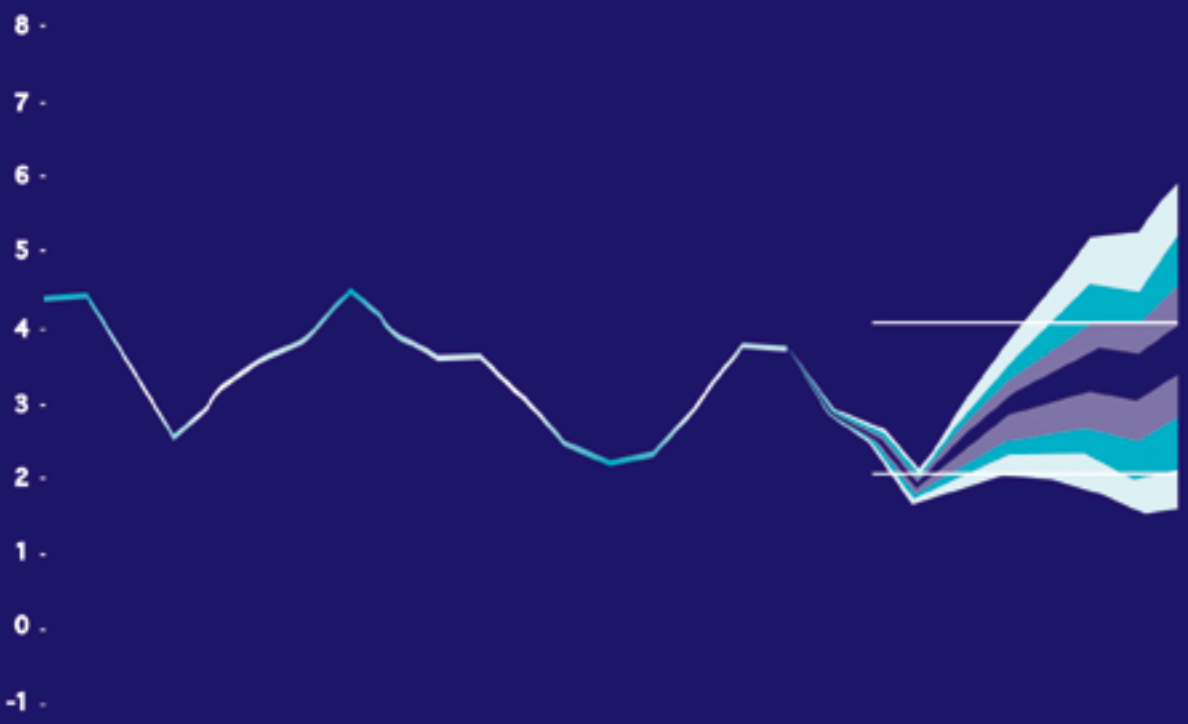
Monetary Policy Report

SEPTEMBER 2006



BANCO CENTRAL
DE CHILE

Monetary Policy Report [1]

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[1]/ The English version of the Central Bank of Chile's *Monetary Policy Report* is a translation from the Spanish original. In case of any difference in interpretation, the Spanish original prevails. Available at www.bcentral.cl/eng/stdpub/publications/policies/polit02.htm.

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*/ The closing data for figures included in this *Monetary Policy Report* was 5 September 2006.

Preface

The main purpose of the Central Bank of Chile's monetary policy is to keep inflation low and stable, targeted at a range of 2% to 4%, centered on 3% over a policy horizon of 12 to 24 months. 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 inform and explain to the general public the Board's view on recent and expected inflation trends, and their consequences for monetary policy; (ii) to publicly disclose the medium-term 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.

This *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, activity 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 8 September 2006 and presented it to the Senate Finance Commission on 13 September 2006.

The Board

Summary

Annual headline inflation rose from slightly negative figures in early 2004 to around 4% in September 2005, and since then it has stayed in the upper part of the target range, due to the incidence of the international oil price increases. The monetary policy interest rate (MPR), meanwhile, has been raised by 350 basis points since September 2004. This gradual withdrawal of the monetary stimulus has fostered an orderly convergence of core inflation measures toward the center of the target range while keeping medium- to long-term expected inflation indicators well anchored around 3%. After nine quarters of output expanding above the trend, the economy has begun to show some signs of reduced dynamism.

In the most likely scenario, economic activity resumes strong growth and closes the remaining gaps during next year. This, combined with medium- and long-term inflation expectations in line with the target, a moderate increase in labor costs and the evidence of limited second-round effects from the fuel hikes, configure conditions that are for price stability. Although financial indicators are still good, it is possible that the current monetary stimulus is not far from one that might be considered neutral. Our estimates yield that, in the baseline scenario, new increments to the interest rate will be necessary in order to keep forecast inflation around 3% per annum. However, this may take some time, depending on new developments and their implications on projected inflation.

External conditions continue to be favorable for the Chilean economy, with some signs of transition toward increased global equilibrium. The US economy has slowed somewhat, as expected, while other economic zones have gained more strength. For the time being the world economy is growing very dynamically. Terms of trade are projected to increase by 24% this year over 2005, more than foreseen in May, owing to both the higher price of copper –still high by historical standards– and rises in other export products. The price of oil, after hitting new nominal peaks in July-August, has declined in the past few weeks, approaching the price prevailing at the closing of last May's *Report*. Yet, it is believed to be heading to levels above May's projections. Financial conditions for emerging economies look less buoyant than in the latest *Report*. There is still worldwide preoccupation about inflation, which has triggered movements in interest rates, parities, stock exchanges and sovereign spreads. The United States, with highly volatile inflation expectations since May to date, seem to have completed its cycle of monetary policy normalizations, in the opinion of market analysts. Other economic zones are still in the process, so new interest rate increases are expected in the euro area and Japan, although in the latter they might come further down the line.

Baseline scenario asumptions

	2004	2005	2006 (f)	2007 (f)	2008 (f)
			(annual change, percent)		
Terms of trade	19.7	10.5	24.2	-7.7	-7.7
Trading partners GDP growth (*)	4.5	3.8	4.4	3.8	3.8
World growh, PPP weights (*)	5.3	4.7	5.2	4.7	4.7
World growth, market weights (*)	4.0	3.3	3.8	3.3	3.2
External prices (in US$)	8.9	7.7	5.5	4.7	2.0
			(levels)		
Copper price LME (US¢ / lb)	130	167	305	275	240
Oil price WTI (US$ / barrel)	42	56	69	68	62
Libor US$ (nominal. 90 days)	1.7	3.6	5.3	5.4	5.3

(*) For detailed explanation see glossary.
(f) Projection.

Source: Central Bank of Chile.

Domestically, the Board of the Central Bank of Chile rose the MPR once (25 basis points) since the last *Report*, and five times (a total of 125 basis points) since September 2005, driving it to 5.25% currently. In the most likely scenario, additional increases will be needed, although they may be fewer and farther between. The information available reveals contained underlying inflationary pressures, and the possibility of the MPR being closer to its neutral level, according to a range of recent estimates. Overall, financial conditions remain good, reflected mainly in the growth of banking loans to households and firms.

The Chilean peso depreciated slightly less than 5% in real terms with respect to the closing of May's *Report,* and 1.5% since September 2005. Taking as a reference the average of the two weeks preceding the statistical close of this *Report*, the current real exchange rate is believed to be consistent with its long¬term fundamentals. Although the terms of trade are significantly above what should be their long-term level, the fact that the economy has been able to save most of its transitory gain –reflected in the current-account surplus– supports this evaluation. As a methodological assumption, the real exchange rate is projected not to differ much from its current figures.

In the first half of the year, and as expected, the annual growth rate of domestic demand declined, although its composition turned out to be somewhat different from earlier estimates. On the one hand, consumption has remained strong –especially its imported component– despite significant adverse effects of energy prices on household income. The rise in the price of energy with respect to last year's is estimated to have eroded nearly 1.5% of this year's private disposable income. This figure is larger than last May's estimate by one percentage point, and is expected not to occur again next year. Indicators of consumer expectations have dropped in the past several months, somewhat more than could be expected given the performance of unemployment and oil prices, and coinciding with the economy's slowdown. So far, it has caused no visible effects on consumption. On the other hand, gross fixed capital formation showed a faster than expected normalization, particularly imports of capital goods, after a rather bulky stock accumulation during the second half of 2005. In any case, the present ratio of investment to GDP in real terms remains in record highs. Considering the firms' results and financing conditions, prospects for this component of domestic demand are good. This is already apparent in a substantial flow of new engineering projects and in machinery and equipment imports in recent months. Firms' expectations, after declining during the second quarter, have stabilized in some sectors and recovered in others.

Economic growth and the current account

	2003	2004	2005	2006 (f)	2007 (f)
			(annual change, percent)		
GDP	3.9	6.2	6.3	4 ¾ - 5 ¼	5 ¼ - 6 ¼
National income	3.9	8.6	9.1	3.3	6.1
Domestic demand	4.9	8.1	11.4	6.3	5.4
Fixed capital formation	5.7	11.7	24.7	3.2	5.5
Total consumption	4.0	6.1	7.6	7.1	6.0
Goods and services exports	6.5	11.8	6.1	4.8	6.1
Goods and services exports	9.7	18.0	20.4	8.9	5.5
Current account (% of GDP)	-1.3	1.7	0.6	3.6	2.2
			(US$ million)		
Current account	-964	1,586	703	5,100	3,300
Trade balance	3,685	9,196	10,180	23,000	19,900
Exports	21,664	32,215	40,574	58,100	58,100
Imports	-17,979	-23,020	-30,394	-35,100	-38,200
Services	-646	-689	-588	-1,100	-800
Income	-4,608	-7,999	-10,624	-19,400	-18,400
Current transfers	605	1,079	1,735	2,600	2,600

(f) Projection.

Source: Central Bank of Chile.

The baseline scenario assumes that public expenditure continues to comply with the structural surplus rule, which is consistent with a substantial expansion in 2007 due to the lagged effect of copper hikes. The parameters established by the experts committee for the 2007 budget are not very different from those considered in the most likely scenario in May's *Report*. Thus, the 2007 budget seems to need no monetary policy actions other than those contemplated in said *Report's* baseline scenario. Similarly, no significant effects are expected from it on the valuation of the peso. As has been previously emphasized, with a more expansionary fiscal policy (e.g., more than considered in the fiscal rule) the peso would be lower, and the interest rate, accordingly higher.

The value of exported goods has hit record highs, due mainly to the high price of copper, combined with good prices for wood pulp and fishmeal. In quantum terms, projections for 2006 continue to forecast a higher growth rate than it showed in 2005, as foreseen in May. Volume imports are expected to grow less than in 2005, with a similar composition to domestic demand: more consumption and less investment. In 2006, the current account will expectedly post a surplus of 3.6% of GDP, outperforming May's projections. This surplus is explained by the enormous public savings, which have more than offset the adjustments of private saving, while investment growth has normalized some. The year 2007 is expected to post a surplus of 2.2% of GDP, consistently with lower terms of trade and a slight recovery of investment. If measured at trend prices, a deficit of about 3.5% of GDP for 2006 and 2007 results.

In the first half, output grew as expected, although the first quarter brought higher- and the second lower-than-expected figures. Thus, the first quarter moderated the deceleration that was forecasted in the last *Report*, and also reduced the acceleration foreseen for the second quarter. For the second half of 2006 May's growth projections are corrected downwards, because of a revision to first-half figures and specific developments in the big mining sector that should result in a decrease in copper production. In the present scenario, output grows at between 4¾% and 5¼% in 2006. Excluding natural resource-related sectors, growth is close to trend for the full year.

Projected GDP growth in 2006 is, in principle, somewhat slower than implied by fundamentals, in particular the external impulse, financial stimulus, and idle capacity. Behind this are, on the one hand, mining activity which, with relatively low growth contemplated for this year due to full use of its productive capacity and production-related problems (because of landslides and collective bargaining) that results in a reduction of 0.2 percentage point in GDP for the year. On the other hand, there are factors whose effect is hard to identify with accuracy, which can explain part of this phenomenon, but not all of it. Among them is the increase in energy cost which, apart from affecting households' real disposable income, may have had a larger than foreseen impact on production, particularly in manufacturing. Furthermore, a big initial rise in investment in machinery and equipment during 2005, has been followed by faster than expected normalization.

It should also be noted that the present macroeconomic policy framework has a smoothing effect on the cycle that is much stronger than it used to be and than earlier estimates. This makes the economy much less sensitive to variations in the terms of trade, in particular in the price of copper, than it has been historically and than what it was earlier assumed. The floating exchange rate, market access conditions and international liquidity help moderate the financial effects of the higher copper price, which were more expansionary in the past. Also, this price is transmitted through fiscal policy with a longer lag, while mining investment has been significantly smaller than it was during previous price hikes.

In 2007, output growth will be, in the baseline scenario, above its trend and also above output growth this year, within a range from 5¼% to 6¼%, while the remaining gaps close definitely. While the growth profile for this year and next has been changed, average growth for 2006-2007 will not be very different from the trend or from growth implicit in last May's *Report*. In the baseline scenario, a number of the elements that affected economic activity this year will reverse or not occur again with the same intensity. A rebound is expected for mining production, while a slight decline in the oil price with dynamic investment and a stronger fiscal impulse for next year. However, the lagged effects of the normalization of monetary policy, a somewhat worsened international setting and reduced idle capacity limit the probability of growth largely above the trend in 2006-2007. In addition, just as there is no certainty of what underlies the discrepancy between GDP growth this year and what is implied by the variables that normally determine its short-term dynamics, there is no clear-cut explanation for the reversal or persistence of these effects over coming years.

Trend GDP growth has had no changes, and is estimated to be slightly above 5%. This falls within a range consistent with the 5.3% estimation of the experts committee called by the Ministry of Finance to discuss parameters for the 2007 budget. It should be added that the baseline scenario for GDP growth in 2007, together with the accumulation and utilization of productive factors (labor and capital), it implicitly considers a moderate rise in total productivity of these factors.

The outlook for the labor market, after considering the change in measuring method applied this year (box IV.1), shows a decline in the annual growth rate of employment throughout 2006, largely because of the performance of self employment. Salaried employment is still dynamic, as confirmed by other sources of information. The seasonally-adjusted unemployment rate has fallen in the past two years, from over 10% in early 2004 to 8.1% last July. As for

gaps in the labor market, new information suggests that the present rate of unemployment is greater than believed before, and slightly above the average for the past twenty years. It is also in the upper part of a wide range estimated for the NAIRU. This is consistent with the diagnosed overall idle capacities that can be inferred from the output growth rate and that, in the baseline scenario, close fully toward the end of 2007.

As for the short-term determinants of inflation, the latest information reveals that the annual growth of nominal wages has dropped and is back to where it was by the end of the second quarter of 2005. New employment figures from the National Statistics Bureau have also permitted to reassess the evolution of unit labor costs, which shows that underlying inflationary pressures are milder than before, and consistent with the center of the target range. On the other hand, beyond fuel prices, the costs of imported goods have risen lately, but not as much as to configure an inflationary pressure capable –by itself– of altering the convergence of the inflation rate to the center of the target range.

Over the past several months, annual CPI inflation has been in the upper part of the target range, reflecting the increases in oil and derivatives that occurred in the second quarter and part of the third. Annual CPIX1 inflation, meanwhile, has remained under 3%, with an annualized instant velocity somewhat above 2% in the last six months. So far, no significant second round effects on inflation have been observed in connection with the oil hikes, aside from the normal ones coming from typically indexed prices and utility rates.

Over the short term in this *Report's* baseline scenario, CPIX1 annual inflation will continue to slowly approach 3%, slightly above in 2007 and back toward the end of the projection horizon. Underlying it is the foreseen closing of capacity gaps, unit labor costs in line with the center of the target range, and a real exchange rate not very different from its latest levels. After a few very short-run oscillations due to the changes in the base for comparison, headline inflation should stay in the upper half of the target range still for some quarters, because of the higher price of fuels in pesos compared with first-half levels. The expected convergence of the oil price to what is believed to be its long¬term measure results in a projected average CPI inflation slightly below CPIX1 inflation in 2008. This scenario is incorporated in private expectations, which only consider a temporary increase in annual CPI change. Therefore, by the end of the projection horizon, annual CPI inflation is expected to be at 3%. The baseline scenario is designed under the assumption that the MPR will, toward the end of the normal policy horizon, reach the level that can be inferred from prices of financial assets over the last two weeks, but after a considerably longer pause than what might be concluded from said prices.

Inflation

	2004	2005	2006 (f)	2007 (f)	2008 (f)
			(percent)		
Average CPI inflation	1.1	3.1	3.7	3.4	2.9
December CPI inflation	2.4	3.7	3.7	3.0	3.2
12- to 24-month CPI inflation (*)				3.3	3.0
Average CPIX inflation	0.9	2.3	3.3	3.5	3.3
December CPIX inflation	1.8	2.9	3.4	3.2	3.4
12- to 24-month CPIX inflation (*)				3.4	3.1
Average CPIX1 inflation	0.8	1.9	2.6	3.2	3.0
December CPIX1 inflation	1.2	2.6	2.7	3.4	2.8
12- to 24-month CPIX1 inflation (*)				3.5	2.9

(*) Inflation projected to September of each year.
(f) Projection.

Source: Central Bank of Chile.

Projections are based on the events that are considered most likely and that make up the baseline scenario. As usual, there are many sources of uncertainty that may configure scenarios different from the one considered most probable.

Internationally, a deeper than expected deceleration in world activity is possible. It could happen if US output is less than expected because of a larger correction to housing prices that would hurt housing investment and consumption. Such a deceleration in the US could spread to other economies, in particular European and Asian ones, by affecting their external sectors. It is also possible that the high oil price affects global growth more than it has so far, or inflation is further accelerated in industrial countries.

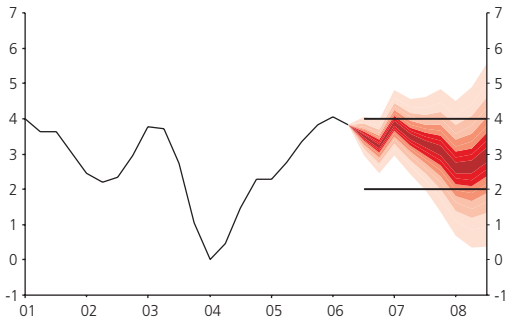
Another contingency would be the oil price trend drifting away from projections. On the one hand, geopolitical risks might rise or persist in their current status, thereby raising the price. On the other, the fall can be deeper, in case the perceived supply-related risk declines, supported by the recent performance of the oil price.

The changes seen in the breakdown of world growth by region are in line with a gradual correction of global imbalances, although the risk of faster adjustments is still present.

In any case, the response of the economy to changes in the relevant external scenario is believed to be smaller than in the past. Therefore, should any of these alternative scenarios occur, its impact would be milder than it could have been in the recent past.

Domestically, in the short run, mining activity falling short of projections for the year is a possibility that cannot be disregarded. This, because of the effects that upcoming collective bargaining processes might have given the exceptional copper prices, as it occurred not long ago. In such case, the effects would be temporary and higher rates of growth would be seen in 2007, due to the base for comparison.

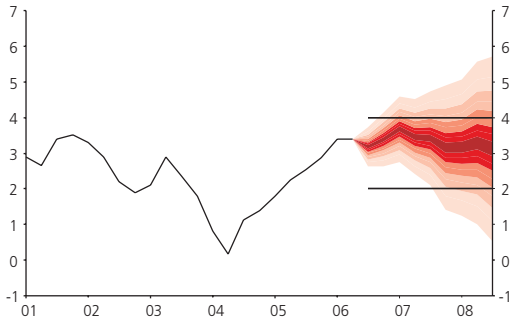
Projected CPI inflation (*)
(annual change, percent)



(*) The figure shows the confidence interval of the baseline projection over the relevant horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk assessment on future inflation performed by the Central Bank. The baseline scenario is designed under the assumption that the MPR will, toward the end of the normal policy horizon, reach the level that can be inferred from prices of financial assets over the last two weeks, but after a considerably longer pause than what might be concluded from said prices.

Source: Central Bank of Chile.

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



(*) The figure shows the confidence interval of the baseline projection over the relevant horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% around the baseline scenario are included. These intervals summarize the risk assessment on future inflation performed by the Central Bank. The baseline scenario is designed under the assumption that the MPR will, toward the end of the normal policy horizon, reach the level that can be inferred from prices of financial assets over the last two weeks, but after a considerably longer pause than what might be concluded from said prices.

Source: Central Bank of Chile.

Toward the medium term, a faster acceleration of output growth cannot be ruled out. This may occur because the unidentified factors that have affected economic activity this year may reverse more strongly than predicted. It is also possible that the still favorable financial conditions cause domestic demand to grow faster.

On the other hand, investment might turn out to be less dynamic than is foreseen for next year. Although construction activity has been strong, latest indicators for housing sales are weaker, and might take some steam off this component of investment. It is also possible that investment in machinery and equipment grows more slowly than supposed in the baseline scenario, because the rate of investment measured at constant prices is still high from a Chilean historical perspective.

After considering the latest information available, it cannot be ruled out that low core inflation persists for longer and configures an inflation trend below projections. Also, inflationary pressures from labor costs, which for the time being are being defined as consistent with the inflation target, might take a different path. This, because recent and upcoming wage bargaining processes might trigger wage increases that in turn become a source of inflationary pressures.

The Board believes that, taken together, these contingencies bias the risk balance downward for this year's growth, while for growth in 2007 and for inflation it is in equilibrium.

