,821	16.2			11.8			27.9		

**Imports**

	US\$ million	Annual change, percent								
		Total Value	Total Volume	Total Price	Consumption Value	Consumption Volume	Consumption Price	Capital Value	Capital Volume	Capital Price
2005 Year	32,735	32.1	21.2	9.0	28.6	25.4	2.5	53.8	51.0	1.9
2006 Year	38,409	17.4	11.7	5.1	17.6	15.8	1.5	5.3	4.0	1.2
2006 I	9,012	24.1	15.3	7.6	17.9	15.1	2.4	17.5	16.8	0.6
II	9,378	18.4	10.8	6.8	27.4	25.5	1.5	-2.7	-5.3	2.8
III	10,003	15.5	9.4	5.6	16.4	13.8	2.3	-1.5	-2.5	1.0
IV	10,017	13.1	12.4	0.6	11.2	11.3	-0.1	9.9	9.4	0.5
2007 I	9,996	10.9			17.2			10.7		

Source: Central Bank of Chile.

Cif imports reached almost US\$38.4 billion (17% annual growth) in 2006, led by the annual rise in consumer and intermediate goods imports, both above average. Imports of capital goods, consistent with weak investment in early 2006, saw growth by volume that was substantially lower than in 2005, but recovered toward the end of last year. In the first quarter of 2007, these imports have continued to grow by value. On the origin of consumer goods imports, figures for 2006 show that China's share of goods by value rose again (from 12% to 14%), while imports from some Latin American countries, such as Argentina, Brazil and Peru, fell by a similar proportion (from 29% to 27% of the total).

The balance of payments current account, meanwhile, reached a surplus of US\$5.260 billion in 2006, 3.6% of GDP. Unlike projections from last January, today the current account is expected to post a surplus again in 2007, to reach almost 3.5% of GDP, mostly thanks to copper's high price.



## IV. Output and the labor market

**Table IV.1**

Gross domestic product  
(real annual growth, percent)

	Weight	2005	2006				
	2006	Year	I	II	III	IV	Year
Agriculture-forestry	3.8	8.2	4.3	6.9	1.0	9.6	5.4
Fishery	1.2	-0.9	3.1	-2.3	-5.2	-4.5	-1.9
Mining	7.5	-1.5	0.1	3.7	-3.4	0.0	0.1
Manufacturing	16.5	6.4	7.5	0.6	-0.7	2.9	2.5
EGW	2.9	5.2	6.4	12.0	4.3	7.0	7.4
Construction	7.0	10.8	4.4	4.1	2.2	5.0	3.9
Wholesale and retail trade (1)	10.1	8.1	5.9	5.8	5.4	3.8	5.2
Transport	6.8	5.1	5.3	4.3	3.1	6.2	4.7
Communications	2.6	10.2	11.4	8.5	9.1	10.7	9.9
Natural resources (2)	11.6	0.0	2.0	4.9	-1.7	1.1	1.6
Other (2)	83.0	6.4	5.4	3.7	3.0	4.5	4.1
<b>Total GDP (3)</b>	<b>100.0</b>	<b>5.7</b>	<b>5.0</b>	<b>4.0</b>	<b>2.6</b>	<b>4.3</b>	<b>4.0</b>

(1) Includes restaurants and hotels.

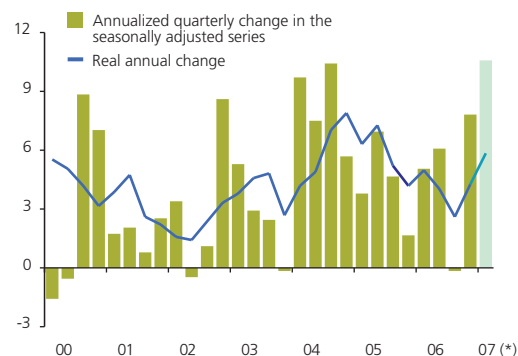
(2) For definition, see Glossary.

(3) Total GDP is the sum of natural resource GDP, other GDP, net VAT collected, and imports duties, minus bank charges.

Source: Central Bank of Chile.

**Figure IV.1**

Gross domestic product  
(real annual growth, percent)



(\*) First quarter 2007 is the average of published Imacecs.

Source: Central Bank of Chile.

This chapter reviews changes in GDP by sector of origin, and changes in employment, to evaluate price pressures on factors and goods markets, along with short-term prospects for output.

### Total GDP

In 2006, economic activity grew 4% annually, with production up in all sectors except fishing (table IV.1). Economic growth was marked by a slowdown in the second and third quarters, with the lowest growth rate posted in the third quarter. In the fourth quarter of 2006 and the first of 2007 output rebounded, somewhat more strongly than forecast in the January *Monetary Policy Report*. More growth in early 2007 involved growth in services sector GDP, driven mining and by wholesale and retail trade, which was high and more than expected. Thus, in the first quarter of 2007, economic activity is estimated to have grown more than in the last quarter of 2006, resuming annual rates of just under 6.0%<sup>1/</sup> (figures IV.1 and IV.2).

The change in the National Accounts Benchmark Compilation from a 1996 to a 2003 base reduced GDP growth by 0.3 percentage point on average in 2004-2006. For the last year in particular, 4% annual growth was slightly lower than projected in January using the 1996 benchmark compilation. The new figures, however, did not substantially change the growth profile of GDP in 2006, although it did involve some changes in the weighting of sectors and components. Overall, this methodological change brought no major shifts in the existing macroeconomic overview (box IV.1).

For 2007, GDP should grow between 5% and 6%, which is more than in 2006. This is based on external and financial conditions that remain favorable and in greater fiscal stimulus.

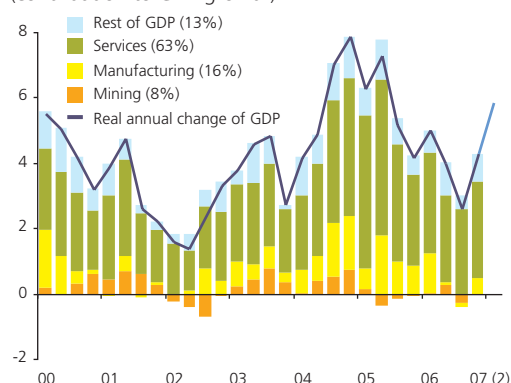
### Natural resource GDP

In 2006, the annual rate of change for GDP in natural-resource-related sectors (mining, fishing, electricity, gas and water) remained less than for total GDP, although by the end of the year it was on the rise. Lower growth in natural resource GDP largely reflected mining's performance. Low production reflected lack of idle production capacity and the impacts of specific factors that hurt production in the third quarter of 2006. For

<sup>1/</sup> As per the usual policy for publishing quarterly national accounts, on 23 May an initial estimate for first quarter 2007 GDP will be released.

**Figure IV.2**

Gross domestic product (1)  
(contribution to GDP growth)



(1) Figures in brackets are the weights for each sector within 2006 GDP.  
(2) First quarter 2007 is the average of published Imacecs (monthly activity indicators).

Source: Central Bank of Chile.

**Figure IV.3**

Mining (\*)

(2003=100)



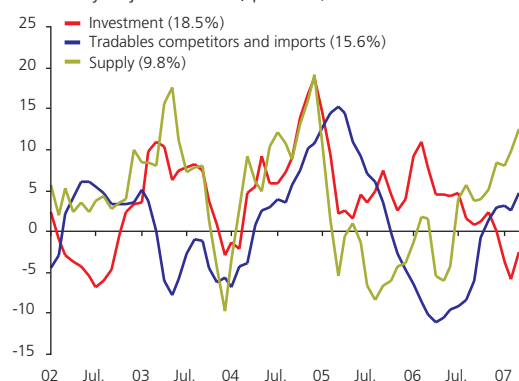
(\*) Moving quarterly average. Seasonally adjusted series.

Sources: Central Bank of Chile and National Statistics Bureau.

**Figure IV.4**

Manufacturing production by grouping (\*)

(moving quarterly average for the annual change in the seasonally adjusted series, percent)



(\*) Figures in brackets are the weights for each subsector over total manufacturing in 2006.

Source: Central Bank of Chile.

this year, mining is expected to grow more than in recent years, reflecting the start-up of new projects and expansions, along with the lower basis for comparison (figure IV.3).

The fishing sector, which weighs less on total GDP, ended 2006 with an annual decline in production, largely due to a scarcity of marine resources throughout the year, which growth in cultivation centers could not offset. In the first quarter of 2007, fishing is estimated to have grown substantially more than in the same period in 2006, reflecting a low basis for comparison, the performance from cultivation centers and larger catches.

Electricity, gas and water, which weighs less on the aggregate, was nonetheless among the strongest performers in 2006, far outdoing the aggregate. In the first quarter of this year, this faded somewhat, mainly reflecting greater restrictions on natural gas (which were up considerably in the early months of this year over the same period last year) and its negative impact on thermoelectric generation.