As has been said, developments in coming months will be crucial to evaluate possible increases in the interest rate. In the most likely scenario, additional rises will be necessary to maintain projected inflation around 3% per annum. However, this may take some time. Particular attention will be paid to the trajectories of domestic demand, output, some key prices such as salaries and the exchange rate, expected inflation and their implications on projected inflation over the normal policy horizon of 12 to 24 months.

Monetary policy decisions in the past three months

Background: *Monetary Policy Report* May 2006

In May, the Chilean economy was still expanding in a relatively orderly fashion, despite unusual conditions, marked by very high terms of trade, the result of record copper prices. Growth in activity and domestic demand were thought to be moving gradually toward trend values and idle capacity was steadily declining. Despite the sharp rise in the international oil price, the expansionary cycle did not threaten price stability, although it did involve a slight, temporary rise in CPI inflation. Inflation expectations remained well anchored at 3%. This made it possible to carry on with the steady normalization of monetary policy, that is, maintaining an expansionary bias for the time being. In the most likely scenario, this will continue to decline, to ensure inflation remains around 3% within the usual projection horizon. The timing of increases will depend on the implications of shifts in activity, the exchange rate, wages and prices on inflation projections.

Meetings from June to August

At its June meeting, the Board considered maintaining or raising the MPR by 25 basis points, although arguments seemed to favor the former. In the previous month, there had been several developments in Chile and abroad. The outlook for the world economy remained very favorable for the Chilean economy, despite some concern about inflation and expectations suggesting interest rate hikes in the main economic blocs. These last had significantly affected emerging economies' financial markets. The copper price corrected downward relatively quickly, but remained high. The main domestic news was the weak Imacec in April, which created uncertainty about the domestic scenario and the real strength of the economy, while peso depreciation, which might push inflation upward in the short term, did not generate inflationary pressures sufficient to warrant a monetary policy response. This was especially important giving the persistent uncertainty of news from the external and real sectors. Thus, evaluations pointed to a macroeconomic outlook that remained favorable, but with more uncertainty. Although maintaining the MPR did not involve changing the overall strategy of monetary policy normalization, it was clear that, at this stage, corrections to the rate could be spread out more over time. The Board unanimously agreed to maintain the MPR at 5% per annum.

In July, the Board considered maintaining or raising the MPR by 25 basis points. The international outlook was more certain than one month earlier, financial markets had stabilized and the prospects for world economic growth had improved. The domestic economy was less clear, since expansion was somewhat lower than forecast in the May baseline scenario. The expansionary financial conditions were tending to stabilize and the Board was considering the possibility that the neutral monetary policy rate could actually be lower than forecast in the baseline scenario used for projections in the last *Monetary Policy Report*. At the same time, the expansionary aspect of monetary policy could remain somewhat less than assumed in Board decisions to that point. This and the current interest rate suggested that the time had come for applying rate hikes at longer intervals. Some elements suggested that annual inflation in coming months could be higher than the market foresaw, especially given the impact of the oil price, which could unleash expectations. In this context, a higher MPR would reduce the likelihood of the economy coming unanchored amidst second round effects from the oil price increase. The Board unanimously agreed to raise the MPR by 25 basis points, to 5.25% per annum, at the same time as it announced that future increases could be less frequent than in the recent past.

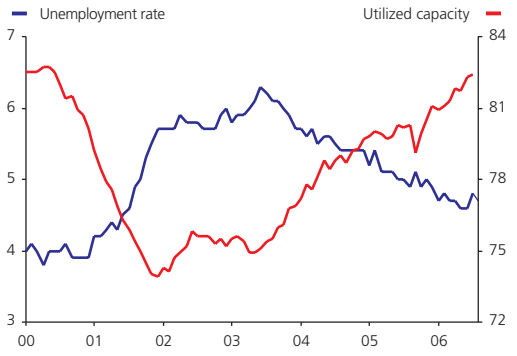
In August, the Board decided that given the information available it would be difficult to justify any option other than maintaining the MPR. The international outlook remained favorable in terms of activity and financial conditions. There was, however, some concern about the noticeable slowdown in the US economy and higher inflation. Domestically, recent activity had been somewhat weaker than projected in the May *Monetary Policy Report* baseline scenario. This could reflect idle capacity being absorbed somewhat more gradually or, probably, weaker pressure on inflation for the rest of the year. Moreover, despite higher fuel prices and exchange rate depreciation, the different measures for inflation suggested that to date pressures were under control. Finally, the Board considered the available information insufficient to justify a change in its strategy of gradually reducing the monetary impulse. The Board unanimously agreed to maintain the MPR at 5.25% per annum.

I. International outlook

Figure I.1

US factor market idle capacity

(percent)

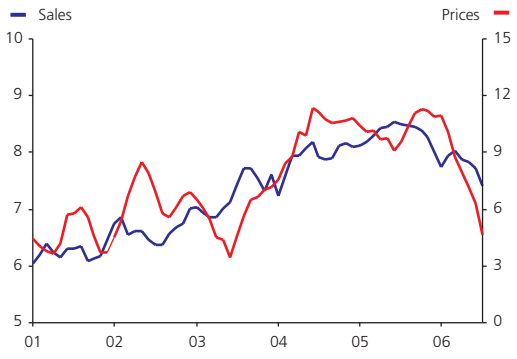


Source: Bloomberg.

Figure I.2

US real estate market

(millions of units per year, annual change, moving half, percent)



Source: Bloomberg.

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

The external scenario for the Chilean economy remains positive, amidst strong growth in world activity, combined with more balanced growth in the main economies. Commodity prices have remained higher than forecast, although in the case of oil, after hitting record heights in July and August, the price fell back to May levels. Monetary policy has continued normalization in most developed economies, given evidence that gaps are closing and inflationary pressures are on the rise. However, external financial conditions remain favorable.

World growth

Activity in the US slowed down, in line with forecasts. Annualized expansion of 2.9% in the second quarter indicated that consumption was still growing steadily, although less than in previous quarters, while investment has slowed significantly, particularly its residential component. Similarly, growth was corrected downward for 2003-2005, suggesting that potential growth is probably several tenths less than previously estimated, or about 3% annually. Accordingly, toward 2007, expected growth has been corrected downward.

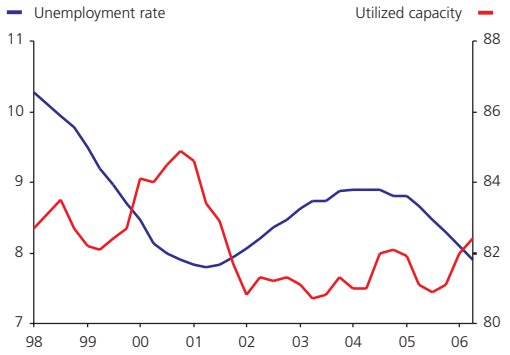
Idle capacity in this economy has virtually disappeared, particularly in the manufacturing sector. Job creation has slowed and the unemployment rate has stabilized at slightly more than 4.5% (figure I.1). These factors, combined with the effects of interest rate normalization, a slowdown in the real estate sector and higher fuel prices suggest that consumption should perform less strongly during the rest of the year. Investment, particularly residential, should continue to slacken (figure I.2). The external sector is starting to contribute to growth, with exports performing well and moderate growth in imports. The fiscal deficit has declined, while the current account deficit stopped growing and has begun a steady fall.

In the euro area, activity has been stronger than expected, mainly reflecting strong domestic demand. Growth has tended to spread more evenly across the region's countries. The decline in idle capacity in the labor market and greater use of installed capacity reveal near-potential activity, so progress toward monetary policy normalization should proceed more moderately in coming quarters (figure I.3).

Figure I.3

Euro area factor market idle capacity

(percent)

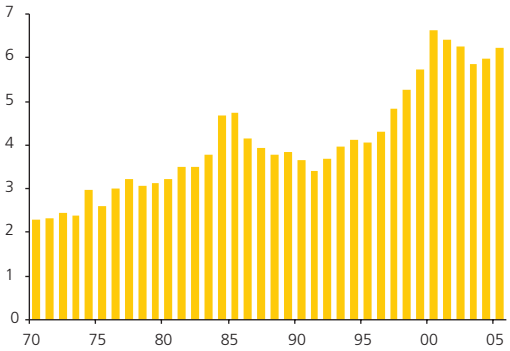


Source: Bloomberg.

Figure I.4

US imports over world GDP

(percent)



Sources: US Census Bureau, Bureau of Economic Analysis and International Monetary Fund.

The Japanese economy is performing well, driven by strong expansion of domestic demand, while the external sector is no longer the main source of growth. A solid performance from the labor market and companies' good financial situations are cause for optimism about consumption and investment in coming quarters. The country's sustained growth, at over 2% in recent quarters, has significantly reduced idle capacity, contributing to moderate inflation. The Bank of Japan has started to raise interest rates.

In China, during the first half the economy outperformed expectations, with especially high investment growth. Measures to contain expansion –restriction on credit growth and project financing– have proven insufficient, although more recent data suggests some slowdown. Private consumption remains strong, although its contribution to growth declined slightly in the past year. The net external sector has also continued to perform strongly. China's robust growth suggests a positive outlook for emerging Asia overall, with stronger domestic demand and a solid performance expected from the net external sector associated with intraregional trade. India, meanwhile, grew more than expected, somewhat more than 9% annually during the first quarter of this year, foreshadowing a strong performance in coming months, as authorities have raised interest rates.

Latin America's economic expansion has strengthened, leading to upward corrections to growth forecasts for 2006 and 2007, based on actual growth figures in the first quarter, which were higher than forecast as of the closing date for the previous *Monetary Policy Report*. Solid commodity prices and ongoing cuts to very high interest rates, particularly in Brazil, have contributed to this solid performance.

In developed, commodity-exporting economies[1], growth projections have held relatively steady at about 3% for this year and next, while reference rates have continued to rise in recent months, but are thought to be concluding.

World growth this year is therefore projected to be stronger than forecast some months ago, while projections for 2007 hold. Less growth expected in the US should be offset by stronger performances from Europe and Latin America, along with the greater weight of emerging Asia within the world economy. This scenario assumes that domestic demand strengthens in these economies, and thereby sustains growth. One risk factor, nonetheless, is associated with the slowdown in the US, which was greater than forecast, and thus reduced even further the performance of the external sector of other economies (figure I.4 and table I.1).

Commodity prices

The copper price has remained high and, as of the closing date for this *Report*, was approaching US$3.50 per pound. It should be noted that the duration of these high prices cannot be entirely explained by expectations of a near balance in coming years, given that the response from supply has not kept up with the enormous growth in consumption. Recently, base metal markets have been very volatile, reflecting global factors associated with monetary policy's normalization in the larger economies, and specific

[1]/ This includes Australia, Canada and New Zealand.

Table I.1

World growth

(annual change, percent)

	Average 1990-1999	2005 (e)	2006 (f)	2007 (f)	2008 (f)
World (*)	3.2	4.7	5.2	4.7	4.7
World at nominal market foreign exchange rate (*)	2.4	3.3	3.8	3.3	3.2
United States	3.1	3.2	3.5	2.7	3.0
Euro area	2.2	1.4	2.3	1.8	1.9
Japan	1.5	2.6	2.8	2.4	1.9
Rest of Asia (*)	8.1	8.5	8.6	7.8	7.6
China	10.0	10.2	10.3	9.0	8.8
Latin America (*)	2.8	4.2	4.7	4.0	3.9
Commodity exporters (*)	2.7	2.7	3.0	3.0	3.0
Trading partners (*)	3.1	3.8	4.4	3.8	3.8

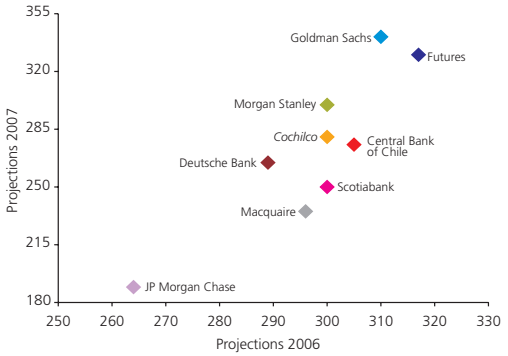
(*) For definition, see glossary.
(e) Estimate.
(f) Projection.

Sources: Central Bank of Chile, using information from a sample of investment banks, Consensus Forecast and International Monetary Fund.

Figure I.5

Distribution of copper price projections (*)

(US¢/lb, annual average)



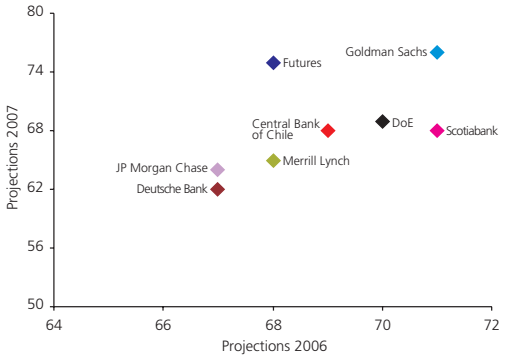
(*) Based on projections available from 30 August to 5 September, except *Cochilco* (30 July). Futures, using average for 10 days prior to 5 September 2006.

Sources: Central Bank of Chile, Bloomberg, Morgan Stanley 2006, *Cochilco* 2006, Goldman Sachs 2006, Scotiabank 2006, Macquarie 2006, Deutsche Bank 2006a and JP Morgan Chase 2006a.

Figure I.6

Distribution of oil price projections (*)

(US$/WTI barrel, annual average)



(*) Uses projections available from 30 August to 5 September. Futures, using average for 10 days prior to 5 September 2006.

Sources: Central Bank of Chile, Bloomberg, Merrill Lynch 2006, Goldman Sachs 2006, Scotiabank 2006, Deutsche Bank 2006a and JP Morgan Chase 2006c.

events that have affected some mining firms. In this context, the market has assigned a higher risk premium to supply. This has pushed projections for the average copper price up to US$3.05 for this year, US$2.75 for 2007 and US$2.40 for 2008 (figure I.5).

The price of molybdenum has stood at around US$25 per pound in recent months, despite weaker demand than last year. This reflected lower production from Chile and Mexico, suggesting that for the rest of the year it should hover at about US$20, postponing the return to more usual levels.

The price of NBSK wood pulp soared above US$700 per metric ton, amidst growth in demand from Europe and China, combined with less productive capacity, given the permanent closure of plants in the US and Canada. This reflected a 10% rise over the estimates in May's *Report*. Prices are expected to fall with the start-up of projects in Argentina, Brazil and Uruguay. The fishmeal price rose 35% during the same period (100% annually), although recently it has fallen somewhat from its peak last June (US$1,430/metric tone). This trend reflected a significant drop in catches and, therefore, Peruvian and Chilean production, amidst strong world consumption.

The WTI oil price has remained surprisingly high in recent months, soaring above US$77 per barrel at times. In real terms, these prices have not been seen since 1982. They reflect strong fuel consumption, despite high prices and a very limited production capacity. A geopolitical risk premium is also apparent, associated mainly with instability in the Middle East. This has brought upward corrections to US$69 per WTI barrel in 2006, US$68 in 2007 and US$62 in 2008. These prices are in line with the information from oil futures and option markets, which assume the price will probably remain around current levels in the short term (figure I.6 and box I.1).

For this year, the terms of trade should rise 24%, up from the 12.6% expected in May. For 2007 prices are expected to approach long-term values for the main products, pulling the terms of trade down by around 8%. This trend assumes higher levels than forecast in May, reflecting greater persistence of prices in the medium term and an upward correction to longer-term commodities such as copper and oil. In recent years, the terms of trade have being particularly affected by the copper price, so its exclusion reveals a less volatile tendency (figure I.7).

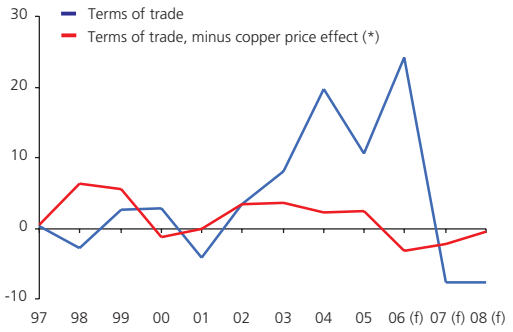
World inflation

Inflation projections for the main developed economies have been corrected upward. This was in response to higher headline inflation combined with greater cost pressures, which reflected a more rapid absorption of idle capacity in factor markets and possible second-round effects of fuel prices, which could be pushing core inflation upward. In the US, however, monetary authorities were forecasting a slowdown in coming quarters that would significantly reduce inflationary pressures. The risk of this not occurring would require continuing to raise interest rates over a longer period (table I.2).

Figure I.7

Terms of trade

(annual change, percent)



(*) The terms of trade minus copper price effect are estimated using the London Metal Exchange price (1996) as reference. No other potential effects in terms of price and quantity are assumed.
(f) Projection.

Source: Central Bank of Chile.

Table I.2

World inflation

(average change in local currency, percent)

	Average 1990-1999	2004	2005 (e)	2006 (f)	2007 (f)
United States	3.0	2.7	3.4	3.5	2.8
Euro area	3.1	2.2	2.2	2.3	2.3
Japan	1.2	0.0	-0.3	0.4	0.6
Rest of Asia (*)	7.6	3.8	2.8	3.1	2.9
Latin America (*)	410.4	6.2	6.3	5.2	5.5
EPI (*)	1.9	8.9	7.7	5.5	4.7

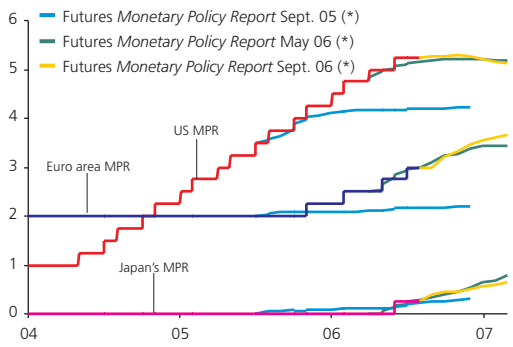
(*) For details, see glossary.
(e) Estimate.
(f) Projection.

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

Figure I.8

Monetary policy rate expectations in developed economies

(percent)



(*) Calculated by the Central Bank of Chile using interest rate futures.

Source: Bloomberg.

Relevant external inflation, measured with the external price index (EPI), should rise 5.5% in 2006, less than forecast in May. This reflects expectations that the dollar will weaken slightly, offsetting somewhat higher inflation in developed economies.

Developed financial markets

Most developed economies have raised their monetary policy rate in recent months. The ten most industrialized ones have done so in the past six months. In this sense, Japan has just started, while other countries, such as the US, are just about finished. Less liquidity in international markets has increased risk premiums on credit to emerging markets, although this has been somewhat offset by the decline in long-term interest rates in the main developed economies.

In the US, the rate on federal funds was raised by 25 basis points at each meeting through July or 425 basis points altogether since monetary policy normalization began in June 2004. Last August saw the first pause, in line with corrections to market expectations following lower figures for activity and a weak labor performance. However, the market still considers an additional increase likely before year's end, along with cuts to rates next year (figure I.8).

In the euro area, reinforcing activity and real inflation rose more than the medium-term target, reinforcing expectations of new increases to the reference rate. This should rise to 3.5% toward year's end, earlier than the end of the first half of 2007 forecast some months ago.

As forecast, in Japan the central bank increased the reference rate by 25 basis points last July, given stronger signs from activity and inflation despite the recent review of CPI figures, with a further rise expected in the fourth quarter.

Long-term external interest rates have fallen, reflecting the prospects of lower trend growth for the US, well-anchored expectations regarding inflation and a decline in the risk premium due to inflationary risk. Rates in the euro area and Japan fell in line with the US, although this had less effect in the euro area due to its stronger economy.

In line with interest rate movements, the dollar depreciated slightly against the euro and appreciated somewhat against the yen, reaching current levels of US$1.28/€ and ¥117/US$1. The US's real multilateral exchange rate has depreciated in recent months. In commodity-exporting, developed economies, average parity has changed little since the last *Monetary Policy Report*, although it has bounced around somewhat in recent months, partly reflecting a bulky current account deficit.

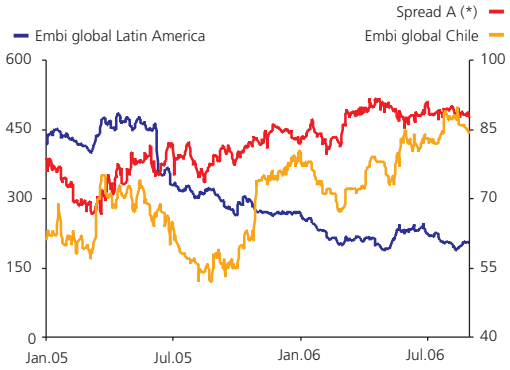
Emerging financial markets

External financing conditions for emerging economies have deteriorated somewhat since the previous *Report*, in response to higher monetary policy interest rates in developed countries and a decline in the resources available for investment, associated with a slowdown in the US. As a result, sovereign premiums have risen as forecast. To a somewhat lesser degree,

Figure I.9

Credit risk premiums

(basis points)



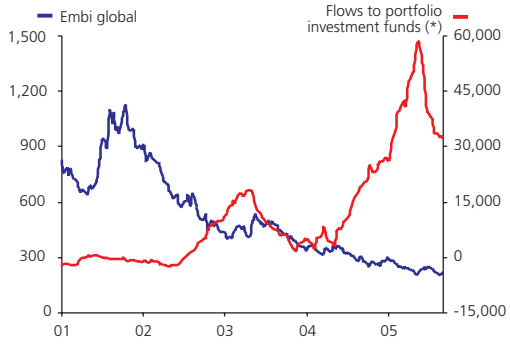
(*) Uses the US A-risk firms'spread.