## Other GDP

Altogether, other non-natural-resource-related sectors grew 4.1% annually in 2006, performing more strongly in the last quarter (4.5% annually), as the aggregate did. For the first quarter of 2007, estimates suggest non-natural resource sectors posted growth rates similar to the aggregate, but more than the previous quarter, and that this should continue in the current quarter. Within this group, the wholesale and retail trade is leading, with manufacturing, which has recovered over the third quarter of 2006.

## Manufacturing

Annual growth in manufacturing output rose in the fourth quarter of 2006, after falling in the third quarter of the year. Overall, manufacturing closed 2006 with relatively low growth, below the aggregate, of 2.5% annually. In the first quarter of 2007, manufacturing is estimated to have grown at higher rates than in the previous fourth quarter, driven by solid production from wood pulp, associated with expanded capacity and annual growth for the period of 20.4%, and branches producing non-tradable goods.

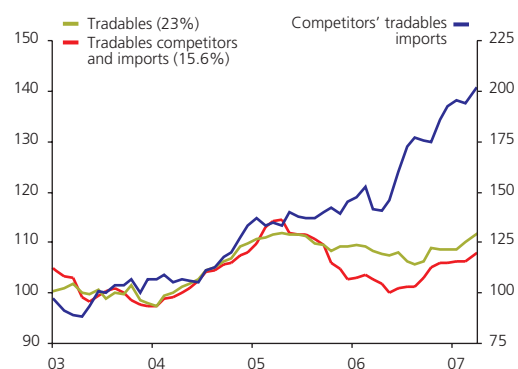
The manufacturing branches that produce tradable goods and compete with imports, which according to the January *Monetary Policy Report* were the most affected by the changing composition of durable consumption away from domestically produced goods toward imports, posted slightly positive annual growth rates in the first quarter. This suggests that, as forecast in January, this trend will not continue to deepen (figures IV.4 y IV.5).

Since last December, however, annual change in investment-linked manufacturing has been negative, coinciding with a rise in imports of these kinds of products. We cannot rule out that this may reflect domestic production being pushed out by imported goods. Nonetheless, more recently this tendency has turned around somewhat. In any case, domestically produced goods' share of the machinery and equipment item within gross fixed capital formation is minor (3.8% 2005, at constant prices), although somewhat higher in terms of manufacturing GDP (18.5% in 2006), so should



**Figure IV.5**

Manufacturing production and imports(\*)  
(moving quarterly average for the seasonally adjusted series, 2003=100)

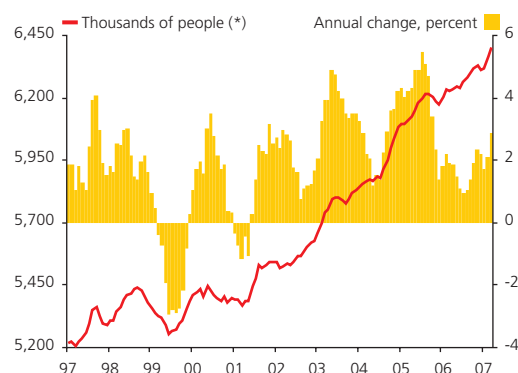


(\*) Figures in brackets are the weights for each subsector over total manufacturing.

Sources: Central Bank of Chile and National Statistics Bureau.

**Figure IV.6**

National employment

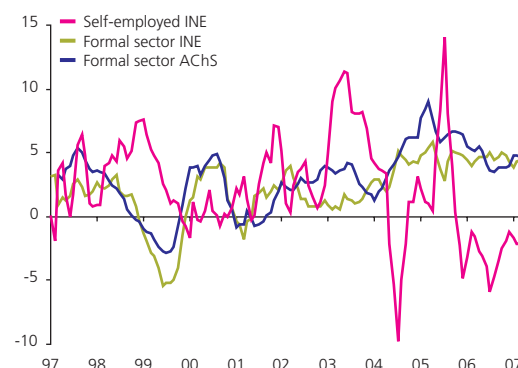


(\*) Seasonally adjusted series.

Source: National Statistics Bureau.

**Figure IV.7**

Employment by occupational category  
(annual change, percent)



Sources: Asociación Chilena de Seguridad and National Statistics Bureau.

this tendency persist, its impact on output overall should be pretty minor compared to the substitution episode experienced in 2006.

In terms of manufacturing employment, annual figures from the National Bureau of Statistics INE (*Instituto Nacional de Estadísticas*) indicated it had fallen between December 2006 and February 2007. Figures for March, however, revealed an incipient change. Figures from the Chilean association for occupational health (*Asociación Chilena de Seguridad, AChS*), meanwhile, have posted stable annual rates of change, under 3%, since the third quarter of 2006. The reasons for this discrepancy are unclear, because the methods and samples used differ. AChS only reports on affiliate firms, that is, only workers in the formal sector.

## Wholesale and retail trade

The wholesale and retail trade grew more than the economy overall in 2006: 5.2% annually. Unlike total GDP, however, growth was weakest in the last quarter of the year. In the first quarter of 2007, wholesale and retail trade recovered, growing more than it averaged the previous year. In fact, this sector has been one of the most active so far this year, in line with imports and indicators for consumption. This is apparent in employment, which has risen significantly since mid-2006, independently of the source.

## Construction

In 2006, construction grew slightly less than the economy overall, falling between the first and third quarters before recovering in the fourth. The baseline scenario assumes that this will continue for the first half of 2007. Significant annual growth in construction inputs, as well as investment in engineering works, apparent from the March list from the *Corporación de Desarrollo Tecnológico de Bienes de Capital* and optimism among this sector's businesses, suggest a positive outlook for this sector in 2007.

Sector employment, measured by the INE, also offers reason for optimism, growing at annual rates that although they bounce around somewhat, have averaged 5% since mid-2006. Sectoral employment data from both AChS and the Chilean chamber of builders (*Mutual de la Cámara Chilena de la Construcción*), are less optimistic, however, with annual change approaching 0%.

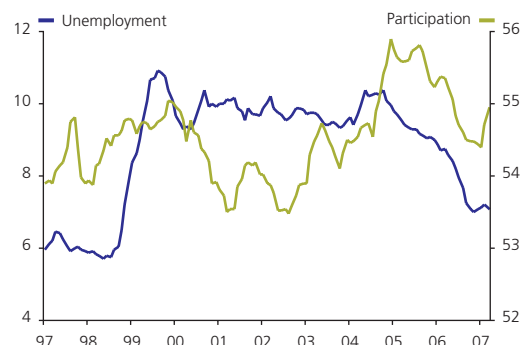
## Employment, participation and unemployment

In the first quarter of 2007, the labor market remained strong. Data for the moving quarters ending in February and March 2007 confirm employment's recovery, with annual change approaching 3% in the last month, higher than the average in 2006 (1.6%, figure IV.6). As has been common lately, total employment growth has been driven by salaried employment, which continues to post annual growth of over 4%, more than offsetting the decline in self-employment. Trends in salaried employment are similar to reports from other sources and can in part be attributed to the new law on contracting out coming into effect, and with it a formalization of employment (figure IV.7).

In the moving quarter ending in February 2007, the labor force finally noted a rise, after a long time with negative or near zero rates of change. Participation, meanwhile, which has been falling since April 2006, rose in February and

**Figure IV.8**

Unemployment rates and labor force participation  
(seasonally adjusted series, percent)



Sources: Central Bank of Chile and National Statistics Bureau.

March. This was also in line with a more dynamic labor market, in which the cost of finding a job has fallen.

The seasonally adjusted national unemployment rate has moved around but has remained slightly over 7% since September 2006 (figure IV.8). These levels are low compared with the average for the past 20 years, and with several of the estimates available for the natural level of unemployment.

As previous reports have noted, labor market figures from the INE's national survey on employment, and their implications must be read with some caution, since the year-on-year comparison is influenced by a change in sampling applied during the first half of 2006. Nonetheless, the evaluation of idle capacity is also supported by information from the University of Chile's studies for Greater Santiago.

## Box IV.1: New national accounts

On 23 March 2007, the new quarterly and annual national accounts series for 2003-2006 using 2003 as their base year were published in line with policies for their updating. New results are to some extent explained by this regular revision of quarterly and annual figures, but above all by the establishment of a new Benchmark Compilation 2003<sup>2/</sup> as the basis for measuring national accounts, which replaces the one in use since 1996.

A new benchmark is the most important instance of national accounts revision. The 2003 version involved revising estimates based on the 1996 reference, from the new base year onward. Previous estimates for 2003 were done again with the new benchmark, revealing the productive structure and relative prices prevailing in the 2003 base year (new shares for GDP components), a framework which will serve as the basis for estimating national accounts in the years to come.

The 2003 benchmark compilation was the result of four years of work, carried out by many Central Bank and external specialists through specific studies. This involved an extensive and unusual review of information sources and exhaustive methodological research to include the latest international advances in measuring national accounts.

The fact that the new 2003 benchmark has reduced the compilation cycle from ten to seven years is also worth noting. In line with international recommendations to

ensure statistical accuracy, the next compilation will be for the 2008 base year, reducing the cycle to five years. Note that for this next benchmark the use of chained indices is being evaluated to avoid revisions due to relative prices. The decision will depend on the coverage and quality of basic prices.

The review of 2003-2006 series (1996 base year) reflected improvements to sources and methods introduced by the 2003 benchmark compilation, the new structure of production and relative prices. For GDP, growth in 2004 was corrected downward by two tenths, six-tenths for 2005, and two-tenths in 2006, this last calculated using the Imacec (table IV.2). On the origin end, this was mainly because the relative share of import duties fell, as a result of cutting customs tariffs from 8.75% in the 1996 compilation to 3.95% in the 2003 version.

From the perspective of expenditure, the reduction in GDP growth in 2004 and 2005 mainly reflects domestic demand. Gross fixed capital formation was the component most negatively affected, the result of a decline in its share of GDP due to a drop in capital goods relative price between the two reference years. Moreover, lower growth rates were also confirmed, reflecting the change in the weights assigned to construction and reclassification of consumer goods for some products, previously considered part of machinery and equipment (such as mobile phones and pick-up trucks) (table IV.3).

**Table IV.2**

Origin of GDP

	Participation 2003, percent		Annual rate of change, percent						Differences in bases 2003/1996 Impact, percentage points		
	Base 96	Base 03	2004 Base 96	Base 03	2005 Base 96	Base 03	2006 Base 96	Base 03	2004	2005	2006
Agriculture	4.5	3.6	8.8	7.6	5.7	8.2	2.6	5.4	-0.1	0.0	0.1
Fishery	1.4	1.2	11.9	19.1	-2.0	-0.9	-1.7	-1.9	0.1	0.0	0.0
Mining	7.8	8.4	7.0	5.0	0.2	-1.5	-0.5	0.1	-0.1	-0.1	0.0
Industrial manufacturing	15.8	16.4	7.2	7.2	5.2	6.4	2.5	2.5	0.0	0.2	0.0
Electricity, gas and water	2.9	2.9	5.2	3.7	6.8	5.2	5.1	7.4	0.0	-0.1	0.1
Construction	8.0	6.9	4.2	3.2	9.8	10.8	5.3	3.9	-0.1	0.0	-0.2
Wholesale and retail trade, restaurants and hotels	10.7	9.7	6.7	6.7	8.5	8.1	5.0	5.2	-0.1	-0.1	0.0
Transport and communications	7.9	9.2	6.2	5.6	8.3	6.4	7.7	6.1	0.0	-0.1	-0.1
Business and financial services	12.6	15.0	6.2	8.5	6.6	7.7	3.9	5.1	0.5	0.3	0.3
Home ownership	7.2	5.8	2.2	2.6	2.4	3.2	2.6	3.4	0.0	0.0	0.0
Personal services	10.7	11.6	3.7	3.4	4.6	2.9	4.1	3.0	0.0	-0.1	-0.1
Public administration	3.6	4.3	2.1	2.2	3.1	3.6	3.6	3.5	0.0	0.0	0.0
Subtotal	93.2	95.0	5.7	5.8	5.6	5.6	3.7	3.8	0.2	0.1	0.2
Bank charges	-3.2	-3.4	6.8	10.7	6.8	15.6	3.8	8.5	-0.1	-0.3	-0.2
GDP at factor cost	90.0	91.6	5.7	5.6	5.6	5.2	3.7	3.6	0.0	-0.2	0.0
VAT	7.6	7.4	7.4	7.9	9.4	8.7	7.1	6.6	0.0	-0.1	-0.1
Import duties	2.5	1.0	19.0	24.1	23.3	26.9	10.9	11.5	-0.2	-0.3	-0.2
<b>GDP</b>	<b>100.0</b>	<b>100.0</b>	<b>6.2</b>	<b>6.0</b>	<b>6.3</b>	<b>5.7</b>	<b>4.2</b>	<b>4.0</b>	<b>-0.2</b>	<b>-0.6</b>	<b>-0.2</b>

Source: Central Bank of Chile.

<sup>2/</sup> For more details, see Central Bank of Chile (2006).

**Table IV.3**

Destination of GDP

	Participation 2003, percent		Annual rate of change, percent (*)				Differences in bases Impact, percentage points	
	Base 96	Base 03	2004 Base 96	Base 03	2005 Base 96	Base 03	2004	2005
Domestic demand	99.1	95.9	8.1	7.5	11.4	11.0	-0.9	-0.9
Gross fixed capital formation	23.6	20.1	11.7	9.9	24.7	21.9	-0.8	-1.6
Construction and other works	14.2	13.3	5.5	3.0	10.2	11.5	-0.4	0.0
Machinery and equipment	9.5	6.9	21.2	23.3	43.6	38.7	-0.4	-1.6
Total consumption	74.5	74.8	6.1	6.8	7.6	7.5	0.6	0.0
Personal consumption	63.6	62.8	6.1	7.0	8.2	7.9	0.5	-0.2
Durable goods	3.9	4.6	14.1	24.4	27.4	27.8	0.6	0.3
Non-durable goods	30.2	28.2	7.2	7.5	7.5	6.3	-0.1	-0.5
Services	29.4	29.9	3.8	3.9	6.0	5.9	0.0	0.0
Government consumption	10.9	12.0	6.1	6.1	4.5	5.3	0.1	0.1
Change in inventories	1.1	1.0	1.7	1.0	1.4	1.3	-0.7	0.7
Goods and services exports	33.3	36.5	11.8	11.7	6.1	3.5	0.3	-0.8
Goods and services imports (minus)	32.5	32.4	18.0	16.9	20.4	17.7	-0.4	-1.0
<b>GDP</b>	<b>100.0</b>	<b>100.0</b>	<b>6.2</b>	<b>6.0</b>	<b>6.3</b>	<b>5.7</b>	<b>-0.2</b>	<b>-0.6</b>

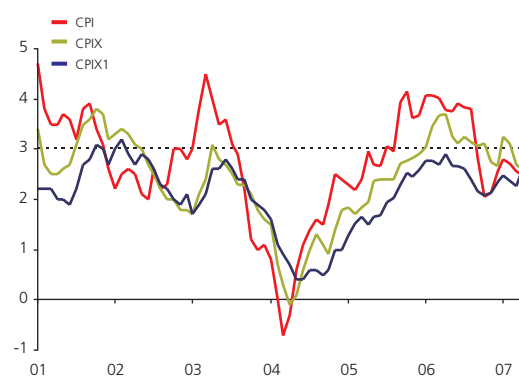
(\*) For the change in inventories variable, the inventories/GDP ratio was used.

Source: Central Bank of Chile.

## V. Recent trends of costs and inflation

**Figure V.1**

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

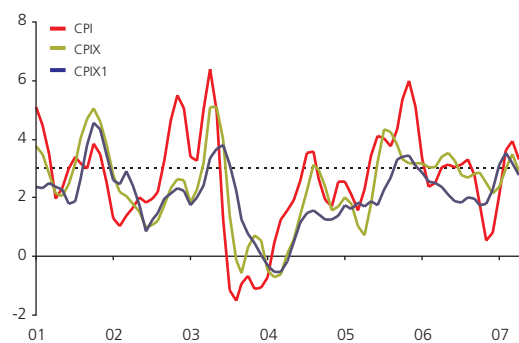


(\*) For definition, see Glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

**Figure V.2**

Expansion velocity, CPI, CPIX and CPIX1 (\*)  
(percent)



(\*) For definition, see Glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

This section examines recent trends affecting the main components of inflation and costs, identifying different sources of inflationary pressures under current conditions.

### Recent inflation trends

CPI inflation in the first four months of 2007 fell below 3%, but was still somewhat higher than projected in January. Most differences arose from shifts in specific prices due to regulatory changes, and particularly in corrections to *Plan Transantiago* fares, which were more than offset by supply shocks, associated primarily with the higher prices of fuels and some foods. CPIX1 inflation was also higher than forecast, reflecting this news. Alternative measures for inflation trends have suggested mixed trajectories, as labor costs remain well contained and inflation expectations stand at around 3%. Information to date suggests that annual inflation will fall in coming months, but less than projected in January. Thus, annual CPI inflation reached 2.5% in April and the CPIX first rose to over 3%, then fell to 2.6% in the same month. Annual CPIX1 inflation, meanwhile, rose somewhat higher than in late 2006: 2.6% as this *Report* closed (figure V.1).

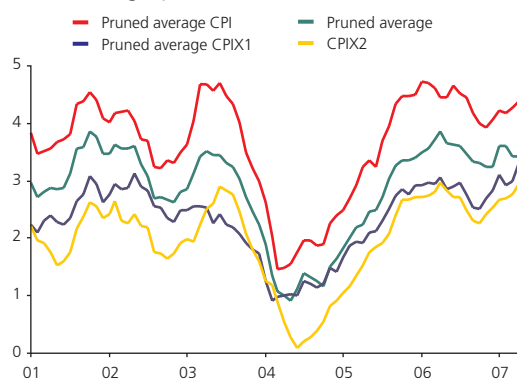
The instant velocity for CPIX1 inflation, measured using moving quarterly averages, revealed it sped up in the early months of 2007, reaching between 3% and 4%, before falling in March, and then rising again in April to under 3% annually, as in previous quarters (figure V.2).