Sources: Bloomberg and JP Morgan Chase.

Figure I.10

Emerging markets

(US$ million, basis points)



(*) 12-month accumulated flows.

Sources: EPFR and JP Morgan Chase.

so has the EMBI global, given investors' search for yields from higher-risk assets. From a historical perspective, external financing conditions remain advantageous.

It should be noted that in May, uncertainty about when the US will conclude its monetary policy normalization led agents to liquidate some of their holdings in emerging markets, generating a significant rise in their premiums. Markets eventually settled down, offsetting part of the increase, thanks to investors' search for returns and the maintenance of a scenario favorable to commodity prices (figure I.9).

In line with the above, investment in emerging economies' portfolio instruments fell significantly. However, positions involving this kind of asset remained well above levels observed in previous years (figure I.10).

Chile's sovereign premium has risen by about 10 basis points since May. Preliminary estimates associate half this increase to the higher premium registered for *Codelco's* bonds, the result of production problems, among other factors. The difference in the increase is in line with the behavior of instruments with a similar risk level, particularly A-rated corporate bonds from the US.

Box I.1: **Risks implicit in commodity prices**

When defining the baseline scenario's external variables for the Chilean economy, reports from different investment banks and specialists are used, along with information from futures contracts. In this scenario it is especially important to estimate future oil and copper prices, given their role in Chile's economic performance.

Analysts' projections and future markets suggest average prices, without providing any information about the dispersion or uncertainty surrounding them. Futures markets in particular are based on participating agents' expectations regarding the price for a given asset.

To estimate market uncertainty regarding projections, buy and sell options contracts can be examined. The information they contain permits to draw a probability distribution function (PDF) for a given horizon of time[1]. Intuitively, the value of an option reflects the probabilities agents assign to the different prices for the underlying asset over a given horizon. Similarly, the volatility implicit in options reflects the degree of uncertainty among agents.

The asymmetry in the PDF compared to the expected value makes it possible to create a balance of risks. Thus, the more biased the function is toward one side, the greater the probability that the market assigns to a future shift in that direction[2].

Thus, the PDF for the oil and copper prices helps reconcile the most likely scenario with the uncertainty that the market associates with trends in these prices, assigning probabilities to risk scenarios for them.

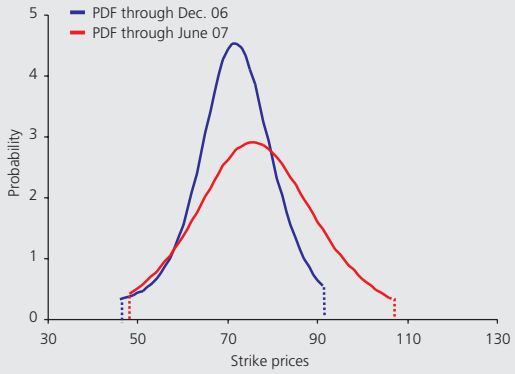
WTI oil options indicate that toward next year, while there is more uncertainty there is no clear bias regarding the value expected by the market, which currently assumes a 7% probability that the price will be higher than US$85 as of December of this year. For June 2007, the probability rises to 25%. The probability assigned to the price falling to less than US$65 between next December and June 2007 stands at around 20% (figure I.11).

For the copper price, the probability of it falling to less than US$3.00 per pound by year's end is 18%, while there's 48% probability of its rising to more than US$3.50 (figure I.12). Results indicate that the market is currently suggesting a slight downward bias in the short term[3].

Figure I.11

PDF for the oil price (*)

(US$/ WTI barrel through 5 September 2006, percent)



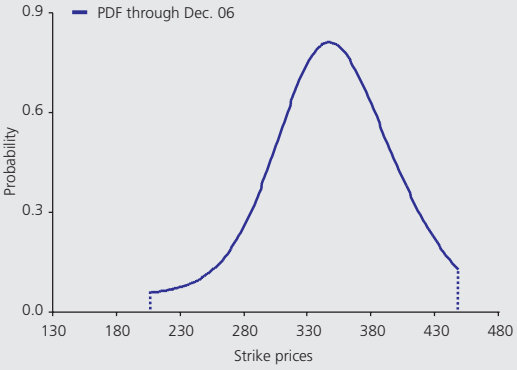
(*) Density function accumulates 95% probability.

Source: Central Bank of Chile and Bloomberg.

Figure I.12

PDF for the copper price (*)

(US¢/lb as of 5 September 2006, percent)



(*) Density function accumulates 95% probability.

Source: Central Bank of Chile and Bloomberg.

[1]/ Based on the methods analyzed and developed for the information contained in financial asset derivatives in Breeden and Litzenberger (1978), Cooper and Talbot (1999), Clews *et al.* (2000), Jung and Miranda (2002), Carlson *et al.* (2005) and Brenan (2006).

[2]/ The methodology described here can be used, with minor adjustments, to obtain the PDF for market expectations for other financial prices, such as exchange rates and interest rates.

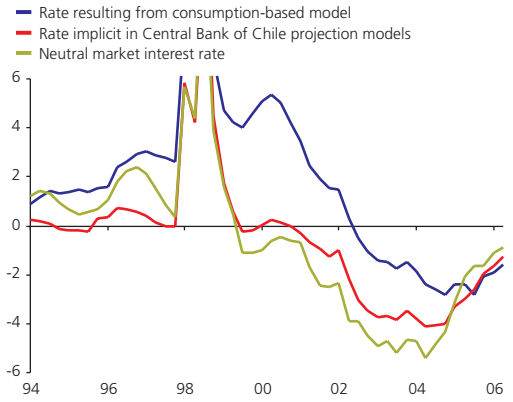
[3]/ Using options contracts, results are unstable for distribution tails, so these are extrapolated, maintaining results for the core of the PDF, which accumulate a 95% probability.

II. Financial markets

Figure II.1

Real interest rate gap: real MPR minus neutral interest rate (*)

(percent)



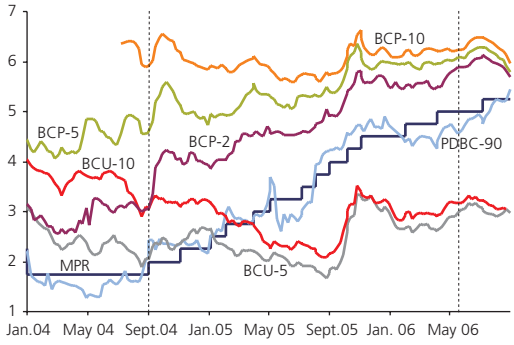
(*) Calculated as the nominal MPR minus inflation forecast in Central Bank of Chile surveys

Source: Central Bank of Chile.

Figure II.2

MPR and interest rates on Central Bank of Chile instruments

(weekly averages, percent)



Source: Central Bank.

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

Monetary conditions

From May to September 2006, the Board of the Central Bank continued the gradual normalization of monetary policy, increasing the MPR once, to 5.25%, for a 350-basis point increase to the MPR since it began to gradually withdraw the monetary stimulus in September 2004. Although financial conditions remain advantageous, it is possible that the current monetary stimulus is not far removed from what could be assumed to be the neutral level (figure II.1 and box II.1). It is estimated that in the most probable scenario, additional interest rate increases will be necessary to keep inflation projections at around 3% per year. However, this could take a long time, depending on the information that builds up and its implications for inflation projections.

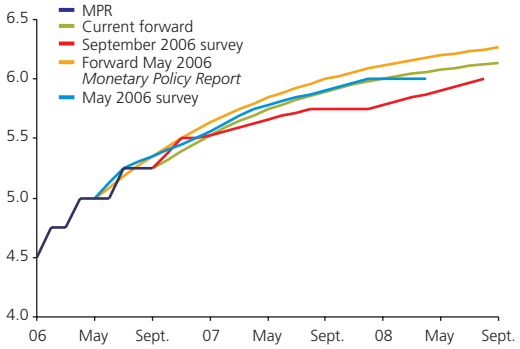
Consistently with the MPR, interest rates on peso-denominated Central Bank debt instruments have risen since normalization began. Thus, since September 2004, interest rates on BCPs have risen by 260, 120 and 10 basis points for two-, five- and ten-year bonds, respectively. Rates on BCU-5s have risen by 90 basis points, while BCU-10s remain unchanged. Today, rates on these instruments generally stand about where they stood at the closing of the May's *Report*, following an inverted "U" trajectory that peaked in late June. The direction, but not the magnitude, of this trend coincided with shifts in rates on real and nominal US treasury bonds (figure II.2).

Different measures for expectations about the MPR suggest the market expects increases to occur over larger intervals in the future than in the recent past, foreseeing two or three 25-basis point increases over the next 15 months. The forward curve –the trajectory of instant interest rates implicit in the yield curve for Central Bank debt instruments– indicates that the MPR should reach 5.4% in December of this year and 5.9% in December 2007 (5.6% and 6.1%, respectively, in May). The September expectations survey foresaw the MPR reaching 5.5% by December of this year and 5.75% by December 2007 (figure II.3).

Figure II.3

MPR, expectations and the forward curve

(percent)

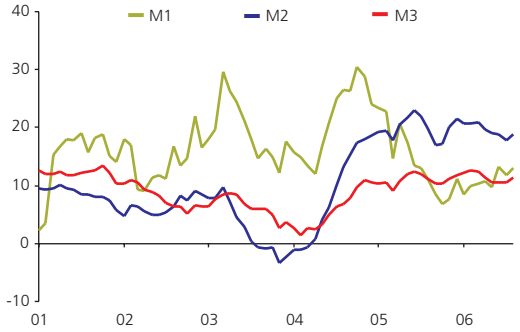


Source: Central Bank of Chile.

Figure II.4

Monetary aggregates

(nominal annual change, percent)



Source: Central Bank of Chile.

Figure II.5

Monetary aggregates

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

Source: Central Bank of Chile.

Monetary aggregates

Since the previous *Monetary Policy Report*, the annual growth rate for monetary aggregates (M1, M2 and M3) has shifted slightly, although it remains higher than expected for long-term growth[1] (figure II.4). Although the pace of aggregate expansion has remained relatively stable in the past three months, it has slowed somewhat compared to the early stages of monetary policy normalization (figure II.5).

Annual growth of M2 remains driven by demand for private sector term deposits, except the household segment. The rise in M3 has been limited by a decline in private holdings of Central Bank documents and mortgage notes, which has coincided with a reduced supply of these instruments.

Household and corporate credit conditions

Nominal annual growth in total bank loans has remained at around 19% since last December, although slightly decreasing its velocity (figure II.6). This trend was apparent in both corporate and personal loans, and particularly consumer credit (figure II.7). On the still strong increase in personal loans, a glance at other periods reveals that credit responds to the cycle and to changes in monetary impulse with a lag, so there may be a slowdown in annual growth in a few quarters. It is also possible that some of these consumer loans have gone to financing a sharp rise in purchases of durable goods during the past 18 months.

One element that could suggest weaker consumer lending in future was apparent in the Central Bank's quarterly survey of bank credit conditions from June[2], which suggested that consumer credit lending conditions had become more restrictive due to the perception that there was greater risk associated with this segment. Something similar is apparent with regard to mortgages, where the survey found that a tendency to make standards more flexible had declined, while demand slowed from previous quarters, which reflects in the declining trend in the velocity of these loans.

Bank lending to companies remained high in recent months, averaging a nominal 18% annually since May. Foreign trade credits grew 17% annually on average in pesos and 23% in dollars. Commercial credits rose almost 18%, at a velocity of expansion of almost 13%. By amount, growth of credits involving smaller sums slowed, while larger credits posted varying tendencies (figure II.8).

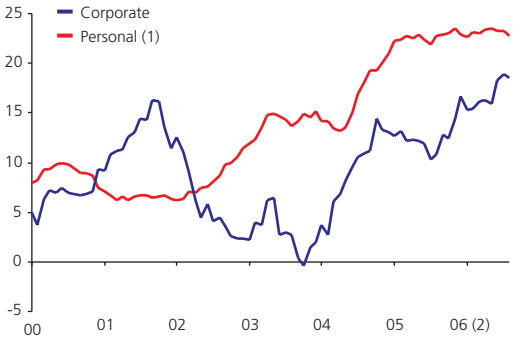
The credit survey also revealed that corporate financing conditions remained stable, with demand weakening somewhat, mainly due to large companies' increased reliance on alternative financing sources. Demand for credit from small- and medium-sized firms (*PYMEs*) also slowed in this period.

[1]/ As per the usual short- and long-term M1 money projection equation, using contemporary fundamentals, residuals continue to show a positive bias. See Restrepo (2002).

[2]/ For April to June 2006.

Figure II.6

Corporate and personal loans
(nominal annual change, percent)

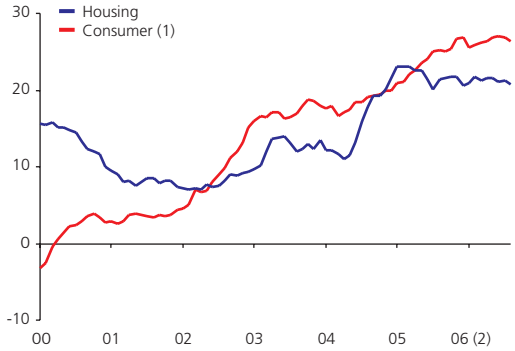


(1) The consumption series within personal loans includes an adjustment in 2004, given changes in overdraft accounting regulation.
(2) August data provisional.

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

Figure II.7

Personal loans
(nominal annual change, percent)

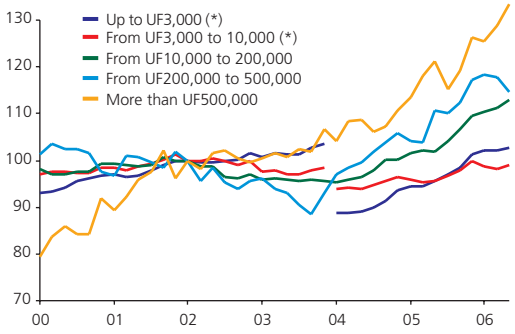


(1) The year 2004 includes an adjustment, given changes in overdraft accounting regulations.
(2) August data provisional.

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

Figure II.8

Corporate lending by size of credit
(index February 2002=100)



(*) The change in the series level in early 2004 reflects changes in overdraft accounting regulations. Until then, overdrafts were noted as commercial debt. Since then, by holder.

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

Since September 2004, the interest rates that banks charge on their operations with third parties have reflected the passthrough of the higher MPR. In fact,

Table II.1

Lending rates
(base 360 days, percent)

			Consumption		LCH rates (3)		Commercial	
		TPM	TPP (1)	Credit cards (2)	Rate 4-5% and duration: 5-6	Rate 5-6% and duration: 5-6	Prime (4)	TPP (1)
2004	Avg.	1.87	24.3	33.4	4.0	4.4	1.6	7.4
2005	Avg.	3.44	26.0	34.1	3.7	4.3	3.4	9.7
2005	Jan.	2.42	25.4	32.5	3.9	4.3	2.3	8.2
	Feb.	2.65	26.8	32.4	3.7	4.5	2.7	8.8
	Mar.	2.75	24.0	32.9	3.7	4.4	2.5	9.1
	Apr.	2.94	25.7	33.6	3.6	4.5	2.9	9.1
	May	3.14	26.6	34.2	3.6	4.2	3.0	10.0
	Jun.	3.25	27.1	35.0	3.2	4.2	3.1	9.5
	Jul.	3.40	26.6	35.2	3.2	3.8	3.5	10.2
	Aug.	3.66	26.6	35.5	3.4	3.8	3.6	10.0
	Sept.	3.94	26.4	35.6	3.3	3.8	3.8	9.9
	Oct.	4.19	25.1	35.0	3.8	4.1	3.6	10.3
	Nov.	4.43	25.5	33.6	4.5	4.7	4.4	10.7
	Dec.	4.50	26.2	33.6	4.5	4.7	4.7	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		4.0	4.2	5.1	10.4

(1) Average weighted rate.
(2) Series published by the SBIF, covering peso operations to more than 90 days for up to UF 200.
(3) Mortgage credit bills rates with the indicated emission rate.
(4) Rate charged to preferred customers or those with the best credit rating (calculated as the monthly average of minimum rates reported by banks daily).

Sources: Central Bank of Chile, Santiago Stock Exchange and Superintendency of Banks and Financial Institutions.

the average weighted rate on consumer credits has risen 350 basis points to around 27% in recent months (table II.1). Interest rates on mortgage credit bills trading in the secondary market coincided with those on Central Bank indexed instruments for the same period. Corporate lending rates, meanwhile, rose a total of 300 basis points since September 2004, to more than 10% per annum throughout 2006. The prime rate, which is the one paid by customers with the best credit rating, rose in line with the MPR, to just below the latter.

As in previous years, bond issues remain an important source of corporate financing. So far in 2006, the total outstanding has reached UF48.4 million, up 17.8% from year-ago levels (figure II.9).

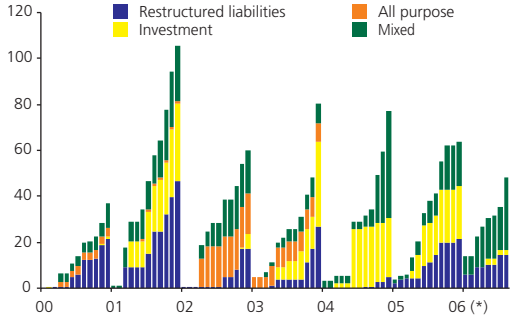
In the stock market, new share offerings reached UF7.5 million in July, down by about 80% compared to the same period in 2005. Amounts traded daily on the Santiago Stock Exchange in recent months were similar to averages for the first quarter of this year, but down from the average for 2005.

Compared with the May *Report*, local stock indicators have moved in line

Figure II.9

Corporate bond issues by purpose

(UF million accumulated per year)

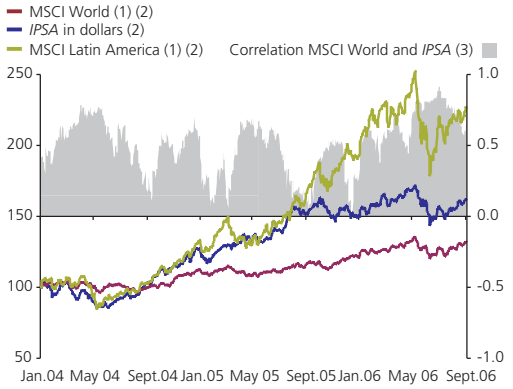


(*) August data provisional.

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

Figure II.10

Chilean, Latin American and world stock markets



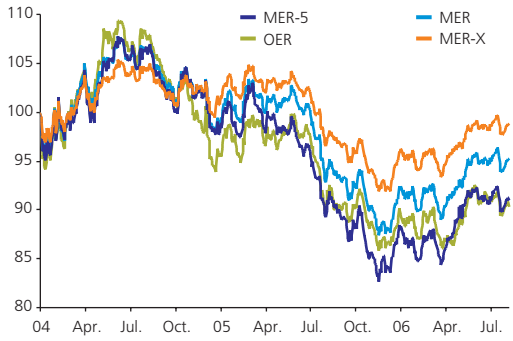
(1) Morgan Stanley Capital International share index
(2) Index 2 January 2004=100.
(3) Percent, 40-day moving window.

Sources: Central Bank of Chile and Bloomberg.

Figure II.11

The nominal exchange rate (*)

(index 2 January 2004=100)



(*) For details, see glossary.

Source: Central Bank of Chile.

with similar indices abroad. After a general drop from May to June, reflecting uncertainty about US monetary policy, this changed to reflect expectations that external interest rates would rise more slowly. Even so, they still haven't returned to this year's peaks. Recent increases in the local market have been driven by solid results from firms. Overall, share prices (measured by the selective price index, *IPSA*) fell 1.8% in pesos and 5.7% in dollars since the previous *Monetary Policy Report*, to accumulate rises of 12.1% and 7.6%, respectively (figure II.10).

The exchange rate

Since the last *Monetary Policy Report*, the peso/dollar parity has depreciated 4%. Between mid-May and late June, the exchange rate rose significantly, to around 550 pesos per dollar. The peso then held relatively steady, unlike currencies such as the Brazilian real, which appreciated. More recently, the exchange rate has remained at around 540 pesos per dollar, coinciding with expectations for lower external inflation and a perception that the US economy has slowed down further, along with greater uncertainty about the performance of the global economy, which particularly affected emerging economies' financial markets (table II.2). In multilateral terms, the peso also depreciated after the previous *Report*: by 4% in the case of the MER, 4.5% for the MER-5 and 3.2% for the MER-X (figure II.11).

By August, the RER had reached 94.2 and the RER-5 83.3, up 6% and 6.2% from April, respectively. Using the average for the two weeks prior to the closing date for figures included in this *Report* as a reference, it is estimated that the real exchange rate is consistent with long-term fundamentals. Despite the fact that the terms of trade are significantly higher than they should be in the long term, the economy's ability to save most of this temporary gain (reflected in the current account surplus) supports this evaluation. Thus our methodological assumption is that toward the end of the usual projection horizon, the real exchange rate will be rather similar to where it stands today.

Table II.2

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

(OER: pesos per US dollar, monthly average; MER, MER-5 and MER-X: 2 January 1998=100; RER and RER-5: 1986=100) (1)

	Apr. 06	May 06	Jun. 06	Jul. 06	Aug. 06	Sept. 06 (2)
OER	517.33	520.79	542.46	540.62	538.53	538.51
MER	99.76	101.79	104.85	104.98	105.11	105.20
MER-5	125.38	129.48	133.88	133.21	133.25	133.24
MER-X	96.04	97.87	99.94	100.14	100.35	100.43
RER (3)	88.83	90.81	93.82	94.02	94.18	
RER-5 (3)	78.41	81.28	83.68	83.28	83.30	

(1) For definition, see glossary.
(2) Average as of 5 September.
(3) Provisional figures.

Source: Central Bank of Chile.

Box II.1: Real neutral interest rate – new information

The gap between the real monetary policy interest rate and the real neutral interest rate (RNIR) determines the degree of expansion or stimulus provided by monetary policy. Despite the RNIR's importance, there is no single definition, since this depends on the type of analysis. The most common ones include: (i) the real interest rate compatible with full employment or the closure of output gaps, which is equivalent to the real interest rate coherent with a flexible-price equilibrium in a macroeconomic model; and (ii) the risk-free interest rate in the steady state of a growth model.[1]/

World markets have seen clear declines in interest rates compared to the 1990s and earlier in this decade[2], which in turn has pushed RNIR estimates down. This has been confirmed by central bank discourse and a variety of academic studies[3]. Chile has also experienced this, with the current estimation for the RNIR range being lower than previously calculated (table II.3).

In practice, the RNIR is an unobservable variable that changes over time. Central banks use different methods to obtain an approximate range for its value, which can basically be grouped as follows: (i) RNIR based on economic theory; (ii) RNIR implicit in financial documents; (iii) RNIR based on a statistical analysis of macroeconomic data.

For the first, two main paradigms stand out. The first is that RNIR is estimated using concepts applicable to an economy that is completely open to financial flows, such as the uncovered international interest parity model, and second, a closed economy using a marginal substitution rate in consumption to determine the return on a risk-free asset, as per Lucas (1978), developed by Campbell and Cochrane (1999) for utility functions using consumption habits. In the first case, depreciation expected for the Chilean peso is added to the relevant external interest rate (which in Chile's case is assumed to be that of the US), a country risk premium and an exchange rate risk premium. In the second, based on a theoretical utility function, using appropriate values for parameters, the neutral interest rate and expectations for per capita output growth are compared. This model differs from the traditional growth model without uncertainty in that the total GDP growth rate provides the lower limit for the RNIR[4].

The rate implicit in financial documents is the one reflected by market expectations according to the interest rate observed assuming arbitrage. In this case, the future short-term interest rate implicit in the five- and ten-year BCUs is calculated, as per Bomfim (2001). This can also be obtained using a statistical ratio that assumes that the difference between the short- and long-term interest rate is an unobserved premium. By assuming certain stochastic processes for these rates and the premium, the short-term and long-term neutral rates can be estimated.

The third method is based on a semistructural macroeconomic model using a Kalman filter to jointly estimate the RNIR and another unobservable variable such as potential GDP. A structure with two observation equations is used: one aggregate demand and a Phillips curve. Both equations depend on the output gap and the rate gap. Stochastic processes for unobserved variables are then proposed to complete the model.

Results suggest that the current range estimated for RNIR (2.4% to 3.8%) is less than reported in May 2002 (3.5% to 5.1%) (table II.3). One reason for this difference is that the prevailing international conditions involve lower rates, which reduce the estimated parity rate. Probably associated with this, the yield curve on local financial papers today is lower than in 2002, pointing to a lower equilibrium rate. Methodological variations could also explain differences. Examples involve including uncertainty in a consumption growth model, unlike the traditional neoclassical model, and the use of a

Table II.3

Alternative estimates for the neutral interest rate
(percent)

Model	Real neutral interest rate (2nd quarter. 2006)
1. Rate parities using US Fed Fund	2.4 a 3.3
2. Rate parities using neutral real rate for the US	3.1 a 3.5
3. Model based on consumption	3.2 a 3.7
4. Forward curve (Bomfim, 2001)	2.85
5. Forward curve (statistical model)	3.31
6. Semistructural model	3.75

(*) Estimated ranges for the first three models are the result of different assumptions regarding calculation parameters implicit in these models. The next three are statistical estimations reporting only a single, specific estimation.

Source: Central Bank of Chile.

[1]/ A previous discussion of relevance and other definitions for the neutral rate can be found in the May 2002 *Monetary Policy Report*, pp. 41-42.

[2]/ The fall in the equilibrium interest rate in Europe is attributed to a drop in productivity growth and low population growth rates, among other factors (ECB, 2004).

[3]/ Garnier and Wilhelmsen (2005), ECB (2004) and Clark and Kozicki (2005), among others.

[4]/ The inclusion of uncertainty yields rather lower estimates. This is one of the main differences between those reviewed here and those considered in May 2002.

III. Aggregate demand

Table III.1

Aggregate demand

(weight in GDP, real annual change, percent)

	Share	2005					2006	
	2005	I	II	III	IV	Year	I	II
Domestic demand	105.8	12.3	12.0	11.5	10.1	11.4	9.0	7.7
GFCF	29.2	27.2	26.5	26.5	19.7	24.7	11.0	2.8
M&E	14.6	48.5	43.3	48.6	36.4	43.6	16.5	0.2
C&O	14.6	13.5	12.7	9.5	5.8	10.2	6.4	5.4
Other	76.7	7.6	7.4	6.8	6.7	7.1	8.2	9.6
Private consumption	64.6	7.7	8.1	8.1	8.6	8.2	7.6	7.8
Government consumption	10.7	5.6	4.8	3.8	3.8	4.5	6.4	4.6
VE (%GDP) (*)		1.8	1.7	1.6	1.4		1.5	2.0
Goods and services exports	35.0	6.6	8.2	4.3	5.3	6.1	6.0	3.4
Goods and services imports	40.9	23.1	22.1	20.0	17.0	20.4	15.8	12.0
GDP		6.6	7.2	5.8	5.8	6.3	5.3	4.5

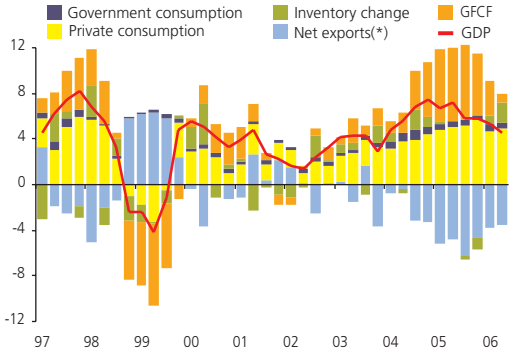
(*) Inventory change over GDP accumulated in four quarters.

Source: Central Bank of Chile.

Figure III.1

Contribution to GDP growth

(annual change, percentage points)



(*) Exports of goods and services minus imports of goods and services.

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 their probable effects on activity.

Aggregate demand

As forecast, in the first half of 2006, domestic demand continued to grow more slowly, with real annual growth falling from 12.3% in the first quarter of 2005 to 7.7% in the second quarter of 2006. Domestic demand was particularly influenced by gross capital formation, especially the machinery and equipment component. This last went from solid growth of 43.6% in 2005 to just 0.2% in the second quarter of 2006, at the same time as investment to GDP ratios remained at historic heights (table III.1 and figure III.1).

During the second half of the year, the annual growth rate for domestic demand should continue to decline, in combination with a temporary drop in mining sector inventories, a high basis for comparison for gross fixed capital formation, and stable growth in consumption.

Consumption and inventories

As in 2005, in the first half of 2006, private consumption grew at annual rates of about 8%. The resistance of this component of domestic demand to high prices of oil and derivatives was noteworthy. The rise in the price of imported energy over the previous year was estimated to have reduced private disposable income by about 1.5% in 2006[1]. This is one percentage point higher than estimated last May. Consumption decisions have nonetheless been favored by lower unemployment and good conditions in the credit market.

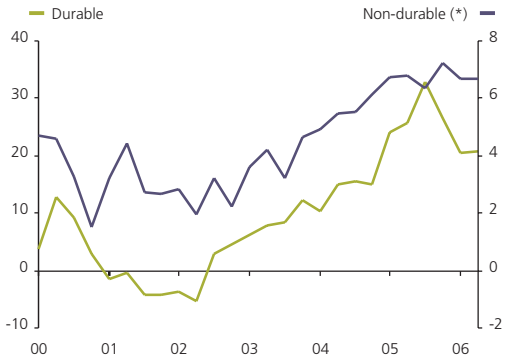
By component, durable consumption continued to stand out, rising by an annual 20.7% in the first half of 2006 (27.4% in 2005, figure III.2). This significant accumulation of durable goods led to a quick correction to the ratio of spending on durable to non-durable consumption, which remained relatively low from late 1999 to early 2004 (figure III.3).

[1]/ This takes into consideration the upward pressure from the higher WTI oil price on the oil import unit value index and the latest available estimate of volumes.

Figure III.2

Private consumption

(real annual change, percent)



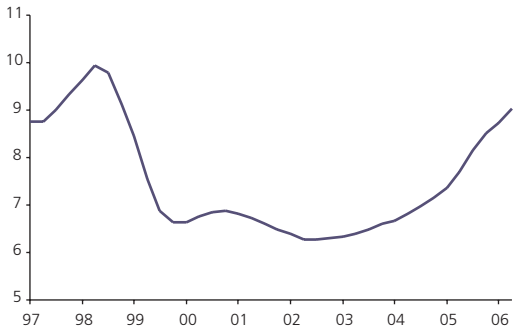
(*) Includes non-durable goods and services.

Source: Central Bank of Chile.

Figure III.3

Durable to non-durable consumption

(moving annual average, percent)

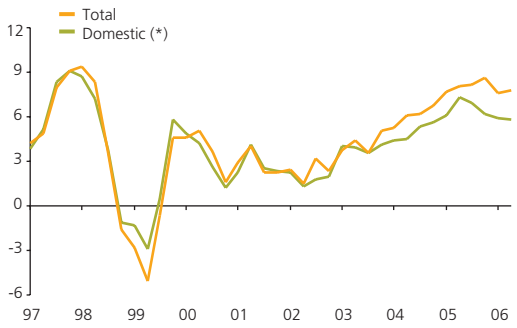


Source: Central Bank of Chile.

Figure III.4

Private consumption

(real annual change, percent)



(*) Consumption of domestic goods.

Source: Central Bank of Chile.

This meant that imports also accounted for a larger share of consumption, since almost all durable goods consumed are imported. Recently, imports' share of non-durable consumption goods also increased. As a result, growth in consumption of domestic non-durable goods fell from 7.3% in the second quarter of 2005 to 5.8% in the same period of 2006 (figure III.4). This trend was favored by competitive advantages enjoyed by some markets of origin.

Different measures for consumer expectations showed a significant decline in the second quarter of 2006, which coincided with a weaker performance from the economy. However, this decline was greater than would be expected given trends in fuel prices and unemployment, so there are reasons to believe expectations may soon improve. To date, these do not seem to have affected households' consumption decisions.

In real terms, private disposable income, deflated using the CPI, should grow 3.7% in 2006 (box III.1). This increase was less than expected for the GDP, although the terms of trade should rise 24%, since income remitted abroad has risen substantially. Credit access, meanwhile, has also driven consumption. This component is expected to continue to perform strongly, although durable consumption's importance may fade somewhat.

In the moving year ending in the second quarter of 2006, accumulated inventories reached 2% of GDP measured at constant prices, well above late 2005 and the first quarter of 2006. In the second quarter, accumulated inventories rose due to consumer goods imports. In any case, as some indicators (*IMCE*) already suggest, in the second half inventories are projected to decline significantly, since they will have to cover the drop in mining production, to fulfill contracts for mineral exports.

Gross fixed capital formation (GFCF)[2]

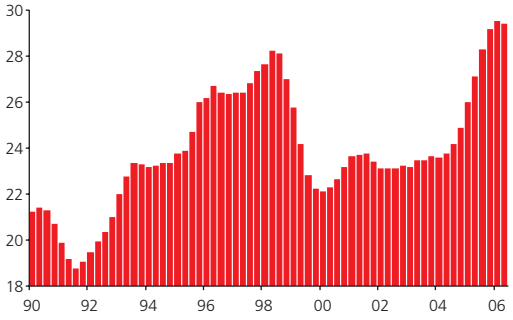
In the first half of 2006, gross fixed capital formation returned to normal more quickly than forecast, after relatively substantial capital stock accumulation in the second half of 2005. Thus, after rising 24.7% in 2005, it rose 11% annually in the first quarter of 2006 and 2.8% annually during the second, led mainly by machinery and equipment. For the moving year ending in the second quarter of 2006, this took fixed investment to 29.4% of GDP at 1996 prices, a record high, and 21.2% at current prices, somewhat down from the previous quarter (figure III.5). For the rest of the year, as a result of a high basis for comparison, annual GFCF growth should continue to show a decline, perhaps even to negative rates in the fourth quarter, but within a context of high levels. In fact, most recently, there has been some recovery in machinery and equipment imports (figure III.6). Further down the road, GFCF is expected to resume growth.

[2]/ In 2005, GFCF included the following: construction and other works (50%) and machinery and equipment (50%). In 2003, the construction and other works component, in turn, included building (56%) and engineering and other works (44%).

Figure III.5

Gross fixed capital formation (GFCF)

(percent of GDP in 1996 pesos, moving year)

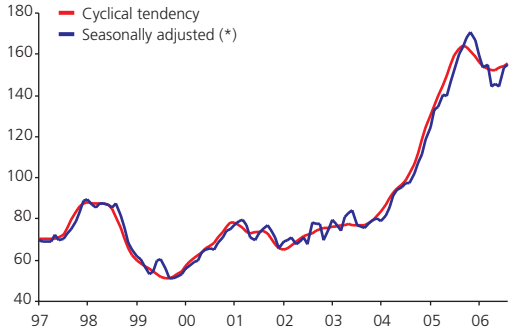


Source: Central Bank of Chile.

Figure III.6

Capital goods imports

(index quantity 2004=100)



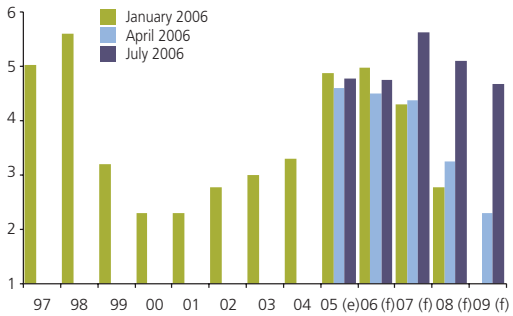
(*) Moving quarterly average.

Source: Central Bank of Chile.

Figure III.7

Investment list (*)

(US$ billion)



(*) Minus telecommunications and real estate.
(e) Estimate.
(f) Projected.

Source: *Corporación de Desarrollo Tecnológico de Bienes de Capital.*

Annual growth of the construction component has tended to decline slightly this year. Building indicators remained strong in the first half, but more recently new housing market indicators have become less positive. Sales of new housing in Greater Santiago have fallen and the number of months necessary to sell off existing stock has increased.

The engineering works component, the CBC inventory[3] for July saw investment levels estimated for 2006-2009 rise. This was particularly apparent from 2007-2009, promising a much stronger performance than assumed in April, even controlling for the usual corrections to intentions to invest that occur as periods go by, and with a more stable profile over time (figures III.7 and III.8). Among these corrections, higher investment in the energy sector stands out. In 2006, the main changes reflected modifications to the programming of already defined projects, which primarily affected the year-on-year profile but not overall growth in investment over the whole period. On mining projects, the difference compared to previous high copper price cycles is that the current one has not come with a significant rise in sector investment (figure III.9).

Investment prospects should also be favored by larger flows of corporate liquidity and broad access to financing in good conditions. In the second quarter, profitability[4] of private corporations filing *FECU* reports was better than in recent years: 21.3% for the moving year ending in the second quarter of 2006, led by mining (figure III.10). Excluding this sector, profitability reached 12.9%, also up from previous quarters and similar to peaks achieved in late 1995 and early 1996.

Fiscal policy

Through June 2006, total spending by Central Government had reached 6.2% of GDP, accumulated saving[5] 9.3%, all-time record highs for both. Revenues were up thanks mainly to taxes –paid by the ten largest private mining firms– and gross copper. Gross debt of Central Government fell from 7.5% of GDP in December 2005 to 5.9% in June 2006.

In budgetary terms, as of July 2006 the annual surplus of the Central Government stood at 6.6% of GDP, saving at 9.6% of GDP, in a context of higher than budgeted revenues and spending as budgeted. Thus, revenues were up to 72.3%, while spending rose to 54.3%. Public investment in particular rose at rates similar to those of the past, as did the investment component (41.9%) and capital transfers (59.8%). Thus, total expenditure rose more than GDP, at a real rate of almost 6%.

[3]/ The investment list prepared by the *Corporación de Desarrollo Tecnológico de Bienes de Capital*.

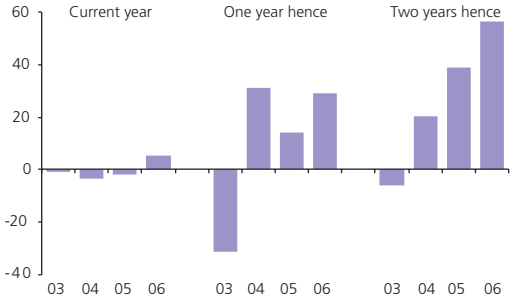
[4]/ Measured as profit from the exercise net taxes on capital.

[5]/ Difference between total revenues and expenditures (budgetary and extra-budgetary).

Figure III.8

Investment list: corrected in April and July of each year (*)

(percent)



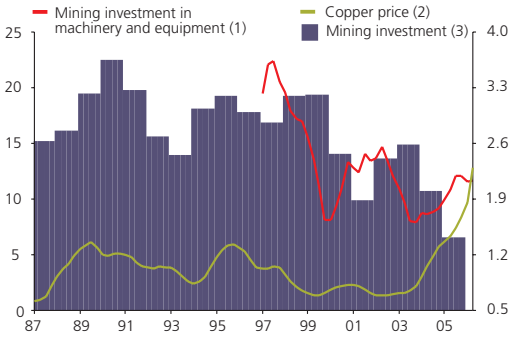
(*) Minus telecommunications and real estate.

Source: *Corporación de Desarrollo Tecnológico de Bienes de Capital.*

Figure III.9

Copper price and mining investment

(US$/lb, percent)



(1) As a percentage of mining GDP. Moving year ending in the respective quarter.

(2) Moving year ending in the respective quarter.

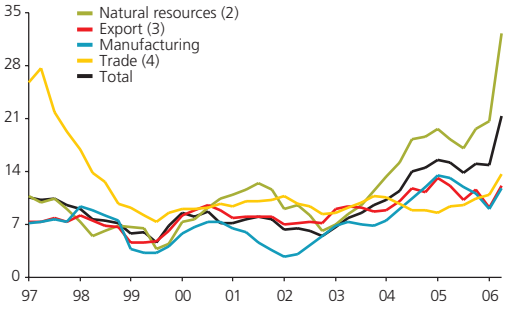
(3) As a percentage of GDP. Moving 3-year window, ending in the respective year.

Sources: Central Bank of Chile and *Codelco.*

Figure III.10

Company profitability (1)

(moving annual average, percent)



(1) Profit for the fiscal year over equity.

(2) Includes electric, forestry, mining, sanitary services and gas.

(3) Includes food, forestry and manufacturing.

(4) Includes retail trade and supermarkets.

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

In light of the new scenario for the copper price for this year and compliance with the structural balance rule, the overall surplus should be well above the 5.3% of GDP estimated by government authorities last June[6]. The new parameters for the 2007 budget are similar to those included in the main scenario used in the previous *Monetary Policy Report*[7].

Exports and imports

During the year, exports by value reached record heights. This largely reflected better prices, particularly for copper, combined with those for wood pulp and fishmeal. The rise in manufacturing shipments, by quantity, was less than in 2005, despite better prices. Agricultural shipments rose in value (price and volume) in the second quarter of 2006, after a first quarter characterized by a modest rise (table III.2).

Import volumes continued to rise more than GDP. At the same time, and in line with the above, capital goods imports returned to normal more quickly than expected. Consumer goods imports remained more dynamic, with fuel purchases making a significant contribution in the second quarter. A significant rise in intermediate goods continued to reflect mainly, although not solely, oil purchases. Altogether, the annual balance of trade accumulated through July rose again, to a historic peak of US$17.5 billion.

Table III.2

Foreign trade

Exports

	Value (US$ million)	Annual change, percent											
		Total			Mining			Manufacturing			Agriculture		
		value	Vol.	Price	value	Vol.	Price	value	Vol.	Price	value	Vol.	Price
2005 Year	40,574	25.9	2.9	22.4	35.6	-3.1	40.0	17.0	11.1	5.3	4.8	4.6	0.2
2006 I	13,110	39.7	8.2	29.0	61.6	7.1	50.9	15.8	9.3	6.0	3.4	0.6	2.7
II	14,676	45.3	0.9	44.0	66.5	-5.6	76.3	17.6	6.1	10.9	19.7	9.9	9.0
Jul.	5,558	68.7			96.0			34.0			20.4		

Imports

	Value (US$ million)	Annual change, percent											
		Total			Mining			Capital			Intermediate		
		value	Vol.	Price	value	Vol.	Price	value	Vol.	Price	value	Vol.	Price
2005 Year	32,637	31.1	20.4	8.8	25.9	22.7	2.6	55.8	52.3	2.3	27.0	12.2	13.1
2006 I	8,990	23.0	14.4	7.6	10.9	6.0	4.7	18.4	17.5	0.7	26.2	13.7	11.0
II	9,369	18.6	11.0	6.9	31.6	25.4	4.9	-0.5	-2.3	1.8	21.7	11.6	9.1
Jul.	3,099	8.4			14.0			-2.7			10.6		

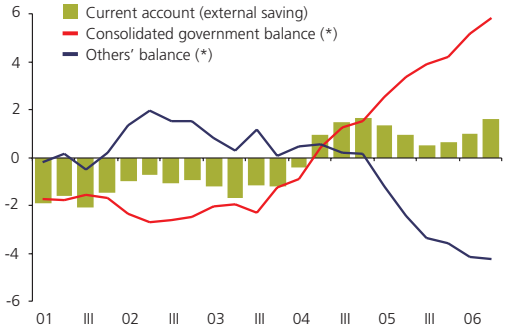
Source: Central Bank of Chile.