Inflation trend indicators posted mixed trajectories since the close of the previous *Monetary Policy Report*. Indicators based on pruned averages showed results somewhat higher than in late 2006 (figure V.3), while core inflation measures based on selection criteria that depend on monitoring a centered and weighted moving average for inflation (box V.1) fell in recent months, but remain around 3% (figure V.4).

An increase in the gap between core goods and services inflation, apparent in late 2006, should be noted (box V.2). It reached around five percentage points in the first two months, then closed at 1.4 percentage points in April, with a larger rise in goods inflation. This, given the size of the difference, raises a question about its implications for future inflation. Statistical evidence reveals that core inflation for services, which grows at annual rates higher than core goods, persists longer. In this sense, maintaining a significant breach between these two CPI measures could mean that in future inflation will be higher, a risk that the Board considered in its monetary policy decisions during the first quarter. This risk, although still present, is under control and has faded

**Figure V.3**

Inflation trend indicators (\*)  
(annual change, percent)

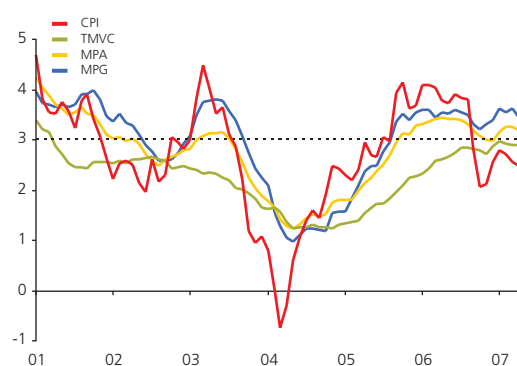


(\*) For definition, see Glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

**Figure V.4**

Core inflation indicators (\*)  
(annual change, percent)



(\*) For definition, see Glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

**Figure V.5**

Traded and non-traded CPI  
(annual change, percent)



Source: National Statistics Bureau.

somewhat as the gap closed in recent months. Annual inflation for tradables and non-tradables performed similarly (figure V.5).

The fuel price has been well above projections in the January *Monetary Policy Report*, and was one factor taking CPI inflation above projections. The price per barrel of crude oil rose to over US\$60 again, while the international gas price, which is the fuel weighing the most within the CPI, rose even more, almost 50% more than the price considered in the January *Monetary Policy Report*. The baseline scenario assumes that the oil price in 2007 and 2008 will be higher than projected in January.

An important factor in the first quarter was the change in prices associated with implementation of *Plan Transantiago*, which pushed down CPI inflation by almost half a percentage point. This effect was not included in the January baseline scenario. In future, there is no certainty about the magnitude of an additional charge for bus transfers, scheduled to come into effect in August, and of what portion of trips will be affected. Nor is there much clarity about how fares will be adjusted in future and how they will be influenced by the oil price. The baseline scenario assumes a 20-peso rise in fares from August onward, for transferring between buses. In 2008 the fare should be corrected according to the polynomial in use previously.

Changes in other prices included in the CPIX but not the CPIX1 (other regulated rates, indexed prices and some perishable foods), have not varied significantly from January forecasts.

In 2007, some foods included in both the CPI and CPIX1 have risen significantly. Their prices have been the main source of the rise in inflation over January projections in both indices. According to a range of sources, the rise in these prices mainly reflects higher international prices, especially for some grains (corn, wheat) and powdered milk. Annual changes in foods included in the CPI and CPIX1 reached around 4% in April, with a subgroup of foods included in the CPI (which depend directly or indirectly on grains and milk as major inputs)<sup>1/</sup> posted an annual rise of 5.7%, all well above figures in the last *Monetary Policy Report*. The annual change in CPIX1 prices not associated with grains or milk did not change significantly, remaining at around 3% (figure V.6).

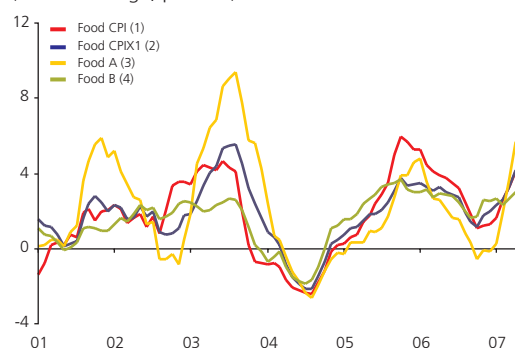
To date, the effect of these higher food prices on CPI inflation has been limited, but doubts persist about how this will evolve and possible second-round effects. It is hard to say how persistent the rise already apparent in international prices will be, and how much will pass through or has already passed through to domestic prices. On one hand, this rise in external prices reflects rising demand that in cases like this may be covered by changes in supply, which make prices return to their previous levels relatively quickly. Domestically, market competition and the belief that this is a temporary phenomenon could temporarily compress margins to absorb higher prices, thereby avoiding increases being much more than those experienced to date. Moreover, given the usual propagation of inflation, indirect effects,

<sup>1/</sup> These include bread, rice, flour, noodles and other pasta, pork, chicken and turkey, sausages and cold cuts, milk, yogurt, other dairy products, cheese, eggs, oil and sugar, altogether 8.92% of the total CPI basket.

**Figure V.6**

Food inflation

(annual change, percent)



(1) 27.2% of the total CPI basket.

(2) 18.2% of the total CPI basket (26.1% of the CPIX1 basket). Compared to (1), excludes fresh fruit and vegetables, fresh fish and meat.

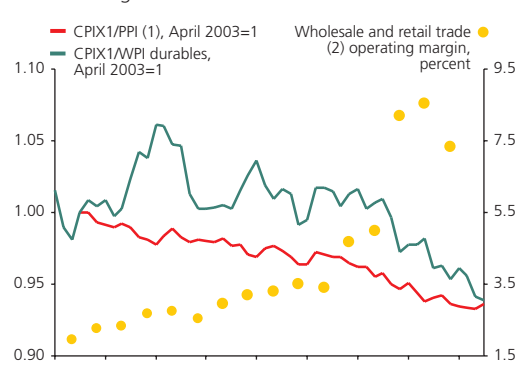
(3) Includes: bread, rice, flour, noodles and other pasta, pork, chicken and turkey, sausages and cold cuts, milk, yogurt, other milk products, cheese, eggs, oil and sugar. 8.9% of CPI.

(4) 11.7% of the total CPI basket (16.8% of CPIX1 basket). Compared to (2), excludes articles in (3) relevant to the CPIX1.

Sources: Central Bank of Chile and National Statistics Bureau.

**Figure V.7**

Indirect margin measures



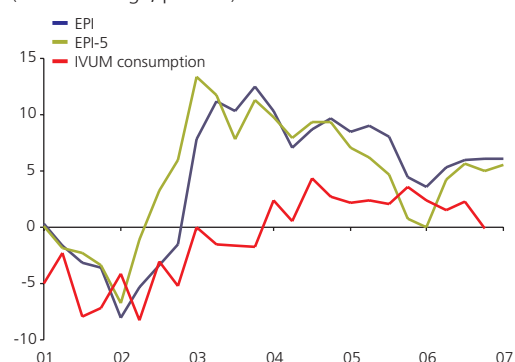
(1) A sample of products common to the CPIX1 and PPI (46% of CPIX1).

(2) Operating margin minus administrative expenses and series on series.

Sources: Central Bank of Chile, National Statistics Bureau and Superintendency of Securities and Insurance (*Fecu*).**Figure V.8**

External inflation in dollars

(annual change, percent)



Source: Central Bank of Chile.

on wages for example, could influence the size of this impact. The baseline scenario assumes that international grain prices will fall more slowly than in the past, due to demand from biofuels.

For now, an analysis of the price of bread, eggs and pasta and changes in the relevant external prices<sup>2/</sup> suggest that about 20% of the rise in the international price of each cereal will pass through to the domestic price over three to four months. Thus, a 10% shock from international cereal prices (corn and wheat at the same time) would affect CPI inflation by 0.06 and CPIX1 by 0.11 percentage points.

## Cost pressures and margins

### Wholesale and producer prices

The Producer Price Index (PPI) has fallen below last December's level. The annual change through April was 8.0%, well down from 14.1% at the end of 2006. Part of this change reflects the high basis for comparison given the copper price during the first half of 2006. In fact, the annual change in the mining and quarries category of the PPI was 22.8%, well below the 52.8% posted at the end of 2006. PPI prices included in the CPIX1, meanwhile, showed annual rates of about 3.5% to 4% in the past six months.

The Wholesale Price Index (WPI) followed a path similar to the PPI, although it bounced around, reaching 4.5% annually in April, down from December 2006. As mentioned above, these shifts do not pass directly through to the CPI, both because WPI or PPI products aren't necessarily in the CPI and because of stabilization funds, margins and fixed taxes on consumer prices.