[6]/ For more analysis, see the budget division, *Dirección de Presupuestos* (2006).

[7]/ The independent expert committees surveyed as part of preparing the 2007 budget estimated the reference price for copper at US$1.21 per pound, while trend GDP was estimated at 5.3%.

Figure III.11

Current account and consolidated government
(percent of GDP, moving annual average)



(*) Gap between saving and investment.

Sources: Central Bank of Chile and Ministry of Finance.

The balance of payments current account closed the first half of 2006 with a surplus totaling US$2.385 billion, 1.8% of GDP for the moving year ending in the second quarter. The result for the second quarter reflected a surplus in the goods and transfer accounts, worth US$5.892 billion and 1.202 billion, respectively. These were partially offset by deficits in the income (-US$5.474 billion) and services (-US$275 million) accounts. Results in the goods and income accounts reflected the copper price during the first half, which brought significant rises in values for exports and remittances for foreign direct investment. The current account should end 2006 with a surplus of 3.6% of GDP, up from May forecasts. A decline in private saving should be noted, which was more than offset by stronger public saving, without requiring external saving for its financing (figure III.11).

Box III.1: **Measuring national income**

National income (IN) is important to understanding and predicting changes in variables such as consumption, saving and investment. This box describes how the Central Bank calculates nominal and real IN, focusing on the deflators used to build the real IN series.

IN includes income and transfers from and to points abroad. Real gross disposable national income includes the gains or losses in income arising from changes in the terms of trade for imported and exported goods and services. This is the effect of the terms of trade ratio (EFTDI).

The official publication of real IN figures is not usual practice among statistics agencies. Moreover, there is no consensus on the most suitable deflators for expressing income and transfers abroad in real terms, along with gains and losses in purchasing power for the EFTDI. Thus, the choice of deflators must be made by each country's statistical authorities.

In Chile, the Central Bank calculates real IN using some methodological suggestions from the United Nations[1]. The EFTDI is constructed as the difference between the surplus (deficit) in the nominal trade balance, corrected using the deflator for exports or imports, and the 1996 trade balance in pesos. This reflects the resources left (or lacking) after financing the balance of trade in real terms. As a result, this measure quantifies the gains or losses to income due to fluctuations in the terms of trade[2]. Payments and transfers abroad, PFext and TRext, are deflated using the goods and services import price index, Pm, while payments and transfers from abroad, PFnac and TRnac, are deflated using the goods and services export price index, Px. This assumes that the income received from abroad essentially reflects income from exports and income paid abroad and involves the implicit assumption that income could have been used to import more goods and services. Finally, the nominal GDP is deflated using the GDP deflator, DEFGDP. Thus, real disposable gross national income (INBDR) is defined as:

$$INBDR = \frac{PIB}{DEF_{PIB}} + \frac{PF_{nac}}{Px} - \frac{PF_{ext}}{Pm} + \frac{TR_{nac}}{Px} - \frac{TR_{ext}}{Pm} + EFTDI$$

In 2006, the INBDR was forecast to grow 3.3% annually, down from 9.1% in 2005. Lower growth reflected several factors. On one hand, real GDP in 2006 was expected to grow less than the previous year, combined with an increase in income remittances abroad (due to mining returns). This income, meanwhile, was deflated using the Pm, which grows less than the Px and the DEFGDP. This way, net factor payments in real terms negatively affect the INBDR and are not offset by the positive effect of the EFTDI.

The Central Bank of Chile is currently reviewing its method and any changes will be implemented from March 2007 onward, to coincide with the change in the base year used in national accounts referring to 2003. As a reference, however, it should be noted that as an indicator for prices representing demand for goods and services and an expenditure deflator for payments and transfers[3], the INBDR should grow 9.8% in 2005 and 5.2% in 2006.

An alternative measure that is useful in macroeconomic analysis of a specific moment is nominal private national income deflated using the CPI, because it is more directly linked to the main private aggregates. This is obtained by subtracting total government income from national income, both deflated using the CPI. This measure is thought to have risen 3.5% in 2005 and 3.7% in 2006[4].

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[1]/ In particular, recommendations for the national accounts system (1993) from the United Nations.

[2]/ In practical terms, EFTDI represents:

$$(1) EFTDI\ (X > M) = \frac{(X - M)}{Px} - (X_{\$1996} - M_{\$1996}) = \frac{(X_{\$1996}\ Px - M_{\$1996}\ Pm)}{Px} - (X_{\$1996} - M_{\$1996}) = M_{\$1996}\left(1 - \frac{Pm}{Px}\right)$$

$$(2) EFTDI\ (M > X) = \frac{(X - M)}{Pm} - (X_{\$1996} - M_{\$1996}) = \frac{(X_{\$1996}\ Px - M_{\$1996}\ Pm)}{Pm} - (X_{\$1996} - M_{\$1996}) = X_{\$1996}\left(\frac{Px}{Pm} - 1\right)$$

[3]/ The EFTDI calculation is not modified.

[4]/ Meanwhile, total national income deflated using the CPI should rise 7.7% in 2005 and 10.7% in 2006.

Box III.2: **The Dutch syndrome-international experience**

The so-called Dutch syndrome (DS) or Dutch Disease refers to events following the discovery of natural gas reserves in the North Sea in the late 1950s, which brought a strong contraction to Holland's manufacturing exports, following an abrupt real currency appreciation.

The recent rise in the copper price has raised concerns in Chile about the potential effects of the copper boom. From the perspective of economic policy, we should be asking how to manage this bonanza in the terms of trade to minimize unwanted impacts. In this case, an important share of this higher copper price is expected to disappear in the long term. Hence the validity of an analysis in terms of "bonanza".

Theoretically and empirically, the existence and effects from DS are controversial. Static theoretical models yield different results, depending on certain key assumptions. In the simplest and best known model (Corden and Neary, 1982), an export boom in the natural resource sector generates foreign exchange appreciation and a contraction in the industrial sector[1]. However, under certain conditions—capital moving between sectors and a manufacturing sector that is more capital intensive than the non-tradable sector—the implications can be different.

One question not answered by the literature reviewed above is the importance of the contraction in the manufacturing sector to long-term growth. The first studies analyzing this question assume that the manufacturing sector enjoys economies of scale based on a learning-by-doing process. In that case, there would be a negative impact on long-term growth. However, more recently these implications have been challenged. The net impact on economic growth depends on the magnitude of the learning-by-doing effects on different economic sectors and the possibilities of absorbing these gains between sectors (Torvik, 2001).

Nor is the empirical evidence conclusive regarding the impact of a natural resource boom. If we focus on countries that have experienced significant improvements to their terms of trade, due to an increase in the export price of a natural resource, results vary. Some studies of oil exporting countries suggest evidence of DS (Gelb, 1986), while others show that despite foreign exchange appreciation, there is no evidence of a contraction in other tradable sectors (Spatafora and Warner, 1999).

Case studies focusing on the policies applied to manage abundance in natural resources offer some useful lessons. Norway, Botswana and Indonesia have being particularly successful in managing income from natural resources. In contrast, Mexico and Nigeria have seen booms bring the symptoms typical of DS (table III.3).

According to these studies, some policies help manage booms better. First, the role of fiscal policy is always crucial. Saving part of the extraordinary income helps to avoid expenditures that will become hard to cut down once the boom has passed. Fiscal prudence is vital to minimize the temptations to spend on low-yield projects. Moreover, fiscal saving reduces pressures leading to foreign exchange appreciation[2]. Second, several authors argue in favor of a foreign exchange policy that avoids significant local currency appreciation. In the case of countries with a fixed exchange rate, this involves devaluations and reserve accumulation. Third, successful economies are influenced by the quality of their institutions. Where they minimize rent-seeking activities, the abundance of these resources does not generate DS symptoms and is friendlier to growth.

One type of policy that usually appears in the discussion is stabilization funds, such as those created in Norway and Venezuela, which seek to avoid temporary positive price shocks or save the wealth from a resource that will run out in time for future generations. Davis et al. (2001) reviewed the experience of these stabilization funds. The key element was how these funds interacted with the rest of fiscal budgetary management. There is no evidence that they contributed to better fiscal management, since countries with funds and prudent fiscal management had both prior to the boom. The fund does not resolve the problems implicit in lack of fiscal discipline, since the government could go into debt and spend without "touching" the fund. Nor are they immune from the problems of rent seeking.

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[1]/ The literature does not provide a more in-depth discussion of the fact that the reallocation of resources required because of the boom has an uneven impact on the wellbeing of groups, which may either suffer from or be benefited by this, as is also the case with policies proposed to cushion the comparative price changes. Bravo-Ortega and De Gregorio (2006) include a discussion of implications of abundant natural resources on wellbeing in their study.

[2]/ It is important to note that to avoid foreign exchange appreciation, these resources must be saved in external markets, as has occurred with Norway (see Céspedes and Rappoport, 2006).

In conclusion, although experiences range widely, suitable economic policies and good management of extraordinary gains seem vital to generate growth in economies with abundant natural resources. In this sense, Chile seems to be well positioned with regard to other economies that have experienced positive shocks in their terms of trade. On one hand, the structural surplus rule saves temporarily high public income due to the copper price. On the other, more than half of the investment in copper is foreign owned, with an important share of higher profits going abroad. The combination of these factors has limited the copper boom's impact on domestic expenditure and (through this channel) on the real exchange rate, controlling its impact on non-copper tradable sectors.

Table III.3

Case analysis

Author	Country	"The Dutch syndrome"	Role of policies and institutions
Røed Larsen (2004)	Norway	No. The Norwegian economy enjoyed sustained growth, although the rate slowed in the late 1990s.	- Fiscal discipline, foreign debt payment, fund invested abroad (avoided currency appreciation). - Economic and political institutions prevent rent seeking.
Sarraf and Jiwanji (2001) Iimi (2006)	Botswana	No. One of the countries with the highest economic growth worldwide in recent decades.	- Avoid excessive expenditure increase (reserve accumulation and fiscal surplus). - Avoid real appreciation (reserve accumulation). - National development plan to suitably invest these resources. - Solid institutions and governance.
Auty and Gelb (1986)	Trinidad and Tobago	Yes. Strong contraction in non-oil tradables, even worse than experienced by other oil-exporting countries.	- Inappropriate fiscal policy. - Currency appreciation.
Kamas (1986)	Colombia	Ambiguous. Non-coffee exports contracted but economic growth held.	- Currency appreciation. - Belt-tightening fiscal and monetary policies.
Looney (1991)	Kuwait	Yes. Higher oil price hurt manufacturing and agriculture output.	- No emphasis on policy discussion.
Conway and Gelb (1988)	Algeria	No evidence of a significant impact on non-oil tradable sectors.	- No emphasis on policy discussion.
Gavin (1993), Sala-i-Martin and Subramanian (2003)	Nigeria	Yes. Extensive evidence that tradable sector (agriculture and manufacturing) output plunged. Per capita output also fell.	- Temporary income did not go to accumulate external assets and/or finance investment in the export sector, but rather low-yield investments. - Excessive fiscal expenditure that was difficult to reduce once revenues returned to usual levels. - Deficient institutions.
Usui (1996)	Indonesia	No. Economic growth during the boom contrasted strongly with the experience of other oil countries.	- Devaluation. - Fiscal surplus.
Usui (1997)	Indonesia and Mexico	Mexico: Yes. Indonesia: No.	- Differences reflected three main factors: (i) fiscal policy, (ii) external borrowing, (iii) foreign exchange policy.

Source: Álvarez and Fuentes (2006).

IV. Activity and the labor market

Table IV.1

Gross Domestic Product
(real annual growth, percent)

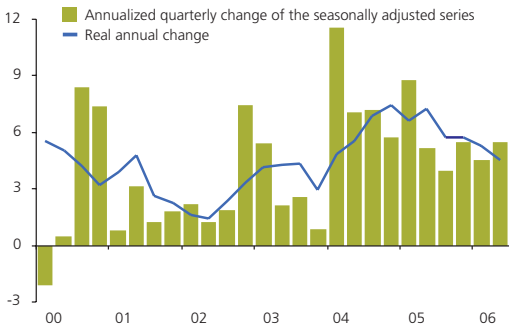
	Weight	2005					2006	
	2005	I	II	III	IV	Year	I	II
Agriculture-livestock and forestry	4.5	4.9	8.0	6.7	2.7	5.7	-0.1	4.5
Fisheries	1.3	-5.0	-6.6	-4.0	6.9	-2.0	3.5	-3.4
Mining	7.4	4.6	-2.2	-2.0	0.7	0.2	0.8	4.2
Manufacturing	15.8	3.7	7.7	4.0	5.5	5.2	6.7	1.9
EGW	2.9	5.2	5.6	8.6	7.9	6.8	7.0	8.3
Construction	8.1	12.8	12.1	9.1	5.7	9.8	6.2	5.3
Wholesale and retail trade (1)	11.0	8.8	10.6	8.2	6.5	8.5	5.7	5.3
Transport	4.6	7.5	7.9	6.4	6.9	7.2	4.7	3.6
Communications	3.4	9.7	10.9	8.8	10.3	9.9	12.8	10.2
Natural resources (2)	11.7	3.2	-0.9	0.4	3.1	1.5	2.7	4.3
Other	80.5	6.4	7.6	5.6	5.4	6.2	5.1	4.0
GDP total (3)		6.6	7.2	5.8	5.8	6.3	5.3	4.5

(1) Includes restaurants and hotels.
(2) Natural resource sectors (mining, fisheries and EGW).
(3) Total GDP is the sum of natural resource GDP, other GDP, net VAT collected, import duties, minus bank charges.

Source: Central Bank of Chile.

Figure IV.1

Gross Domestic Product
(real annual growth, percent)



Source: Central Bank of Chile.

This chapter reviews changes in GDP, based on sectors of origin and trends in employment.

Total GDP

Although output growth in the first half was similar to forecasts in the previous *Monetary Policy Report*, it nonetheless rose somewhat more in the first quarter (5.3% annually) and somewhat less in the second (4.5% annually). Projections for the first quarter were corrected upward as new information on wine production came in, affecting both the agricultural and manufacturing sectors[1]. Growth in the second quarter was less than the first, primarily reflecting the performance of manufacturing and partly offset by more growth from EGW and mining. On growth velocity, a review of data from the first quarter resulted in a moderation of the slowdown estimated for that period in the previous *Monetary Policy Report*. This also reduced the turnaround forecast for the second quarter, which was rather less than initially projected (table IV.1 and figures IV.1 and IV.2).
For the second half of 2006, the information available suggested average GDP would remain similar to the first half of the year. After this evaluation took place, figures for the first half and specific factors affecting large-scale mining that reduced copper production became available. Aside from these specific factors, activity was expected to pick up less than forecast in May, taking activity during the year to somewhere between 4.75% and 5.25%.

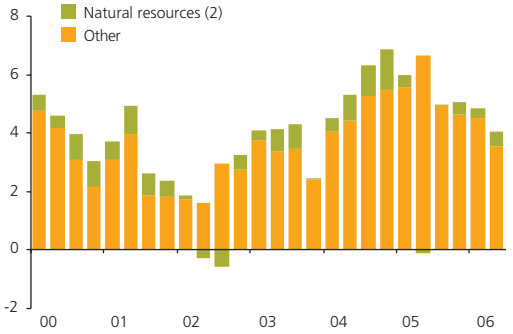
Natural resource GDP

In the first half of 2006, natural-resource-related sectors overall grew less than aggregate activity: 2.7% annually in the first quarter and 4.3% in the second. In the first half, EGW posted annual rates of change greater than their average in 2005, reflecting more growth in hydroelectric generation. After growing 3.5% during the first quarter, the fishing sector fell by around 3% annually in the second quarter, reflecting a reduction in extractive fishing. Mining grew 4.2% annually in the second quarter, after a weak average in 2005 and the first quarter of this year. Lower grade ores and some problems specific to medium-scale mining were behind the poorer performance during the first quarter of 2006 (figure IV.3). In the second half, partial indicators suggested that overall these sectors would expand less than in

[1]/ According to the usual policy of reviewing Quarterly National Accounts, on 23 August a new estimate for GDP for the first quarter of 2006 was published.

Figure IV.2

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



(1) Total GDP is the sum of natural resource GDP, other GDP, net VAT collected, import duties, minus bank charges.
(2) Sectors: mining, fisheries and EGW, which accounted for 12% of GDP in 2005.

Source: Central Bank of Chile.

Figure IV.3

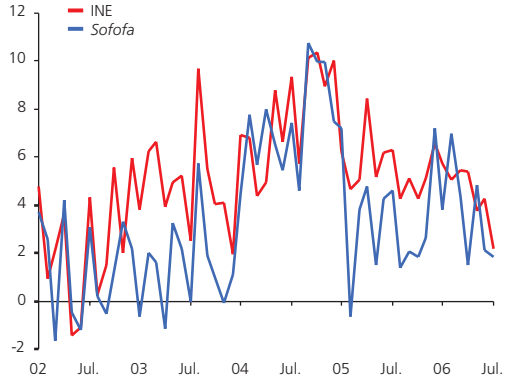
Mining (*)
(moving quarterly average, index year 2000=100)

(*) Seasonally adjusted series.

Sources: Central Bank of Chile and National Statistics Bureau.

Figure IV.4

Manufacturing output
(real annual growth without calendar effect, percent)



Sources: National Statistics Bureau (INE) and *Sociedad de Fomento Fabril (Sofofa).*

the first quarter. In particular, the mining sector was expected to fall short of previous projections, largely due to technical problems and downtime associated with labor bargaining. However, this reduction in production should be temporary.

Other GDP

In the first half of 2006, activity in other sectors overall was lower than in 2005 (down from 6.2% in 2005 to 4.6%). For the second half of this year, other GDP was forecast to perform more strongly.

In the second quarter, both annual growth and the rate of expansion of manufacturing activity were lower than in 2005 and the first quarter of 2006. This partly reflected weaker performances from specific sectors, postponements and changes in production lines, and the calendar effect of two fewer days compared to the same quarter in 2005 (figure IV. 4).

It is also possible that the impact of higher energy costs on manufacturing, due to both the higher oil price and restrictions on natural gas, may have been greater than forecast. Despite solid results in recent quarters, operating margins for the manufacturing sector obtained from the *FECUs* have fallen significantly in recent years, more than apparent at operating margins, and could reflect higher energy costs (figure IV. 5).

Toward year's end, manufacturing should perform more strongly than in the second quarter, due mainly to the startup of new pulp plants and the reversion of temporary factors that affected activity during the first half.

This year to date, activity for the wholesale and retail trade grew more than GDP: 5.7% during the first quarter and 5.3% in the second. Although these figures are lower than last year, this mainly reflected a higher basis for comparison, since the quarterly pace of expansion was greater. Growth slowed in the second quarter, primarily due to poor wholesale sales, especially machinery and equipment, as investment returned to normal. In April, the calendar effect, which negatively affected the wholesale component of trade, seems to have been greater than usual.

In the first half of 2006, the construction sector posted annual rates of change similar to those from the last quarter of 2005, but the pace was slowing. This was consistent with the completion of several infrastructure projects that had been prime factors in sector production. The July list of engineering works[2], meanwhile, revealed a change in the calendar for this year, with more activity in the first and last quarters, but no major shift in activity for the period as a whole. Partial measures for activity in the first half remained strong, and were expected to pick up during the second half.

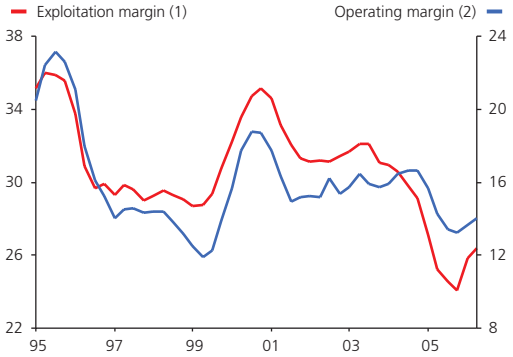
Farming, livestock and forestry activity shifted very little during the first quarter of 2006. It had risen over previous estimates, due to higher production of wine grapes, which brought an upward correction to this

[2]/ Figures from the *Corporación de Desarrollo Tecnológico de Bienes de Capital.*

Figure IV.5

Manufacturing margins

(percent)

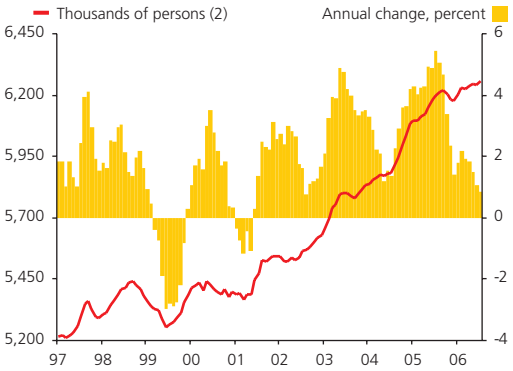


(1) Total sales minus the cost of products sold, over total sales.
(2) Total sales minus the cost of products sold, minus management and sales costs, over total sales.

Source: Superintendency of Securities and Insurance (*FECU*).

Figure IV.6

National employment (1)



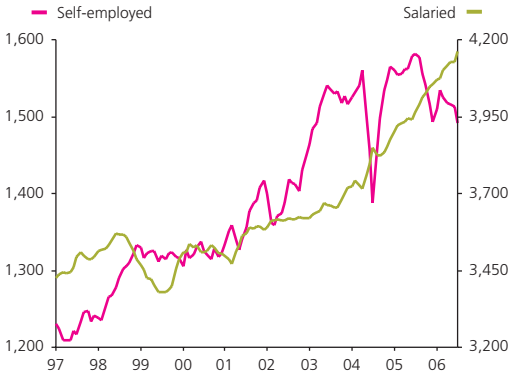
(1) Preliminary series provided by National Statistics Bureau and constructed using the method published on its website (29 August 2006).
(2) Seasonally adjusted series.

Source: National Statistics Bureau.

Figure IV.7

Employment by occupational category (*)

(thousands of persons)



(*) Seasonally adjusted series based on preliminary series provided by National Statistics Bureau and constructed using the method published on website (29 August 2006).

Source: National Statistics Bureau.

sector's activity. In the second quarter, activity rose 4.5%, led by rises in fruit production—especially wine grapes—and livestock. In coming quarters, growth is expected to outdo this aggregate, reflecting a stronger performance from fruitgrowing and livestock.

Other sectors turned in mixed performances in the first half: while communications rose more than in 2005, transportation rose less, probably affected by the performance of sectors using these services, particularly manufacturing. For the second half, both are expected to perform better than during the first half of the year.

Employment

This section's analysis is based on preliminary series from INE, developed using a method announced on its website on 29 August 2006, which involves sample updates and population projections based on the 2002 Census (box IV.1). This means that the current outlook for the labor market has varied somewhat from that of the previous *Monetary Policy Report*. Annual growth in total occupation has fallen in 2006, mainly reflecting trends in self-employment. The seasonally-adjusted unemployment rate for the past two years should also be noted (figure IV.6).

Formal sector employment continued to post strong growth, rising annually from 4% to 5% in the past year, as reported by other sources, among them the Chilean health and safety association Asociación Chilena de Seguridad (figure IV.7). Annual growth of total employment has nonetheless fallen by 0.8% in the moving quarter ending in July, reflecting the creation of some 52,000 jobs between August 2005 and July 2006. Annual growth reached a 12-year high in July 2005 (5.5%). A decline in self-employment growth, which has been falling steadily since mid-2005, is behind this.

The rising trend in formal sector employment is reflected in a recovery in several sectors, particularly construction, since early in the year. Likewise, employment in the wholesale and retail trade and agriculture, which had been depressed from late 2005 to early 2006, has recovered slowly and manufacturing employment, although still bouncing around, has strengthened since last December.

After recovering since May, vacancies remain similar to early in the year, when seasonally adjusted. By August, they had shifted 15% in the previous 12 months, more than in April of last year.

Participation and unemployment

Although it has varied somewhat, the seasonally adjusted labor participation rate remains similar to early in the year, after increasing between September 2002 and mid- 2005, and reversing partially during the second half of last year. Labor participation trends in recent years have mainly been determined by women. Men's participation, meanwhile, has moved around rather aimlessly during the same period (figure IV. 8).

Figure IV.8

Labor participation rate by gender (*)

(percent)

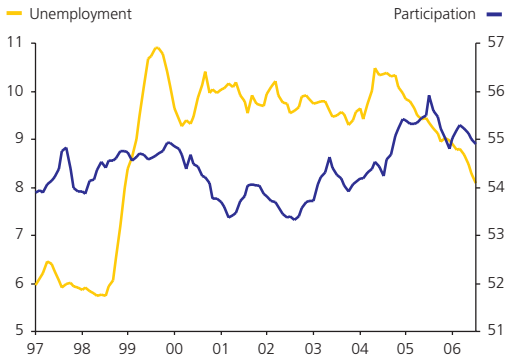
(*) Seasonally adjusted series based on preliminary series provided by National Statistics Bureau and constructed using the method published on its website (29 August 2006).

Source: National Statistics Bureau.

Figure IV.9

Unemployment rate and labor participation (*)

(percent)



(*) Preliminary series provided by National Statistics Bureau and constructed using the method published on its website (29 August 2006).

Source: National Statistics Bureau.

The seasonally adjusted unemployment rate has fallen steadily in the past two years, to 8.1% for the moving quarter ending in July 2006. This reflected both lower growth in the labor force and a decline in the number of unemployed since late 2004 (figure IV.9). By gender and during the same period, seasonally adjusted male unemployment fell 2.9 percentage points versus 1.5% for women.

The unemployment rate reported by Universidad de Chile survey for Greater Santiago stood at 11.1% in June, 0.3 percentage point less than one year earlier. The same source reported a seasonally adjusted unemployment rate for June that was up from March, but still smaller than one year earlier.
In terms of idle capacity within the labor market, new information suggests that the current unemployment rate, which is higher than announced earlier, is slightly up from the average for the past 20 years and is in the upper range of estimated values for the natural unemployment rate. This is consistent with the general diagnosis of idle capacity, as deduced from the pace of output growth, and which, in the main scenario, should close during 2007.

Box IV.1: **New INE employment figures**

Monitoring the labor market forms an essential part of macroeconomic analyses carried out by any central bank, given its impact on inflation. On one hand, trends in the employment and unemployment rates offer indicators of the economy's location in the economic cycle and idle capacity. On the other, evidence suggests that nominal wage changes are inversely correlated with the unemployment rate and that given the level of output, the level of employment determines productivity, thus affecting unit labor costs, one of the main sources of inflationary pressures.

This year, the National Statistics Bureau (INE) changed its national employment survey (*Encuesta Nacional de Empleo, ENE*) to update its sampling framework and selection, and include new population projections, both based on the 2002 population and housing census. This sort of correction is applied every few years to include relevant information from the last census, previously carried out in 1996. Thus, figures published in the first half of this year are not directly comparable to those previously reported. To deal with this problem, INE generated an overlap to smooth the historical series using a statistical model. This box briefly describes the splicing method[1], underlining its main implications for the Central Bank's usual analysis of these figures.

The change in the sampling framework involves updating the national distribution of housing and demographics as identified by the 2002 Census. Implementation of the new sampling framework was apparent in the selection of the new sample, which was gradually included in the *ENE* between January and June 2006, at a rate of one-sixth of the new sample on the date of each month, corresponding to moving quarters. Population projections were also updated, to move from those based on the 1992 Census to the 2002 Census. The first data published using the updated population projections was for the moving quarter ending last July.

The splicing method used involved applying a correction factor calculated as the percentage difference between data with and without the changes. The correction factor assumes that the sample change (FacMues) was calculated based on the moving quarter ending in March 2006, in which both surveys were equally applied (half the new and half the old sample). To calculate the correction factor due to changes in population projections (FacPob), INE used the difference between estimates provided by the sample for the moving quarter ending in June 2006 (100% new sample) using expansion factors from the base years 1992 and 2002. These correction factors were linearly reduced until the moving quarter ending in February 1998, when the old sample became less representative of the demographic and housing conditions in the country. Data prior to this date underwent no changes. The formula applied was:

$$\hat{y}^{t}_{MPS} = \hat{y}^{T}_{SO}\ (1+ \lambda_{m}\ FacMues)(1 + \lambda_{pob} FacPob)$$

$$\lambda_{m} = \min\{1, \frac{t}{T_{m}}\}\ y\ \ \lambda_{pob} = \{1, \frac{t}{T_{pob}}\}$$

where y_{MPS} are series estimators smoothed by both variables of interest and y_{SO} are the estimators used in the original series[2]. The factors T_{m} and T_{pob} indicate the period associated with each effect, equal to 97 and 100 moving quarters, the result of the change in the sample and in population projections, respectively.

The smoothed series reported here are preliminary, provided by INE using the method announced on its website on 29 August 2006.

Based on the smoothed series, the number of those employed has gone up over the number of those unemployed throughout the overlap period. The smoothed series for the labor force in 2005 is 7.3% higher on average compared to the original series (figure IV.10). In the case of the unemployment rate, the smoothed series shows a low of 7.7% in January of this year and a high of 8.8% for the moving quarter ending in July

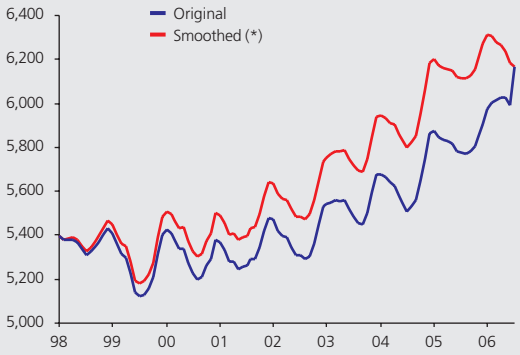
[1]/ For more details on this method, see INE (2006).

[2]/ The original series refer to those published by INE from the moving quarter ending in February 1998 to June 2006.

Figure IV.10

National employment

(thousands of persons)



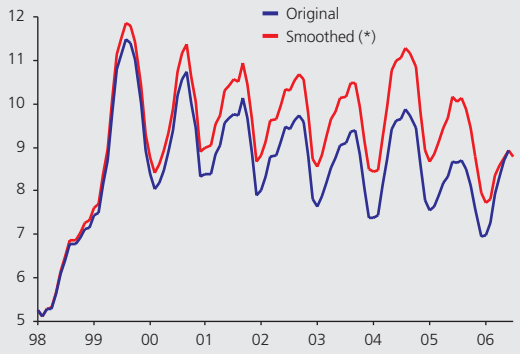
(*) Preliminary series provided by National Statistics Bureau and constructed using the method published on its website (29 August 2006).

Source: National Statistics Bureau.

Figure IV.11

Unemployment rate

(percent)



(*) Preliminary series provided by National Statistics Bureau and constructed using the method published on its website (29 August 2006).

Source: National Statistics Bureau.

(figure IV.11). The estimation of the NAIRU using INE's new unemployment series offers a confidence level with a higher limit (6.3%-9.7%) than in the previous Monetary Policy Report[3].

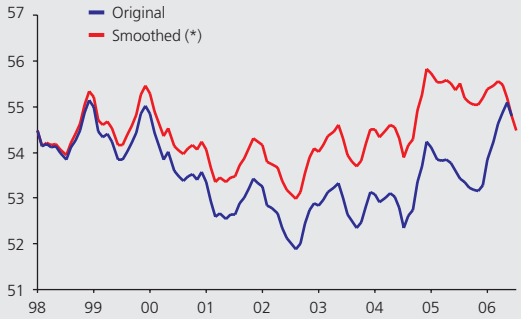
The most differences are apparent in the labor participation rate. While the original series rose since early in the year, the new one shows a slight rise until March, followed by a decline. Moreover, from1998 to date, the average for the new series is 0.9 percentage point higher than for the old (figure IV.12).

The smoothed employment series also offers a gentler view of recent trends in unit labor costs (ULC). Most measures used show a steady annual rise in ULCs, from negative rates in the second half of 2004 and most of 2005 to between 2% and 6% in the second quarter of this year, instead of rates around 8% when the original series was used. More recently, ULC growth has tended to decline, suggesting that inflationary pressures are under control in the labor market.

Figure IV.12

Participation rate

(percent)



(*) Preliminary series provided by National Statistics Bureau and constructed using the method published on its website (29 August 2006).

Source: National Statistics Bureau.

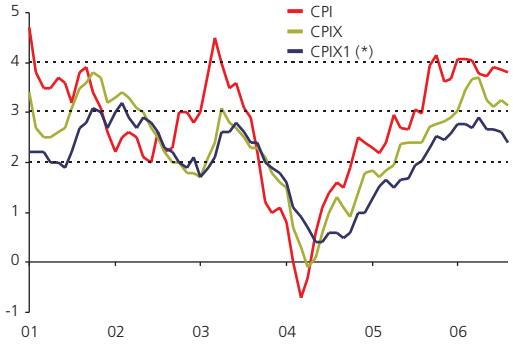
[3]/ For more details, see box V.1,: The NAIRU Unemployment Rate, May 2006 *Monetary Policy Report*, pp. 46-47.

V. Recent inflation trends

Figure V.1

CPI, CPIX and CPIX1 inflation

(annual change, percent)



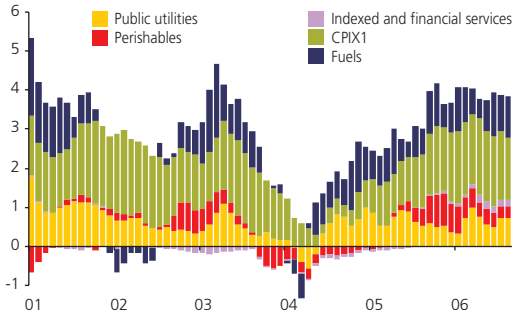
(*) For definition, see glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

Figure V.2

Factors influencing annual CPI inflation

(percentage points)



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 in current conditions.

Recent inflation trends

In recent months, annual CPIX1 inflation has risen more slowly than forecast in the previous *Monetary Policy Report*. Annual CPIX inflation, meanwhile, has held steady at around 3%, reflecting higher prices for some public services, particularly bus fares; annual CPI inflation has moved into the upper end of the target range, reflecting higher fuel prices (figures V.1, V.2 and V.3).

In August, the 12-month CPI had risen 3.8%, about where it was at the end of the first four months of the year, while the CPIX had fallen to 3.1% and the CPIX1 to 2.4% (from 3.7% and 2.9%, respectively, in April 2006).

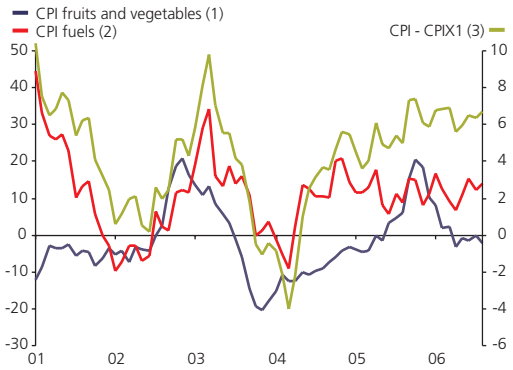
Annual CPIX1 inflation was down slightly from the assumption in the May *Report's* baseline scenario. In line with a slower decline in idle capacity, core inflation seems to have stopped rising, at an instant expansion rate that has moved away from the center of the target range to average about 2.0% in the second quarter, down from the first quarter (figure V.4). It is therefore expected to take longer to move toward the center of the target range than initially forecast, although it will still achieve this goal within the usual monetary policy horizon. In any case, from a longer-term perspective, annual CPIX1 inflation has moved from less than 1% in late 2004 into the target range today.

The behavior of the CPIX1 confirmed predictions that higher fuel prices would push the CPI upward, but to date there have been no significant second round effects, that is, aside from the usual passthrough to regulated utility rates and whatever could be expected from indexed prices. Inflation forecasts for different periods reflect this situation. In the short term, the Central Bank's September survey of economic expectations suggested that inflation through December 2006 would reach 3.5%, up from 3.0% last April. In the medium term, in contrast, expectations remain well anchored at around 3%. All this suggests expectations that the higher fuel price's impact on inflation will be temporary, particularly given the credibility regarding the Central Bank's commitment to its inflation target.

Figure V.3

Inflation by component

(annual change, percent)

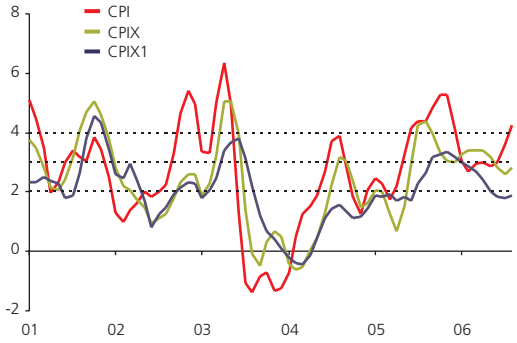


(1) CPI fruits and vegetables, includes fresh fruit, fresh and frozen vegetables (3.8% of total basket).
(2) CPI fuel, includes gasoline, kerosene, propane and liquefied gas (4% of the total basket).
(3) CPI products excluded from the CPIX1 (30% of the total basket).
Sources: Central Bank of Chile and National Statistics Bureau.

Figure V.4

CPI, CPIX and CPIX1 expansion velocity (*)

(percent)



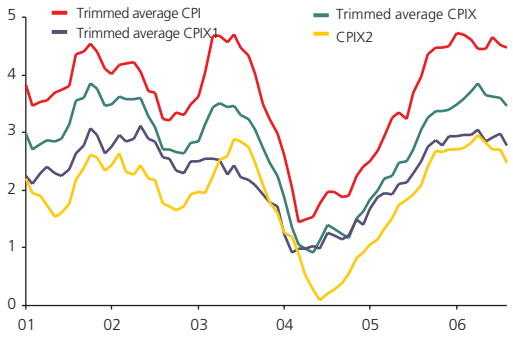
(*) For definition, see glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

Figure V.5

Trend inflation measures (*)

(annual change, percent)



(*) For definition, see glossary.

Sources: Central Bank of Chile and National Statistics Bureau.

Although they have bounced around somewhat, other indicators for trend inflation, such as the CPIX2 and trimmed measures for the CPI, CPIX and CPIX1, have posted no significant changes in recent months. If anything, they have tended to decline lately, after rising substantially between mid-2004 and the end of the third quarter of 2005 (figure V.5). This also points to some stabilization in price trends, despite the higher oil price.

Annual inflation for tradables and non-tradables, meanwhile, continued to post normal movements. In any case, the average from May to August for both measures was lower than registered during the first four months of 2006 (figure V.6).

Fuel prices

Compared with the May *Report*, the WTI oil price has risen to nominal records in July and August. More recently, however, derivative prices have tended to fall on external markets and as this *Report* closed, this was starting to pass through to domestic prices. The latter were also affected by the stabilization fund's operation, which absorbed the impact of previous hikes. In July, a new version of this mechanism started to function, with changes in the price-determination method and relevant markets, although maintaining the basic structure. Since start-up, this new fund has provided credit, thus absorbing part of gasoline's international volatility, the result of the increase in WTI crude oil prices along with higher refinery costs. Even with these subsidies, fuel inflation played a significant role in annual CPI inflation for the period, accumulating 0.7 percentage point in the past four months. For now, if the current price outlook holds, this should pull CPI inflation down.

Non-durable prices

The price of non-durable goods role in recent months was in line with seasonal patterns from last year, accounting for a larger share of total inflation compared to the first part of 2006 (figure V.7).

Other components

Regulated service prices[1] have risen since last May. Trends in oil and derivatives pushed bus fares up by 20 pesos in June and 10 pesos in July, while among regulated utilities, telephone charges rose, while electricity fell. For coming months, the latter is expected to undergo little change overall, despite the higher cost of natural gas from Argentina, because it represents a minimal amount within the indexation for these rates. Prices on indexed services[2], usually linked to total inflation through indexation clauses, have recently posted annual changes larger than in previous months, reflecting higher CPI change.

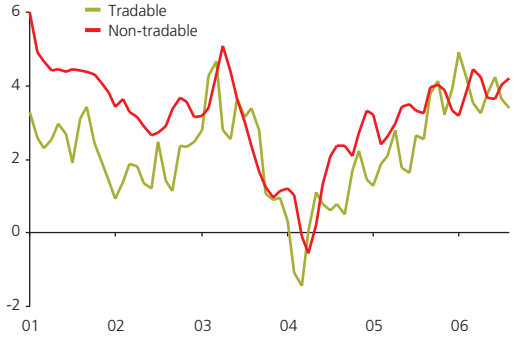
[1]/ Electricity, water, telephone and bus fares: 8.26% of the CPI basket.

[2]/ Rent, mortgage, property taxes and tolls: 7.12% of the CPI basket.

Figure V.6

Tradable and non-tradable CPI

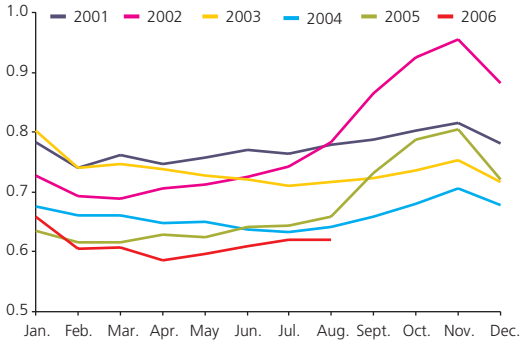
(annual change, percent)



Source: National Statistics Bureau.

Figure V.7

Fruit and vegetable CPI over total CPI

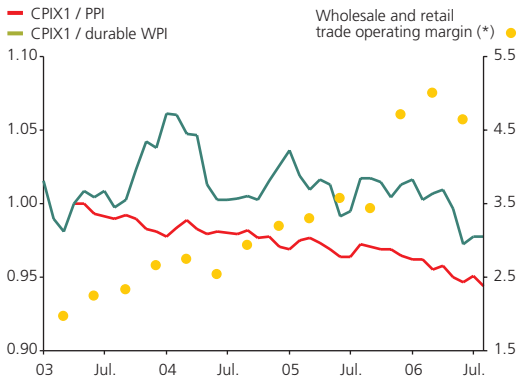


Source: National Statistics Bureau.

Figure V.8

Margin proxies

(ratio)



(*) Sales margin minus sales and administration expenses.

Sources: Central Bank of Chile, National Statistics Bureau and Superintendency of Securities and Insurance (*FECU*).