### Sales margins

Sales margins obtained from *Fecu* (company) reports rose slightly in the fourth quarter of 2006, ending up higher than at the end of 2005. The wholesale and retail trade sector, in contrast, fell slightly in the last quarter of 2006, although it did remain higher than in previous years. Indirect measures for margins derived from different aggregates of the CPI, WPI and PPI have fallen slightly since the January *Monetary Policy Report*, in line with past years' averages. Altogether, different measures for sales margin do not suggest inflationary pressures arising from lags in cost pressures (figure V.7).

### Imported inflation

Aside from the prices of grains and oil derivatives, no significant changes in cost pressures from imported inflation are apparent. Nominally, the peso has fallen 2% against the dollar since January, considering the average for the two weeks prior to the closing date for this *Report* and last January's. Nonetheless, in the early days of May the peso appreciated significantly, pushing it up to

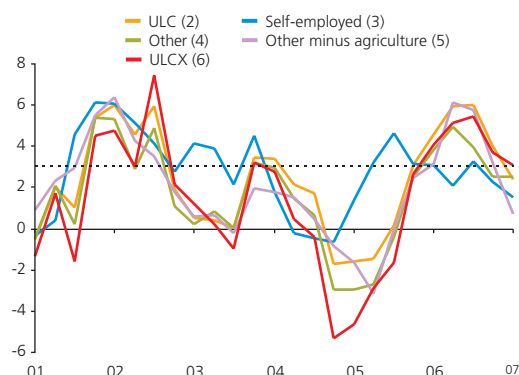
<sup>2/</sup> In the case of bread, the international reference price is the price of Argentine bread wheat and Soft Red Winter N°2 wheat. Durum wheat is relevant for pastas, while the price for Yellow No. 2 corn is used in the case of eggs.



**Figure V.9**

Unit labor costs (1)

(annual change, percent)



(1) GDP data first quarter includes figures in line with the average of published Imacecs.

(2) Total nominal LC, actual hours worked in the formal sector, formal sector employment and total GDP.

(3) Analogous to total, replaces formal employment with national employment.

(4) Includes other LC, other formal sector employment, other GDP (minus EGW, mining and fishery) and actual hours of work in the formal sector.

(5) Analogous to other, subtracting agricultural sector from other formal sector employment and other GDP.

(6) For definition, see Glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

levels similar to the minimums in 2006. Measured against a currency basket, however, the peso has remained relatively stable, since the US dollar has depreciated against most relevant currencies. The real exchange rate (RER) has not changed much either. The annual increase in the import unit value index for consumer goods has fallen to below 2005 levels (figure V.8). The annual change in the EPI and the EPI-5 has risen steadily since January, but remains on average similar to the closing date for the last *Report*. This reflects dollar depreciation on international markets and rising inflation in some countries, among them the US and some in the euro area.

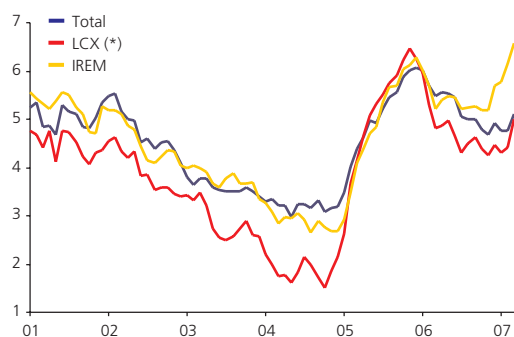
## Wages and unit labor costs

Changes in unit labor costs (ULC) in 2007 reveal limited cost pressures, rising by less than 3% annually (figure V.9). Moreover, their pace remains negative. Productivity has been the main factor behind this trend. Nominal annual wages measured using the cost of labor (LCI) measure have risen slightly in 2007, to 5.1% as of March. In contrast, the hourly wage index (HWI) has risen significantly on an annual basis (figure V.10). This difference primarily reflects methodological differences (box V.3). Other wage indicators, such as those from AChS and average taxable income of AFP (private pension fund managers) affiliates posted annual changes similar to those in the last *Monetary Policy Report*: 6% and 5%, respectively.

**Figure V.10**

Nominal wages

(annual change, percent)



(\*) For definition, see Glossary.

Sources: Central Bank of Chile and National Statistics Bureau.



## Box V.1: New alternative measures for core inflation in Chile

The Central Bank of Chile's inflation target is based on headline inflation, measured by the CPI. Often, however, the CPI is affected by temporary shocks that make interpreting the outlook for inflation difficult. This makes core inflation measures useful for both studying trends and designing and implementing monetary policy, to constantly improve it. This box presents three new measures we have added to those introduced in the May 2000 and September 2003 *Monetary Policy Reports*.<sup>3/</sup>

These new measures seek to produce timely information on inflation's behavior, eliminating its noisiest components using two different strategies. In the first place, pruned averages are constructed by excluding items, based on monthly changes in seasonally adjusted prices, making it possible for this exclusion to vary over time (Bryan and Cecchetti, 1994).<sup>4/</sup> Two types of pruned averages are calculated, one excluding subgroups (MPG) and the other eliminating items (MPA) from the CPI posting lesser/greater monthly growth.<sup>5/</sup> Secondly, a measure is calculated that excludes the most volatile components (Pedersen, 2006). To calculate, items are organized by variance in changes during the six previous months.<sup>6/</sup> This measure is called the TMVC (*Trim of Most Volatile Components*).<sup>7/</sup>

To evaluate core inflation, their distance<sup>8/</sup> from the inflation trend is measured, obtained using a 25-month Henderson<sup>9/</sup> filter to monthly CPI inflation calculated using seasonally adjusted data from January 1999 to December 2005. The three new measures perform better, at least in this dimension, than the usual ones (CPIX, CPIX1, CPIX2 and MP\_CPI).<sup>10/</sup>

In each case, the corresponding prune is chosen by minimizing the distance between the core inflation and trend measures. The resulting prunes are 40% on the left side and 20% on the right, in the case of MPG, 42.5% and 27.5% in the case of MPA, and 67% for TMVC. In other words, the MPG includes 40% of CPI items, the MPA 30% and the TMVC 33%. Formal model equality tests indicate that none of the current measures is better, statistically speaking, than the MPG, the MPA or the TMVC. Furthermore, the three alternative measures are biasfree for monthly CPI inflation.

Annual change in the MPA is smaller than for the MPG because the former excludes 7.5% more of the components posting the largest increases. In some periods, however, the MPG grows less than the MPA because it excludes subgroups of items. In general, the TMVC grows less than the other two,

indicating that the most volatile items are those that usually post the largest annual changes (figure V.4).

From 2001 to 2002, while annual CPI inflation was dropping, both the MPG and the MPA fell too, whereas the TMVC rose slightly between September 2001 and June 2002. This suggested that the lower CPI inflation was temporary, since the trend posted by the least volatile prices was headed in the opposite direction. Then, as the CPI's falling trend reversed toward the end of 2002, the TMVC started to fall, pointing to the temporary nature of this phenomenon. The significant decline in the CPI from March 2003 to March 2004, which was more persistent than previous drops, appeared in all three measures. From April 2004 to August 2006 the three coincided again with the CPI. Since late 2006, the three measures posted larger annual rates of change, revealing that core inflation had picked up. More recently, the drop in CPI inflation is somewhat apparent in the new alternative measures for core inflation, which have been rather more stable.

<sup>3/</sup> For more details, see Córdova et al. (2007b).

<sup>4/</sup> Unlike the CPIX, CPIX1 and CPIX2, which exclude items determined a priori from the total CPI basket (see Glossary).

<sup>5/</sup> To calculate measures, subgroups/items are lined up according to their monthly change. If  $w_{j,t}$  is the weighting of the  $j$ -th subgroup/item as ordered, and the pruned average is calculated as:

$$\pi_t^* = \frac{1}{1-(\alpha+\beta)} \sum_{j \in J_{\alpha,\beta}} w_{(j),t} i_{(j),t},$$

where  $\alpha$  is the percentage pruned from the left side (lowest rates of change),  $\beta$  is the amount pruned from the right side (highest rates of change),  $i_{(j),t}$  is the unweighted monthly incidence of the  $j$ -th subgroup/item as ranked and  $J_{\alpha,\beta} = \{j: \alpha < \sum_j w_{j,t} < \beta\}$ , is the set of weights of the remaining components after exclusion.

<sup>6/</sup> The optimum number of months is determined using the root mean square error (RMSE).

<sup>7/</sup> If  $w_{j,t}$  is the weight for the  $j$ -th item already ranked, the TMVC is calculated as:

$$\pi_t^* = \frac{1}{1-\beta} \sum_{j \in J_{\beta}} w_{(j),t} i_{(j),t},$$

where  $\beta$  is the percentage pruned and  $J_{\beta} = \{j: \sum_j w_{j,t} < \beta\}$  is the set of weights for non-excluded components.

<sup>8/</sup> The meter used to measure this distance is based on the RMSE.

<sup>9/</sup> This filter is symmetrical so the trend depends on both lags and leads for monthly inflation, and therefore cannot be obtained in real time.

<sup>10/</sup> The CPIX and the CPIX1 are described in box I.1, *Monetary Policy Report*, May 2000; the CPIX2 and the MP\_CPI are discussed in box V.1, *Monetary Policy Report*, September 2003, and in more detail in Grünwald and Orellana (2004).

## Box V.2: Goods and services CPI

As per the normal practice of other central banks, Chile's has constructed a new price aggregate that distinguishes between goods and services.<sup>11</sup> This is done using CPI baskets from April 1989 and December 1998, regrouping the products included in one of the two categories (goods or services). After sorting these items, indices are developed for each basket, and both goods and services are weighted according to their impact on the total CPI basket for the respective base year. Finally, the series are spliced using December 1998 as the base for both (Dec. 98 = 100). Thus, a CPI is obtained for goods (CPIG), which covers 55.4% of the total CPI basket and a CPI for services (CPIS), which includes the rest (44.6%), according to weights for the December 1998 basket.

The distinction between goods and services is moreover a good proxy for the tradable and non-tradable items typically published by the INE (figure V.5). If the items in the different baskets are compared, it is evident that most appear in both (table V.1).

**Table V.1**

Products by basket  
(CPI basket: December 1998)

	Goods	Services	Total
Tradables	333	4	337
Non-tradables	45	101	146
Total	378	105	483

Sources: Central Bank of Chile and National Statistics Bureau.

Using the CPIG a series is constructed that excludes fuels, fresh fruit and vegetables, and yield the core CPI for goods, CPIGX, which covers 92.5% of the CPIG. The same operation is performed for the services CPI, with the items excluded being basic utilities and bus and subway fares. This yields the CPISX, which covers 79.7% of the CPIS (figure V.11).

**Figure V.11**

Total goods and services and core inflation  
(annual change, percent)



Sources: Central Bank of Chile and National Statistics Bureau.

Econometric exercises reveal that historically the CPISX has been more persistent than the CPIGX.<sup>12</sup> The CPISX, meanwhile, correlates more with the output gap and wage changes, while the CPIGX is more sensitive to the exchange rate.<sup>13</sup> This analysis also reveals that the discrepancies between the two, as we have seen recently, contain information about the future behavior of inflation, although its effects are moderate.

<sup>11</sup>/ For more details, see Córdova et al. (2007a).

<sup>12</sup>/ To analyze the persistence of these series, an AR model was specified for each variable (orders 1 to 4) over the four-quarter change in the respective price index, also incorporating a moving average component of the fourth order.

<sup>13</sup>/ These results were obtained by estimating Phillips curves similar to those used regularly for the CPIX1 (Central Bank, 2003).

## Box V.3: Hourly wage index (HWI) and labor cost (LCI) wage statistics

Normally wages are considered responsible for a significant portion of pressures on costs and therefore short- and medium-term inflation, with monetary factors explaining its long-term behavior. Wages' importance lies in the fact that a significant percentage of business costs is associated with payments to the labor factor. In this sense, an increase in wages without a similar rise in labor productivity can mean companies will pass higher costs on to prices. Because of this, monitoring wages is essential to central banks' macroeconomic analysis.

Since 1959, the INE publishes statistics on wages, in the form of monthly indices for wages received by an employee. Starting in 1993, an integrated system provides monthly indicators and changes in the two complementary variables: workers' wages and labor costs to employers. The last time the INE updated its index system was in January 2006.<sup>14/</sup>

There are two major differences between wage indices and labor cost indices: the components making up each index and their weights. Nine components make up the HWI and 13 the LCI, with eight common to both (for example, the base wage) and six not shared, such as payments for overtime or training expenditures, which are included in costs but not in wages.

On the weights, the LCI reflects average change in labor costs, weighted for their share of total costs. The HWI, in contrast, averages hourly wages, weighted by the number of normal working hours.<sup>15/</sup> Thus, the HWI assigns more weight to changes in the wages of employees working longer hours (in terms of their importance to the total payroll).<sup>16/</sup>

Since April 2006, there has been a discrepancy between changes in the annual growth of the HWI versus the LCI,

since the first has risen significantly more than the second. To investigate the source of this divergence, the microdata used to calculate each index was analyzed. Results suggested that the main cause behind the difference is greater growth in wages to employees working longer hours, which weigh less in total costs.

These led to the conclusion that virtually the entire discrepancy reflects the weights used to calculate each index and not a different increase in the components that they don't share.<sup>17/</sup> The latter would be more worrisome in terms of possible inflationary pressures. In principle, therefore, and beyond the consequences of the fact that in the latest data in March both indicators rose, the divergence in their growth rates does not pose an obvious risk to inflation.

<sup>14/</sup> This kind of correction is done every few years to update the information from censuses of establishments. For more details on this method, see INE (2007). It is beyond the scope of this box to analyze the quality and representativeness of these indices.

<sup>15/</sup> Formally speaking, these indices are calculated as follows:

$$CMO_t = \sum_{eg} \left( \frac{\bar{C}_{t,eg}}{\bar{C}_{0,eg}} \right) \left( \frac{\bar{C}_{0,eg} * H_{0,eg}}{\sum_{eg} \bar{C}_{0,eg} * H_{0,eg}} \right); \quad IREM_t = \sum_{eg} \left( \frac{\bar{R}_{t,eg}}{\bar{R}_{0,eg}} \right) \left( \frac{HO_{0,eg}}{\sum_{eg} HO_{0,eg}} \right)$$

where, the second term of each indicator represents the weights,  $\bar{C}_{t,eg}$  is the average hourly labor cost paid in group  $g$  of companies in time  $t$ .  $H_{0,eg}$  and  $HO_{0,eg}$  indicate total hours and total ordinary hours paid to workers in group  $g$  in company  $e$  in the base month, January 2006.  $\bar{R}_{t,eg}$  is the average hourly wage for normal working hours by group  $g$  in company  $e$  and time  $t$ .

<sup>16/</sup> Employees are grouped by functions within the firm, such as: senior management, professionals, technicians, office workers, personal service workers, sales people, officials, operators and unskilled workers.

<sup>17/</sup> Specifically, the reduction in overtime cannot be treated as the main cause behind this discrepancy.



## VI. Inflation scenarios

This section presents the Board's evaluation of Chile's economic prospects for the next two years, including the analysis and the decisions made during the monetary policy meeting of 10 May 2007. It provides projections for the most likely trajectories of inflation and growth, and points out the most relevant risks. These projections are based on the working assumption that in coming quarters the next few quarters, the monetary policy interest MPR will remain at a level similar to the one that can be inferred from financial asset prices prevailing in the two weeks prior to this *Report's* statistical closing. Aside from this assumption, projections depend on a set of events that make up the baseline or most likely scenario, so this chapter also presents the Board's analysis of the balance of risks to both output and inflation.

### External scenario

---

The external scenario relevant to the Chilean economy has improved somewhat over January's forecasts. Projected world growth for this year and next is greater than it was in January, especially for Chile's main trading partners. Moreover, relevant financial conditions abroad have improved, despite turbulence in late February. Moreover, commodity prices have risen again, so the terms of trade are projected to fall slightly in 2007, significantly less than forecast in January. Altogether, this suggests a stronger stimulus from abroad than foreseen early in the year.

Nonetheless, several risks could configure alternative scenarios. First, as the US economy has slowed, other zones have grown stronger, producing an outlook of high world growth. Despite this, the US's slowdown could still last longer or deepen further than expected, with repercussions in other regions. This is especially associated with doubts about how the real estate adjustment will finally pan out, how strong private consumption will remain, and weakness apparent in investment in machinery and equipment. On top of this, there is a chance that financial conditions relevant to emerging markets may turn out less favorably than forecast in the baseline scenario. This could happen, for example, if there's a sudden change in investors' appetite for risk, as a result of a sudden correction to some financial market, causing a significant rise in sovereign premiums. At the same time, inflationary pressures could rise if developed economies push interest rates higher than expected. Global imbalances also remain present and if corrected in a disorderly manner, they may have negative consequences on financial markets.

The baseline scenario assumes that commodity prices, particularly for copper and gasoline, will fall from current levels. However, there is still a risk that

prices will not follow the path assumed. Implications for inflation and output are varied, and dependent on the impact these alternative scenarios may have on variables such as the exchange rate and domestic demand. The Board estimates that the impact of a higher copper price is limited, provided that, as has been the case to date today, the operation of the fiscal rule allows isolating a large part of its effect on domestic demand and the exchange rate. The Board also believes that the price of oil, especially gasoline, which has been very different from forecasts, should have a limited effect on medium-term inflation, although in the short term it could be a major source of divergence from the baseline scenario. Something similar could happen with external prices for some foods.

## Aggregate demand

---

The baseline scenario assumes that domestic demand will grow this year at an annual rate somewhat higher than in 2006, with private consumption and investment rising at higher rates too. Goods exports will also grow more than in 2006, to become one of the main sources of higher GDP growth projected for this year over 2006.