Margins and cost pressures

Wholesale and producer prices

The producer price index (PPI) grew 22.8% for the year ending in August (14.1% to April 2006), reflecting the greater impact from the mine and quarry operations category (82.9% annually). Comparing prices that have equivalents in the CPIX1, the annual change reached 3.7% in April and 4.3% in August (2.2% in August 2005).

In August, the annual rise in the WPI reached 11.1%, above the average for the first four months. Domestic goods posted an annual increase of 12.4%, imports 6.6%. Mining stood out in both groups, up 33% and 16%, respectively. Although both the PPI and the WPI have risen substantially since the last *Report*, as mentioned previously, the passthrough from these increases to the CPI is not direct. This is because the products making up the different indicators' baskets do not allow a direct comparison between wholesale, producer and consumer prices[3]. Nonetheless, because the WPI is used when correcting different public utility rates, it does exercise some influence over short-term projections and it is possible to establish its link to the CPI through this route.

Retail margins

Indirect measures for retail margins obtained from different CPI, WPI and PPI aggregates continued to fall slightly. Prices included in both the CPIX1 and the PPI were lower than in the previous *Report*, as was the measure for durable goods included in the CPIX1 and the WPI (figure V.8).

Annualized operating margins for the wholesale and retail trade, according to figures from the FECUS, fell slightly in the second quarter of 2006 compared to the previous quarter. After bottoming out in the first quarter of 2003, these are currently similar to those posted in 1998.

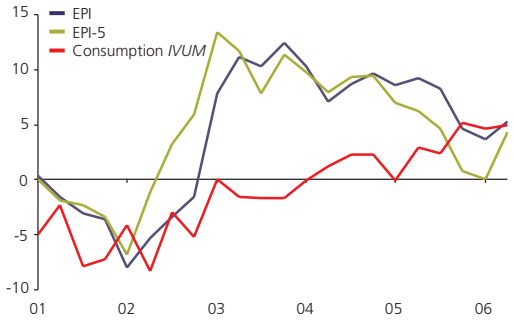
Imported inflation

Most recently, inflation on imports, measured in dollars, has risen. The external price index in dollars (EPI) posted annual growth of 5.3% in the second quarter of 2006, reversing a drop that began in the second quarter of last year. The same rising trend is apparent in the index grouping prices for Chile's main trading partners (EPI-5), up 4.3% in the second quarter of this year. The import unit value (*IVUM*) for consumer goods continued steady growth begun in late 2005 (figure V.9). Moreover, the peso has depreciated since the closing date for figures included in the previous *Report*. Specifically, since mid-May the exchange rate has risen significantly to 550 pesos per dollar in late June. Thereafter it remained relatively stable, declining to 540

[3]/ This is so because mining products, which have risen enormously in price, do not enter directly into the CPI.

Figure V.9

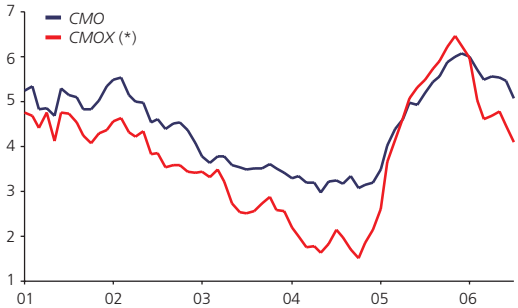
External inflation in dollars
(annual change, percent)



Source: Central Bank of Chile.

Figure V.10

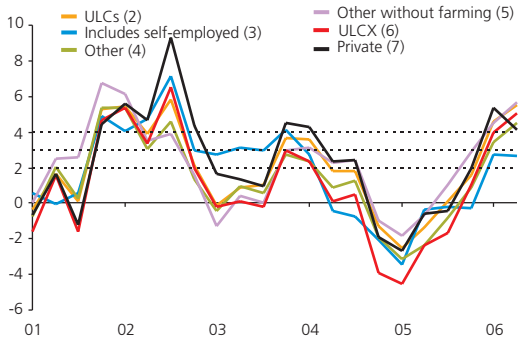
Labor cost
(nominal annual change, percent)



(*) For definition, see glossary.
Sources: Central Bank of Chile and National Statistics Bureau.

Figure V.11

Unit labor cost (1)
(nominal annual change, percent)



(1) Quarterly series. Includes preliminary employment series provided by National Statistics Bureau using 29 August 2006 method, which changed sampling framework and population projection.
(2) Assumes total nominal *CMO*, actual hours of work in the formal sector, salaried employment and total GDP.
(3) Analogous to Total, replacing salaried employment by national employment.
(4) Assumes *CMO*, salaried employment, other GDP (minus EGW and mining) and actual hours of work in the formal sector.
(5) Analogous to Other, minus farming under other salaried employment and in other GDP.
(6) For definition, see glossary.
(7) Minus community, social and personal services.

Sources: Central Bank of Chile and National Statistics Bureau.

pesos per dollar more recently. Although in recent months there is growing world concern about rising inflation, to date the baseline scenario does not consider imported inflation enough of a threat on its own to deflect inflation away from a steady move toward the center of the target range.

Wages and unit labor costs

Annual growth in nominal wages has been lower than posted since late 2005 and the first four months of 2006. Thus, through July, the annual rise in labor costs (*CMO*) and wages (*IREM*) declined to 5.1% and 5.2% respectively. The *CMO*, minus sectors associated with natural resources and social and personal services (*CMOX*), dropped, posting annual growth of 4.1% through July[4] (figure V.10). In any case, growth in wages has remained in line with the usual indexation clauses and productivity trends.

Annual growth in unit labor costs (ULCs) has become much tighter than it was in the May *Report*. This reflects the use of preliminary employment series provided by INE, constructed using the method published on 29 August 2006, which included a change in the sampling framework and population projections (box IV.1). Thus, the outlook for inflationary pressures arising from ULCs is more benign than indicated some months ago (figure V.11). Through the second quarter of this year, annual growth in ULCs, depending on their different definitions, ranged from 2% to 6%.

[4]/ The actual magnitude of the drop is still difficult to interpret, given the change in the method for estimating this index. The base used for indicators changed (from April 1993 to January 2006), and the sample size was redefined, as were the economic categories used.

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 last monetary policy meeting of 7 September 2006. It provides projections for the most likely course of inflation and economic growth, and examines the main risks. These projections examine the most likely path for inflation and economic growth and the most significant risks. They are based on the methodological assumption that toward the end of the usual policy horizon, inflation will be similar to that deduced from financial assets in the past two weeks, but with a somewhat longer lag than inferred from these prices. Projections are also conditional on developments included in the baseline (most likely) scenario. Should any of the alternative or risk scenarios actually occur, results will also be different, so the Board's analysis of the balance of risks to both activity and inflation is also provided here.

Baseline scenario

The Chilean economy continues to face favorable external conditions. Prices for its main exports remain high, not only for copper, but also for other products, such as wood pulp and fishmeal. World activity continues to be strong, with more balanced growth in the main economies. Monetary policy in most developed economies continues in its normalization process amidst evidence that gaps are closing more quickly and inflationary pressures have risen. Nonetheless, external financial conditions remain favorable. After reaching new nominal peaks between July and August, the oil price has fallen in recent weeks and currently stands about where it stood at the closing of the May *Report*. In the medium term, however, it is expected to move higher than originally forecast.

In the most probable scenario, additional corrections to monetary impulse will be necessary, although these may take longer than originally forecast. Information to date reveals core inflationary pressures remain under control, and it is entirely feasible that the MPR is closer to a range of recent estimates for its neutral level. Overall, financial conditions remain advantageous, as is apparently mainly in the growth of bank financing to households and companies.

The scenario for inflation has not changed much since last May, while the outlook for growth assumes some postponement in the forecast recovery. Although the remaining gaps should continue to close, they should do so more slowly than in the past two years and somewhat later than forecast in previous scenarios. This outlook is influenced by mining activity, on

one hand, which is expected to grow little this year because its productive capacity is completely taken up and, moreover, there have been some production problems (associated with cave-ins and collective bargaining), which should result in a drop of almost 0.2 percentage point in its GDP this year. On the other hand, there are several elements whose precise impact is hard to estimate, that could be behind part but not all of this tendency. These include the rise in energy costs, which is also affecting households' disposable income, and which may have affected production, particularly of manufacturing, more than initially forecast. There was also a sharp rise followed by a return to normal in investment in machinery and equipment. Moreover, the current macroeconomic policy approach tends to stabilize the cycle more than in previous periods and estimates. This could all mean that the economy's sensitivity to changes in the terms of trade, particularly in the copper price, may be less than in the past and less than previously assumed and, furthermore, with a different lag. The floating exchange rate, conditions for market access and international liquidity seem to be moderating the expansionary financial effects of the higher copper price more than in the past. At the same time, this price is passed along through fiscal policy with a longer lag, while mining sector investment has been substantially lower than in previous cycles of rising prices.

In the baseline scenario, several elements affecting activity this year should change or not repeat themselves with the same intensity in 2007. Specifically, mining production is expected to pick up and the oil price should drop slightly next year. Investment should improve and fiscal impulse increase. In contrast, the lagged effects of monetary policy normalization, a less positive international outlook, and less idle capacity make it unlikely that growth will rise much above trend levels. Moreover, just as there is uncertainty about what underlies the discrepancy between GDP growth and levels suggested by variables that typically determine its performance in the short term, there is no certainty about whether these effects will turn around or persist in coming years.

Aggregate demand

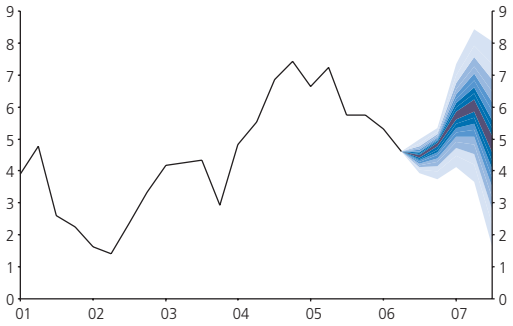
In 2006, private consumption has remained strong, driven by still favorable credit conditions and a decline in unemployment. This despite the aforementioned effect of the higher energy price on private income and consumer expectations that, at the margin, are less optimistic. Consumption is forecast to grow 7.1% this year and 6% in 2007, within a context of a change in the composition of durables.

In 2005, investment over output reached record highs of almost 30%, measured using 1996 prices. The lower growth of this component of demand was predictable, although it has been less than forecast in May, mainly due to machinery and equipment. Taking into account company results and financial conditions, prospects for 2007 for this component of domestic demand are positive. This is already apparent in a significant flow of new engineering works projects and in the level of machinery and equipment imports in recent months. Growth projected for investment this year should reach around 3%, while in 2007 it should rise to over 5% annually. Using 1996 prices, this would take the investment to GDP ratio to around 29% in 2006 and 2007, an all-time high.

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 used. These confidence intervals summarize the Central Bank's risk assessment for future inflation, assuming that toward the end of the usual policy horizon the Monetary Policy Rate will reach the level suggested by financial asset prices in the past two weeks, after a longer pause than inferred from these prices.

Source: Central Bank of Chile.

The projections in this *Monetary Policy Report* assume that fiscal policy will continue to be guided by the structural surplus rule, with a rise in the reference value for the copper price in 2007, which reflects an experts' committee evaluation. This amount is similar to that implicit in the May *Report*, so the 2007 budgetary process should not require any monetary policy actions other than those contemplated in that baseline scenario.

In aggregate terms, in 2006 exports should meet forecasts in the previous *Report*, although agricultural exports are expected to perform somewhat more strongly and manufactured exports somewhat more weakly. This, combined with more favorable terms of trade, should contribute to a larger than forecast surplus in the balance of trade. All this should occur as imports, as predicted, grow significantly more slowly, although still above GDP. In 2007, growth in export volumes should be higher than this year, as should activity, mainly reflecting more shipments from mining and agriculture.

This year, the current account should post a surplus of 3.6% of GDP, up from the May forecast. This reflects the fact that the fiscal surplus rule makes it possible to save an important share of the resources generated by better terms of trade, thereby financing more spending on consumption and investment without resorting to external saving. The effect of these abnormally high commodity prices on external accounts does not seem to mask any significant saving-investment imbalances. In fact, the current account at trend prices should post a deficit of about 3.5% of GDP in both 2006 and 2007. The differences with previous estimates reflect a rise in projections for the long-term prices of oil and copper.

Activity and the labor market

In the first half of the year, the manufacturing sector didn't perform as well as in 2005, especially in the second quarter. Growth should recover toward year's end, thanks especially to the start-up of some projects. More recent events in the mining sector, as mentioned, suggest that it will rise less than earlier projections for the second half.

In 2006, according to the preliminary splicing of labor market figures provided by the INE[1], the annual growth rate in total employment has fallen, at the same time as formal sector employment remains strong. The unemployment rate has fallen significantly in the past two years, and now stands slightly higher than average for the past 20 years, and in the upper part of the broad range of values estimated as the natural unemployment rate. This evaluation of idle capacity in the labor market is consistent with analyses based on the information previously published by the INE. Employment is expected to keep on growing, but at rates somewhat lower than to date, given the reduced idle capacity in the labor market.

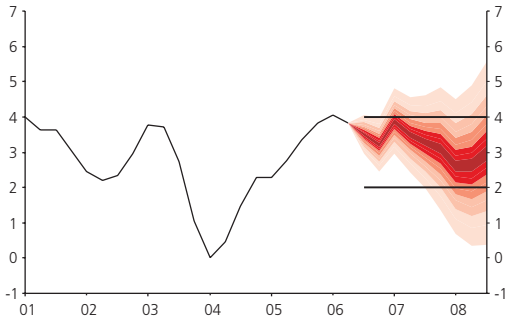
The number of hours worked has not changed significantly in recent months, bringing its annual rate of change back to positive figures, after sharp declines in 2005, with implementation of a legal reduction in hours of work. In this context, the growth in average labor productivity fell compared to 2005, mainly reflecting the change in hours worked.

[1]/ Box VI.1: NAIRU unemployment rate, May 2006 *Monetary Policy Report*, pp. 46-47.

Figure VI.2

CPI inflation projection (*)

(annual change, percent)



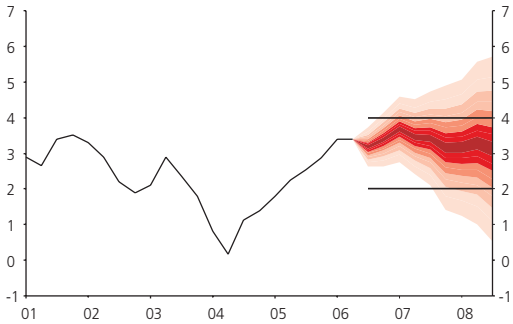
(*) The figure shows the confidence interval for the baseline projection for the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70% and 90% are used. These confidence intervals summarize the Central Bank's risk assessment for future inflation, assuming that toward the end of the usual policy horizon the Monetary Policy Rate will reach the level suggested by financial asset prices in the past two weeks, after a longer pause than inferred from these prices.

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 used. These confidence intervals summarize the Central Bank's risk assessment for future inflation, assuming that toward the end of the usual policy horizon the Monetary Policy Rate will reach the level suggested by financial asset prices in the past two weeks, after a longer pause than inferred from these prices.

Source: Central Bank of Chile.

Trend GDP growth did not change and is estimated at somewhat more than 5%, a range consistent with the 5.3% growth estimated for this variable by the finance ministry's committee of experts, which met to establish parameters for the 2007 budget. In August 2005, this same committee set trend growth at 5% for the 2006 budget. It should be noted that the baseline scenario for GDP growth for 2007, along with the accumulation and use of productive factors (employment and capital), has implicit a moderate rise in total productivity of these factors.

Growth this year should reach between 4.75% and 5.25%, somewhere between 5.25% and 6.25% in 2007, up from trend. This may slow but will not stop the closing of gaps, until they are completely closed toward the end of the projection horizon (figure VI.1).

Inflation scenario

The baseline scenario estimates that, in the short term, CPIX1 inflation will approach 3% more slowly than assumed in May. CPI inflation should rise somewhat above May estimates, remaining in the top half of the target range for several quarters more, mainly due to higher fuel prices compared to those in pesos during the first half of 2006. In the short term, however, it should bounce around considerably, because of the basis for comparison from the end of the third and beginning of the fourth quarters of 2005.

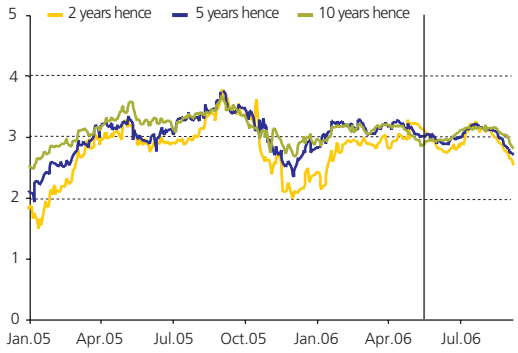
Unit labor costs (ULCs) currently suggest core inflationary pressures consistent with the center of the target range and more moderate than previously posted. This is influenced by new figures from INE, on one hand, which significantly modify productivity trends in the first quarter of 2006 based on previous figures, and nominal wages whose annual rate of change has been lower than in late 2005. The latter remain in line with the usual indexation clauses. In any case, fluctuations in productivity, resulting from both how statistics are measured and changes in figures themselves, are a source of uncertainty regarding short-term trends in ULCs. In the medium term, the most likely scenario assumes that ULCs current growth rate will moderate somewhat, approaching the center of the target range toward the end of the projection horizon. Along with fuel prices, the costs of imported goods have risen, although on their own they do not pose an inflationary threat capable of altering the convergence of inflation to the center of the target range.

Medium-term expectations regarding inflation have remained at around 3% in recent months. Inflation compensation two, five and ten years' hence has remained around the target, although with some tendency to decline most recently, especially for shorter periods (figure VI.2). The survey of expectations indicates a scenario similar to the one analyzed here in the short term, with annual CPI inflation standing at around 3.5% in December of this year. In the longer term, CPI inflation expected in that survey remains at

Figure VI.4

Inflation compensation

(percent)

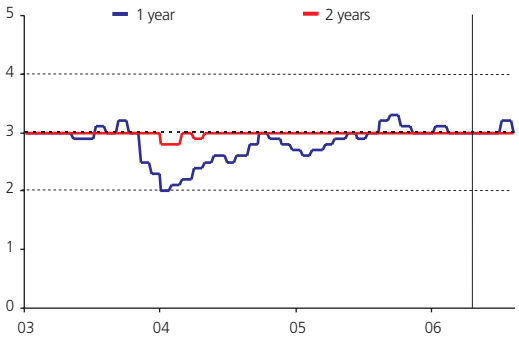


Source: Central Bank of Chile.

Figure VI.5

Inflation expectations: survey

(percent)



Source: Central Bank of Chile.

3% one and two years' hence, reflecting the temporary impact of the higher oil price on inflation (figure VI.3).

Core inflation (CPIX1 variation), should rise gradually in 2007, consistently with a gradual reduction in idle capacity and the control of wage pressures. However, the lower basis for comparison, along with imported goods' higher inflation in dollars and exchange rate depreciation apparent since the last *Monetary Policy Report*, should temporarily take this indicator to around 3.5% toward the end of next year, with values moving back to the center of the target range toward the end of the projection horizon. After remaining for several quarters in the upper half of the target range (although bouncing around, as indicated, in the short term), annual CPI inflation should fall toward the end of 2007 approaching the center of the target range and remain around 3% in 2008. This outlook includes the CPIX1 tendency mentioned above, and a scenario for the oil price where it slowly falls to its assumed long-term value, which on this occasion is higher than in previous *Reports* (figures VI.4 and VI.5).

Balance of risks

Projections are developed based on the events considered most likely, which thus define the baseline scenario. As usual, there are several sources of uncertainty that could give rise to different scenarios.

Externally, world activity may slow more than expected. This could reflect lower than forecast growth in activity in the US, given the risk of a sharper correction to housing prices, which could negatively affect residential investment and consumption. This possible slowdown in the US could affect other economies, particularly in Europe and Asia, by dampening their external sectors. Nor can we rule out the possibility that the high oil price may negatively affect global growth more than has been observed to date or that inflation may pick up more than forecast in industrial countries.

It is also possible that the oil price performs differently than projected. Geopolitical risk could rise or persist at current levels, pushing prices upward. Prices may fall more than forecast, should perceptions of supply risk decline, as suggested by recent trends in the oil price.

Changes apparent in the composition of world growth by region are coherent with a gradual correction to global imbalances, although the risk of a sharper correction remains.

In any case, the Chilean economy is expected to respond less to changes in the relevant external scenario than in the past. Thus, should any of these alternative scenarios occur, they should have less impact than in the recent past.

Domestically, in the short term growth in mining activity for the year may be less than projected. This would reflect the possible impact of collective bargaining amidst exceptionally high copper prices, as seen recently. Should this occur, it will be temporary and involve higher growth rates in 2007, due to the changed basis for comparison.

Toward the medium term, activity could pick up, posting higher than forecast growth. This could occur because unidentified factors that have affected activity this year could turn around more strongly than assumed. Similarly, still favorable financial conditions may push domestic demand growth further.

On the other hand, investment could perform more weakly than forecast next year. Although construction has performed well, more recent indicators for housing sales have weakened, which could slow down this component of investment. Investment in machinery and equipment may grow less than assumed in the baseline scenario, given that the investment rate, measured at constant prices, still remains unusually high by Chile's historical standards.