Private consumption will rise in 2007 at an annual rate of around 7%. Compared to 2006, this projection assigns more weight to non-durable and less to durable consumption. This is likely given a significant accumulation of durable goods stocks in recent years. This growth in private consumption is somewhat higher than projected in January's *Monetary Policy Report*, and continues to be based on favorable financial conditions, lower unemployment and strong occupation rates, combined with recently disclosed first-quarter data. As a reference, in the baseline scenario national private disposable income deflated by the CPI will rise almost 2 percentage points more than total national income.<sup>1/</sup> The Board believes there is significant risk that these same factors could push consumption higher than forecast, and that this could be influencing the strong figures for wholesale and retail trade in recent months.

Gross fixed capital formation is expected to grow more this year than last: by about 8% annually. This is based on favorable financial conditions, high business profits, and good prospects for world and local growth. Trends in capital goods imports in the past two quarters and the positive outlook for engineering works apparent in the list prepared by the Capital Goods Corporation in December 2006 and confirmed in March, also back up this projection. Altogether, the Board has projected an investment to GDP ratio, measured using 2003 prices, that should reach somewhat more than 24%.

The baseline scenario also assumes that fiscal stimulus, which is greater than in 2006, will be another factor behind higher growth projected for this year. Moreover, it includes the methodological assumption that in 2008 fiscal policy will continue to be guided by the structural surplus rule, using a reference value for the copper price that in real terms is similar to the one

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<sup>1/</sup> For more details on definitions of national income, see box III.1, *Monetary Policy Report*, September 2006, pg. 32.

implicit in the 2007 budget. This is all consistent with the evaluation that current high prices will not last. Using a significantly higher reference price for copper, could bring major changes in the baseline scenario, affecting inflation and the RER, as well as for the possible path of the MPR.

For 2007, the baseline scenario assumes a rise in export volumes over 2006. This is based on an increase in mining and manufacturing shipments, largely associated with the start-up of production capacity expansion for some commodities, especially manufacturing, wood pulp and mining. On export values, and in contrast with the January forecast, in 2007 shipments abroad should be higher than in 2006. This is because this *Report's* baseline scenario assumes a higher average price for copper and other export products. For imports, the baseline scenario assumes volumes will rise slightly less than in 2006. Capital goods imports will rise in line with expectations for investment, while consumer goods imports will rise less than the aggregate, in line with the assumption that the change in origin noted in 2006 will not continue. Overall, total imports by value will be higher than in 2006, with prices up from January forecasts, in line with the higher oil price. The 2007 trade balance will post a surplus of some US\$22 billion. At the same time, the current account of the balance of payments will continue to post a surplus, approaching 3.5% of GDP this year. This contrasts with the virtual balance projected in January. Measured in trend prices, the 2007 current account will post a deficit of somewhat less than 4% of GDP.<sup>2/</sup>

## Economic activity and gaps

---

The Board estimates that trend GDP growth will remain around 5% for 2007-2009. This projection considers the revision to the National Accounts due to the change in the Benchmark Compilation from base 1996 to base 2003, and the dynamics of capital accumulation. This suggests that the still existing gap between actual and trend output should close in the course of the next several quarters. By its very nature of unobservable variable, the true size of the gap is still uncertain. In these conditions, the risk remains that idle capacity may be less than estimated, or that it will be picked up more quickly, for example due to greater GDP growth.

The labor market remained strong, with mostly formal sector employment picking up again in the first quarter and a relatively stable, seasonally adjusted unemployment rate since September 2006. This remained low compared to historic averages and the range of estimates available for the natural unemployment rate, NAIRU. This evaluation of labor market gaps, formerly very clear in the data from the National Statistics Bureau, is now also backed by information from Universidad de Chile for Greater Santiago. Looking ahead, as idle capacity is absorbed, employment should rise more slowly.

The baseline scenario assumes that energy costs will not rise again significantly this year or next. There is some risk in this sense, however. On one hand,

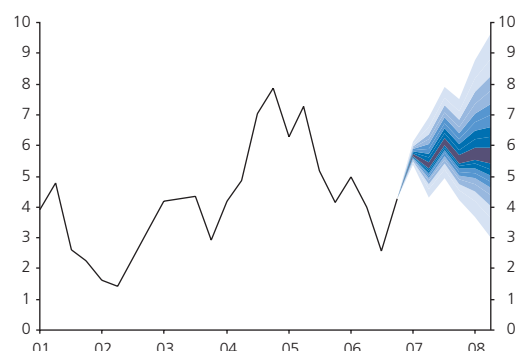
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<sup>2/</sup> This calculation assumes a long-term copper price of US\$1.10 per pound. If the price reaches US\$1.21 per pound, the deficit compared to trend prices will be 0.5 percentage points of the lower GDP.



**Figure VI.1**

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



(\*) The figure shows the confidence interval for the baseline projection for the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% are ranged around the baseline scenario. These intervals summarize the Board's risk assessment for future economic growth. The baseline scenario is constructed using the methodological assumption that in coming quarters, the MPR will reach a level similar to that deduced from financial asset prices in the two weeks prior to the closing date for statistics included in this Report.

Source: Central Bank of Chile.

in recent months episodes of natural gas cuts have intensified in terms of both duration and magnitude. Although their recent effect on aggregate output has been small, the possibility of a larger than assumed impact must not be overlooked. On the other hand, in recent years electric power, the country's main energy source, has become significantly more expensive, and the possibility of higher than forecast increases cannot be ruled out. These would affect the turnaround expected in economic activity and significantly influence inflation and households' disposable income. The final state of hydrological conditions will be determinant in this sense.

The baseline scenario also assumes that some expansion in productive capacity for commodities will contribute to more growth. Part of this is already apparent in manufacturing and mining output during the first quarter.

Given all the above, the baseline scenario assumes that in 2007, GDP will grow in the range of 5% to 6%. This will be more than last year and estimated trend growth. The Board assumes that given possible alternative scenarios, the balance of risks to output is biased upward (figure VI.1). The economic growth scenario is based on favorable domestic financial and external conditions abroad and stronger fiscal impulse, with somewhat faster growth in domestic demand and more optimism about exports. In 2008, the Board believes output will again grow at an annual rate above trend.

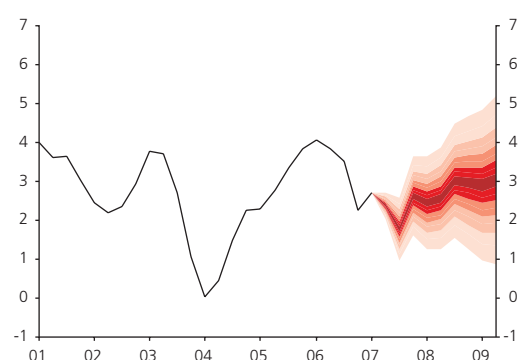
## Cost pressures

Aside from the price of oil derivatives and some foods, no significant shifts are apparent in cost pressures linked to imported inflation. Taking their average for the two weeks prior to this Report's statistical closing, the peso/dollar parity was almost 2% lower than during the same period in January, despite significant peso appreciation in early May. It has nonetheless fallen back to levels similar to the minimums posted in 2006. Measured against a currency basket, however, during 2007 the peso has been more stable, reflecting US dollar depreciation against most relevant currencies. In fact, the multilateral real exchange rate (RER) has posted no major shifts either. Moreover, its average value during the two weeks prior to this Report's closing is consistent with its long-term fundamentals. For imported inflation in pesos, an early estimate suggests that as long as the multilateral exchange rate remains virtually unchanged, the decline in the nominal exchange rate will offset international inflation in dollars and primarily reflect the depreciation of the US currency.

The baseline scenario is built on the methodological assumption that, in the long-term the RER will not move far from its value in the two weeks prior to the statistical closing of this Report. However, considering the US dollar's weakness in international markets and the typical volatility of the nominal exchange rate, alternative scenarios for this price cannot be ruled out over the projection horizon. For reference sake, provided the nominal exchange rate remains where it was after reports on economic activity and CPI in the past month, and assuming there are no significant changes in imported inflation in dollars, inflation one year ahead will be 0.4 percentage point lower than projected in the baseline scenario. This all assumes that the passthrough coefficient from the exchange rate to inflation will remain near its historic values.

**Figure VI.2**

CPI inflation projection (\*)  
(annual change, percent)

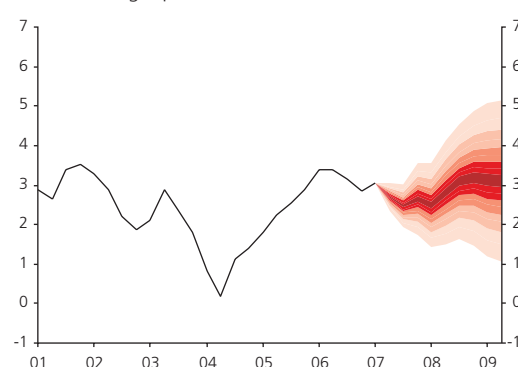


(\*) The figure shows the confidence interval for the baseline projection for the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% are ranged around the baseline scenario. These intervals summarize the Board's risk assessment for future inflation. The baseline scenario is constructed using the methodological assumption that in coming quarters, the MPR will reach a level similar to that deduced from financial asset prices in the two weeks prior to the closing date for statistics included in this Report.

Source: Central Bank of Chile.

**Figure VI.3**

CPIX inflation projection (\*)  
(annual change, percent)



(\*) The figure shows the confidence interval for the baseline projection for the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% are ranged around the baseline scenario. These intervals summarize the Board's risk assessment for future inflation. The baseline scenario is constructed using the methodological assumption that in coming quarters, the MPR will reach a level similar to that deduced from financial asset prices in the two weeks prior to the closing date for statistics included in this Report.

Source: Central Bank of Chile.

Inflationary pressures from labor costs also look under control, given that unit labor costs continue to rise at moderate annual rates and that the expected acceleration has not fully materialized. Aside from some discrepancies in measures arising from methodological differences, annual growth in salaries promises to rise slightly in 2007, a trend that became more evident in recent data. The baseline scenario assumes that annual growth in labor costs will gradually converge on levels consistent with the 3% inflation target. However, this could take longer, as has been the tendency in recent quarters. The gap between core goods and service inflation should also be noted. Given the higher level and persistence of service inflation, this could drive inflation up rather more quickly than projected. This risk, although still present, is nonetheless under control and has faded as this difference has declined in recent months.

The baseline scenario assumes that in the next few months domestic food prices will not change significantly from their levels during the first four months. Over a longer term, they are expected to follow a similar path as relevant external prices, which should fall slightly. Although for now their impact on headline inflation is under control, there is some uncertainty around how persistent their rise will be and any second-round effects they may cause. On one hand, the rise in external prices to a large degree reflects rising demand, which could increase in the near future. However, in cases such as this, changes in supply can push prices back to previous levels, over a limited period. Domestically, market competition and a sense that this effect will be transitory could temporarily compress margins to accommodate higher prices, without causing price increases much larger than those already experienced.

As mentioned, the baseline scenario assumes the higher oil price will be persistent. The usual uncertainty about the price has been compounded by current doubts about the gasoline price's evolution, given that refinery margins are very high and how soon they will return to historic averages remains unclear. Although their effect on medium-term inflation is under control, in the short term this could cause significant differences from the baseline scenario. Moreover, under current conditions this involves more uncertainty, given doubts about the operation of the fuel price stabilization fund, which initially is slated to end in July, and how changes in fuel prices will affect bus fares in the new system.

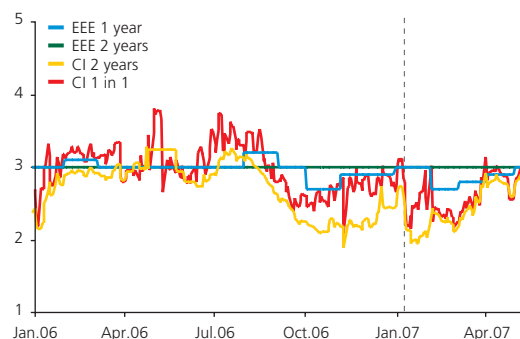
## Inflation scenario

The Board estimates that annual CPIX1 inflation will continue to rise, approaching 3% during the third quarter of this year. Largely due to the basis for comparison, arising from high oil prices in the third quarter of 2006 and the negative incidence of the tariff change associated with *Plan Transantiago* in early 2007, CPI inflation should approach 2% during the second and third quarters. In any case, the projected decline in annual CPI inflation this year will be less than anticipated in January, because of the impact of the higher price projected for oil and higher actual inflation already apparent in food prices.

Later on, annual CPI inflation will move closer to 3%, where it should remain in 2008. Thus, for the end of the projection horizon of around two years, CPI inflation should stand at 3% and CPIX inflation at 3.1% (figures VI.2 and VI.3). Private sector expectations for inflation are similar to projections

**Figure VI.4**

Inflation expectations: survey and inflation compensation (percent)



Source: Central Bank of Chile.

in this scenario. For December of this year, the May expectations survey foresees CPI inflation of around 2.9%. Two years ahead, expectations suggest inflation will line up with the Board's baseline scenario, that is, well anchored in the 3% annual target (figure VI.4).

Medium-term CPI inflation projected in this *Report* does not differ substantially from the January forecast. CPI inflation's move toward the target is based on expectations that are anchored around the target, the gradual closure of output gaps, unit labor costs growing in line with the inflation target, and a RER that will remain around current values. Taking into account different contingencies, the Board considers risks to inflation are balanced.

The Board reaffirms its commitment to conduct monetary policy to ensure that projected inflation remains at 3% over the policy horizon. Future changes to the MPR to achieve this objective will depend on incoming information and its implications for projected inflation, projections, changes in the risks already identified and others that may arise.

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## Glossary

**Commodity exporting economies:** Australia, Canada and New Zealand.

**CPIGX:** Goods price index, minus fuels and fresh fruit and vegetables, leaving 92.5% of the total goods basket.

**CPISX:** Service price index excluding utilities and transit fares, leaving 79.7% of the total service basket.

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

**CPIX1:** CPIX minus fresh fish and meat, regulated utility rates, indexed prices and financial services, leaving 70% of the total basket.

**CPIX2:** CPIX1 minus medical products, leaving 60% of CPI basket.

**EGW:** Electricity, Gas and Water.

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

**EPI:** External Price Index, external prices relevant to Chile. External inflation is calculated using wholesale price indices (WPI) expressed in US dollars (or the CPI, where the WPI is not available), for countries included in the multilateral exchange rate (MER) index. Both the WPI and exchange rates are included in the form of monthly changes, weighted according to their share of trade with Chile, minus oil and copper.

**EPI-5:** EPI using prices from: Canada, the US, Japan, the United Kingdom and the euro area.

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

**GDP, NR:** Gross Domestic Product, Natural resources: EGW, mining and fishery.

**GDP, other:** Includes the following sectors: agriculture-forestry, industrial manufacturing, construction, trade, transportation and communications, financial and business services, home ownership, personal services and public administration.

**HWI:** Hourly wage index

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

**LCI:** Labor cost index.

**LCX:** Labor costs minus personal, social and community services, EGW and mining.

**M1:** Currency plus non-financial private sector checking accounts net of float and demand deposits other than checking accounts and demand savings deposits.

**M2:** M1 plus time deposits, time savings deposits, mutual funds with investment in debt instruments lasting up to one year and deposits in savings and credit cooperatives, minus time deposits belonging to these mutual funds and savings and credit cooperatives.

**M3:** M2 plus deposits in foreign currency, Central Bank of Chile documents, Treasury bonds, mortgage bills, bills of trade, company bonds, quotas of other mutual funds and AFPs (voluntary saving), minus those where mutual funds and AFPs have invested their M3 assets.

**MER:** The multilateral exchange rate. This represents a measure for the nominal value of the peso against a broad basket of currencies with the same weightings as the RER. For 2006, ordered by their weight: Germany, Argentina, Belgium, Brazil, Canada, China, Colombia, South Korea,

Spain, United States, Finland, France, The Netherlands, Italy, Japan, Mexico, Peru, United Kingdom, Sweden, Taiwan and Venezuela.

**MER-5:** The multilateral exchange rate for: Canada, US, Japan, UK and euro area.

**MER-X:** MER minus US dollar.

**MPA:** Pruned average CPI, excluding items posting the largest and smallest monthly changes.

**MPG:** Pruned average CPI, excluding subgroups posting the largest and smallest monthly changes.

**Oil exporting economies:** Saudi Arabia, United Arab Emirates, Kuwait, Norway, Russia and Venezuela.

**Pruned averages for the CPI, CPIX and CPIX1:** Core inflation indicators that eliminate the extremes in the changes weighted within inflation measures. The rest are reweighted and the respective index is recalculated.

**RER:** Real exchange rate. This represents a measure for the real value of the peso against a basket of currencies. It is constructed using MER countries.

**RER-5:** RER, using the MER-5 currency basket.

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

**TMVC:** Trim of Most Volatile components, trimmed average CPI, minus the most volatile components.

**Trading partners' growth:** Growth of Chile's main trading partners, weighted according to their share of total 2006 exports. The countries included receive 94% of total exports.

**UF:** CPI-indexed unit of account of widespread use in Chile. It is the equivalent to approximately 35 US dollars.

**ULCX:** The unit labor cost (ULC) considering only formal sector employment, and wages and output, minus sectors associated with natural resources.

**World growth:** Regional growth weighted by share of world GDP at PPP, published by the IMF in World Economic Outlook (WEO, April 2007). World growth is calculated for 2005-2008 using a sample of countries representing 87% of world GDP. This assumes 6.0% growth for the remaining 13%.

**World growth at market exchange rate:** Growth measured using the market exchange rate. Each country is weighted according to its dollar denominated GDP, published in the IMF's World Economic Outlook.

## Abbreviations

**BCP:** Central Bank bonds in pesos

**BCU:** Central Bank bonds in UFs

**CCNN:** National Accounts

**CdeR:** Compilación de referencia (Benchmark compilation)

**MPR:** Monetary policy rate

**PDBC:** Central Bank discountable promissory note



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