Given the latest information, core inflation could remain low for longer than forecast, thereby keeping inflation down. Likewise, inflationary pressures from labor costs, which are currently considered consistent with the inflation target, could perform differently. This would reflect collective bargaining processes, as seen recently, and as programmed for coming months, which could turn wages into a source of inflationary pressures.

The Board assumes that overall, these different contingencies mean that the balance of risks is biased downward for growth this year, and balanced for growth and inflation in 2007.

As mentioned, the information received in coming months will be crucial to evaluating possible increases in the interest rate. In the most likely scenario, additional rises to the interest rate will be necessary to keep inflation around 3% annually. However, this could take longer. Of particular interest will be trends in domestic demand, activity, some key prices such as wages and the exchange rate, expectations regarding inflation and their implications for inflation projections over the usual 12- to 24-month policy horizon.

Box VI.1: **The inflation response to an oil shock**

The international price per barrel of oil has risen more than 250% since January 2002. It would be logical for this higher cost to be passed through to at least part of final goods' prices. However, after almost two years of steady increases in the prices of oil and derivatives, one of the characteristics of this oil shock has been its limited impact on world inflation, compared to previous episodes of significant increases, such as those of the 1970s. It is important to note that the simple observation that inflation is lower now than in the 1970s does not mean that the impact of oil on prices has fallen, since these are determined through a general balance, while other relevant variables may also have changed.

This box is based on a study by De Gregorio, Landerretche and Neilson (2006), which provides empirical evidence for Chile and a broad sample of industrialized and developing countries. The paper analyzes the relationship between inflation and the oil price, and how it has changed. As a result, this box complements one presented in the January 2006 *Report*, which discusses some possible explanations for this phenomenon[1].

Comparing oil shocks

The study identifies four episodes of oil shocks, defined by substantial increases (50% or more) in the Brent oil price, sustained over time (table VI.1). The macroeconomic environment was characterized by high inflation in the 1970s, while for more recent episodes conditions have been more stable, with low inflation in both industrialized and developing countries. Evidence shows that after a shock occurred, increases in inflation were both positive and high for the two episodes in the 1970s, contrasting particularly with the most recent shock (2004 to 2006), in which inflation rose substantially less.

To systematically compare episodes it is necessary to determine whether the real size of the shock is similar, since otherwise it could be largely nominal. The current shock, involving a real 88% rise, is similar in magnitude to the two episodes in the 1970s, of 100% and 69%, respectively.

Table VI.1

Characteristics of oil shocks (*)
(percentage change in 24 months)

	Jan. 1974 - Dec. 1975	Feb. 1979 - Jan. 1981	Jul. 1999 - Jun. 2006	Jul. 2004 - Jun. 2006
Average inflation for the period				
Industrial countries	32	32	11	6
Emerging countries	45	48	17	11
Change in inflation				
Industrial countries	13	7	1	0
Emerging countries	11	8	-7	-5
Change in the oil price				
Nominal	152	113	78	105
Real	100	69	66	88

(*) To characterize each episode, a shock was defined as a percentage rise of more than 50% over 24 months, persistent over time. Monthly data from the IMF and the US Fed were used. Inflation rates greater than three standard deviations from average (hyperinflation) were deleted.

Source: De Gregorio, Landerretche and Neilson (2006).

Oil price passthrough to inflation

A conventional way of describing the inflation process is to use an equation that relates inflation to lags to approximate inflationary expectations and the gap between actual and potential economic activity. To identify the influence from the oil price, this was expanded to add percentage changes in the oil price. This expanded relationship was estimated for 37 countries. From 1967 to 1980, a 1% rise in the oil price brought an accumulated increase in inflation of 0.48% in the long term in industrialized countries, with this coefficient falling to just 0.06% for 1980-2006. For Chile, very similar results were obtained, based on 1990.

Estimated coefficients for the passthrough of the oil price to inflation fell for most countries between the 1970s and the current period (figure VI.6). Most passthrough coefficients were lower for 1990-2006, as more countries were clustered around zero (the area below the curve), indicating a virtual absence of more significant passthrough. This contrasts with high passthrough coefficients apparent prior to 1990. Thus, the average passthrough coefficient in the world sample fell from 0.10 in 1965-1989 to 0.03 in 1990-2005[2].

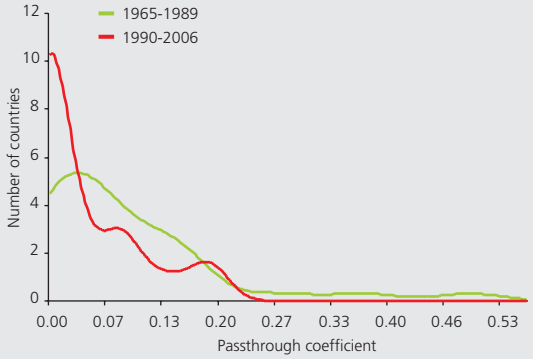
[1]/ Box I.2: Oil shock effects on inflation: international evidence, *Monetary Policy Report*, January 2006, pp. 19-20.

[2]/ Passthrough coefficients in countries experiencing hyperinflation or very high inflation (such as Chile, 1974-1975) are excluded, since it is difficult to estimate long-term passthroughs.

Figure VI.6

Oil price passthrough to domestic inflation: distribution of coefficients by country

(percent)

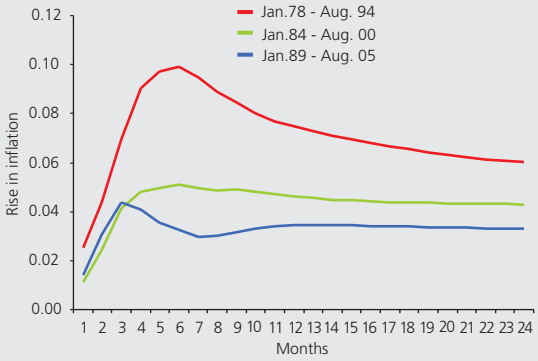


Source: De Gregorio, Landerretche and Neilson (2006).

Figure VI.7

CPI inflation's dynamic response to a 1% oil price shock in Chile

(percent)



Source: De Gregorio, Landerretche and Neilson (2006).

Dynamic responses from inflation to an oil shock in Chile

A complementary exercise is to estimate the relationship between different series associated with inflation (an autoregressive vector, VAR). This method helps to describe the overall behavior of the main macroeconomic variables and their dynamic response to oil shocks. In Chile's case, for three different periods (although with some overlap) the CPI's response to an oil shock shows that most recently (January 1989-August 2005) the estimated passthrough was lower than for previous periods. Thus, a 1% shock in the real oil price generated at the most a 0.04% impact three months after the shock, whereas for 1978-1994, the same shock provoked a peak of 0.1% in CPI inflation seven months later (figure VI.7). These results are qualitatively similar to those estimated for another ten countries for which results were obtained.

Conclusions and possible explanations

Empirical evidence indicates that the passthrough from the oil price to total CPI inflation has fallen in most countries worldwide. Possible causes were discussed in the January 2006 Monetary Policy Report, and include: (1) globalization and the growing deregulation of economies, which has favored competition; (2) more flexible labor markets; (3) less oil used in production and consumption; and (4) the greater credibility enjoyed by monetary policy and the macroeconomic stability achieved.

It can be argued that globalization has increased competition, which may have cushioned prices' response to shocks, but it is unclear whether a systemic cost shock will eventually pass through to price levels. On the use of oil, it has been clearly demonstrated that its use has declined in the US (Peterson, 2006) and Chile (January 2006 Report), but this is not enough to explain the complete drop in the passthrough coefficient. It is argued, moreover, that more flexible economies (Peterson, 2006) particularly labor markets (Medina and Soto, 2005), have been important. Some authors assign growing importance to achieving greater credibility for macroeconomic policy in general and monetary policy in particular, in an atmosphere of low inflation, which helps to anchor inflation expectations. If this last hypothesis is the dominant one in explaining the decline in passthrough, there is a risk of a rapid erosion of expectations, which requires that central banks be particularly sensitive to inflationary shocks, such as the current oil shock, which could make it difficult to keep inflation expectations well-anchored.

Box VI.2: **Changes in projections compared to one year ago**

In the past year, the Board of the Central Bank has continued to gradually reduce monetary impulse. From September 2005 to September 2006, the MPR rose 125 basis points, to 5.25% per annum. This reduction in the expansionary effect of monetary policy has been consistent with economic growth, reduced idle capacity and the gradual convergence of core inflation.

Internationally, in the past year a scenario favorable to the Chilean economy has consolidated, following two already positive years. The world outlook remains strong, with dynamic growth in economic zones that had been lagging behind. Projected world growth for 2006 now stands at 5.2%, somewhat more than one percentage point higher than projected a year ago. Today copper has peaked at prices unthinkable one year ago, and there's no sign of a significant decline in the foreseeable future. The LME price per pound leapt 130%, from US$1.32 in September 2005 to US$3.05 today. The WTI oil price also rose in the past year, from US$56 per barrel projected for 2006 one year ago to US$69 projected today, a 23% rise. Consistently with these corrections and increases in other exports, the terms of trade are expected to rise 24% in 2006, contrasting with an 8.5% fall expected one year ago.

In Chile, domestic demand growth has fallen, in line with investment normalizing more quickly than forecast, after hefty growth in 2005, partly offset by a stronger thrust from consumption, especially of durable goods. In 2005, domestic demand closed the year up 11.4%, more than forecast in September (9.8%). As occurred the previous year, investment growth played a decisive role in this difference, rising almost six percentage points more than forecast in September 2005. For 2006, domestic demand should grow 6.3%, similar to forecasts one year ago (6.2%). By component, however, investment is now projected to grow less this year: falling from 5.2% forecast one year ago to 3.2% estimated today. In terms of exports and imports of goods and services, annual growth rates for 2006 are somewhat lower for the former and higher for the latter.

Activity has posted some of the main surprises. In 2005, it rose 6.3% annually, within the range forecast in September of that year (6-6.5%). For 2006, in contrast, current projections for activity growth are below the range forecast one year ago (5.25%-6.25%). This assumes that economic activity is showing signs of losing strength than would be expected, given conditions abroad, financial conditions and idle capacity, suggesting a scenario in which idle capacity will be utilized more slowly than forecast last May.

For inflation, currently the annual CPI change is greater than projected in September 2005, while core inflation is smaller. This is occurring amidst the slower uptake of idle capacity and a slightly more appreciated exchange rate, on one hand, and greater cost pressures on the other, associated with the oil price and positive variation rates of unit labor costs, which one year ago were negative. Thus, average CPI inflation expected for 2006 (3.7%) is now higher than projected in September 2005 (3.2%). Average CPIX1 inflation for 2006 (2.6%), meanwhile, is lower than projected in September of last year (3.3%). CPIX inflation projected today (3.3%) is somewhat higher than projected one year ago (3.2%).

Appendix A: Central Bank of Chile Balance Sheet

This appendix presents the status of and projections for the main items in the Bank's financial statements and their relationship to the policies being applied. As described on other occasions, the current structure of assets and liabilities in the Central Bank of Chile balance sheet reflects the financial crisis of the 1980s and reserves accumulated in the 1990s.

Assets consist mainly of international reserves and fiscal promissory notes, while liabilities consist mainly of domestic debt securities issued to finance in a non-inflationary manner part of the recovery of the banking system in 1980s and the accumulation of international reserves in the 1990s.

In the long term, the level and composition of assets and liabilities in the balance sheet determines the Central Bank's flow of financial profits or losses. In particular, given the composition of the balance sheet, the flow in income and expenditure posts a deficit, with average assets less than average liabilities. It should be noted that it is normal for financing costs to exceed the international interest rate in emerging economies, such as Chile's. However, this gap has closed as Chilean inflation has moved toward levels similar to that of industrialized countries.

Moreover, currency mismatch present in the balance sheet has led to enormous sensitivity of book results to changes in the exchange rate. In fact, the book losses for 2005 are largely explained by the reduction in the exchange rate that year. The Bank's assets in foreign currency reflect the accumulation of international reserves, which in turn offers benefits since this serves as insurance against instability.

The reasons behind the Central Bank's negative capital and its average results being negative lie in a combination of three major factors: (i) a starting capital whose economic value is substantially less than posted in book statements in 1989 and the fact that the amount set for these purposes in Article 5 of the 2nd transitory article in the constitutional law governing the bank, which stipulates the starting capital that the Central Bank should have, was never delivered; (ii) expenditures to purchase and maintain international reserves in the past 15 years; and (iii) losses due to foreign exchange revaluations of the Bank's foreign currency assets.

The projections for the balance sheet presented in this appendix are based on the working assumption that the exchange rate posted in late July (536 pesos per dollar) will hold, along with parities with other foreign currencies. Another working assumption is that state and private banks' foreign currency deposits will remain at the same levels posted in late July, within the legal framework in effect through 30 August 2006 (box A.1).

In 2006, the deficit continued to shrink. This is because documents payable in dollars (BCX) issued the previous year are still being serviced. Thus, assets and liabilities in foreign currency are reduced without changing the overall position of the balance (assets minus liabilities) payable in foreign exchange (table A.1).

The government suspended the policy of making prepayments in pesos on dollar-denominated debt held by the Central Bank (Treasury promissory notes). As a result, since March, the government has prepaid in dollars, thus increasing the Central Bank's international reserves, although this is not enough to offset the corresponding decline in servicing dollar-denominated documents, the BCXs. Similarly, the policy of offsetting documents indexed to the exchange rate as they fell due (BCD) by issuing for Chilean currency documents payable in dollars (BCX) was also suspended. Thus, foreign exchange operations occurred in January, before these two policy measures came into effect. These involved US$254 million in prepayments in pesos on Treasury promissory notes and US$50 million for the placement of BCX in exchange for pesos.

The Central Bank's effort to reduce the size of its deficit and reduce the gap between domestic and external rates has brought a steady decline in the nominal deficit in the past five years (table A.1).

Calculations of the deficit include corrections to the Chilean peso (changes in the UF), expenditures on administration and interest as such. This corresponds to nominal interest in pesos. This does not include losses and gains arising from shifts in exchange rates or revaluations of fixed assets. Moreover, this excludes income from interest and corrections from accrued assets whose servicing program has not been defined.

On interest rates, the Central Bank is facing particularly favorable conditions. The expansionary monetary policy applied, given prevailing conditions, has pushed down the costs of its domestic liabilities, by more than the decline in interest income from reserves. Moreover, although the recent rise in external interest rates has come with a similar shift in domestic rates, this has improved results because, generally speaking, international reserves are more liquid than liabilities, so the higher rates on the latter take longer to translate into costs.

From a long term perspective, while a rise in the deficit is foreseeable as the Central Bank normalizes its monetary policy rate, provided fiscal accounts remain solid most of the decline in the interest rate gap (country risk premium) apparent in recent years should be permanent.

It is important, however, to underline that the Central Bank's deficit is the result of a negative capital and a quasi-fiscal deficit, which from a macroeconomic perspective should be treated as an outflow from the consolidated public sector.

As mentioned, balance sheet projections for the remainder of this year and 2007 see commercial banks' short-term liabilities remaining at levels posted in late July. However, through July of this year there had already been a significant drop in short-term monetary operations involving assets (*Repos*) and liabilities (deposits in foreign currency for US$1.05 billion and obligations for future sales or swaps worth US$750 million). This is the result of a lower technical reserve requirement, which in turn reflected banks' renegotiation of liability maturities. This drop in dollar obligations to banks does not affect the overall position in dollars in the balance sheet, because it comes with a similar reduction in international reserves. For 2006, the monetary base is expected to drop 270 billion pesos, given behavior noted through July and the rise in the interest rate for that period (table A.2).

For the rest of the year, provided foreign currency deposits in banks do not change, as assumed, international reserves should fall by almost US$550 million, basically as BCX fall due. In 2007, once the servicing on these documents is completed, international reserves should rise by more than US$700 million, essentially due to interest, which nonetheless involves a reduction in the balance of reserves as a percentage of GDP, compared to the final balance estimated for 2006.

The net movement of international reserves so far this year has reflected several factors. Reserves fell with servicing in dollars on BCX promissory notes and a reduction in dollar liabilities with commercial banks, and rose due to government prepayments in dollars on Treasury promissory notes and a rise in dollar deposits in the Central Bank.

The projection for the balance sheet in 2007 generally assumes longer-term conditions. Growth in international reserves was the sole result of interest, since there were no foreign exchange operations, assuming a zero change in foreign exchange deposits of the State and banks. Likewise it assumes growth in the monetary base in line with output and inflation. Moreover, normal servicing of subordinated debt and other credits in Chilean pesos should make it possible to finance net servicing of Central Bank promissory notes worth almost 400 billion pesos. Thus, in the projection, the final stock of promissory notes from the Central Bank should fall from 11.8% of GDP

Table A.1

Central Bank balance sheet: results summary
(percent of GDP)

	2002	2003	2004	2005	Jul.06	2006 (f)	2007 (f)
Assets	38.3	31.0	25.7	21.0	17.6	16.5	15.8
International reserves	23.6	18.6	15.5	13.5	12.5	11.8	11.4
Treasury promissory notes and other loans to the government	10.9	8.0	5.7	3.3	2.1	2.1	2.0
Monetary policy instruments	0.5	1.3	1.8	1.7	0.9	0.5	0.4
Other assets	3.3	3.1	2.7	2.4	2.1	2.1	2.0
Liabilities	36.4	32.1	27.9	24.7	20.4	19.5	18.7
Promissory notes with secondary market	29.2	25.6	21.0	16.0	12.8	11.8	11.3
Policy instrument with banks	0.0	1.5	1.7	3.1	1.8	1.8	1.7
Other liabilities with banks	1.3	0.1	0.4	0.6	0.8	0.8	0.7
Other liabilities except monetary base	1.7	0.8	0.8	0.5	1.4	1.4	1.3
Monetary base	4.3	4.1	4.0	4.5	3.5	3.6	3.7
Capital (A+B)	1.9	-1.1	-2.1	-3.8	-2.8	-3.0	-2.9
A. Revalued starting capital	0.6	1.7	-1.0	-2.0	-3.4	-3.4	-2.9
B. Net result	1.3	-2.8	-1.2	-1.8	0.6	0.4	0.0
Non-financial	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Net interest and change in UF	-1.5	-0.7	-0.5	-0.4	-0.1	-0.1	-0.1
Due to change in exchange rates	2.9	-2.0	-0.6	-1.4	0.6	0.5	0.0
Revalued capital	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Memorandum							
Nominal deficit (1)	1.2	0.8	0.7	0.5	0.1	0.3	0.2
Position payable in foreign currency (2)	31.1	24.2	16.5	9.9	9.4	9.5	9.3
Position expressed in foreign currency (3)	22.0	17.1	13.4	9.2	8.8	8.9	9.0

(1) Includes administrative expenditures and net costs due to interest and UF indexation. Does not include losses or gains due to exchange rate variation, interest or corrections accruing on assets whose servicing program is not defined, also excludes revalued capital and fixed assets due to monetary correction.
(2) Assets minus liabilities payable in foreign currency.
(3) Position in foreign currency minus liabilities in Chilean pesos indexed to the exchange rate.
(f) Projection.

Source: Central Bank of Chile.

Table A.2

Central Bank balance sheet: flows (1)
(billions of pesos)

	2002	2003	2004	2005	Jul.06	2006 (f)	2007 (f)
1. International reserves	-175	-502	-329	691	-335	-969	-11
2. Policy instruments in Chilean pesos	313	304	2,899	3,130	-78	19	367
2a. of which: indexed to the exchange rate	-710	47	1,887	1,327	76	85	234
3. Central Bank promissory notes in dollars	0	-203	-1,319	117	747	1,292	0
4. Other operations in Chilean pesos except monetary base (2)	-235	408	-74	-92	-100	-128	-110
5. Other operations in foreign currency (3)	186	103	-942	-3,246	-572	-484	11
Monetary base (variation = 1+2+3+4+5)	89	111	235	599	-339	-270	257
Memorandum							
Position payable in foreign currency (foreign exchange operations = 1+3+5)	11	-601	-2,589	-2,439	-161	-161	0
Position expressed in foreign currency (1+2a +3 +5)	-699	-554	-702	-1,112	-85	-76	234

(1) Foreign exchange flows. Balances are, moreover, affected where applicable by interest, inflation adjustments and price changes.
(2) Servicing of Treasury promissory notes in UF, servicing of subordinated debt and other operations in Chilean pesos.
(3) Bank and fiscal deposits and other operations in foreign currency.
(f) Projection based on laws in effect as of 30 August 2006, therefore assuming no capitalization of the Central Bank.

Source: Central Bank of Chile.

Box A.1: **Central Bank capitalization advantages**

in late 2006 to 11.3% in late 2007.
Chile's National Congress recently approved different sections of a draft law on fiscal responsibility, which, among other issues, authorized the government to make a capital contribution to the Central Bank of Chile, worth up to 0.5% of GDP in five years, starting in 2006. This box examines the importance of this law to the Bank and the country.

To start, it should be noted that it would be very beneficial for the Bank to have enough capital to ensure healthy financial flows, as per usual international practice. Chile is atypical in international terms, since very few central banks have negative capital[1]. Thus, the IMF, in its annual consulting report under Article IV on Chile, has for several years recommended recapitalization of the Bank. Similarly, risk rating agencies mention the Bank's negative capital as something that should be corrected[2].

If a central bank is properly capitalized, the market will consider it financially capable of acting to achieve its policy goals and deal with unforeseen contingencies. In contrast, if it is considered to be in a weak capital position and there is concern about the impact of its decisions on its financial statements, it could lose credibility and its policies might not achieve the desired effects. Credibility is important, because it enhances the stabilization potential of monetary policy. In other words, it reduces the cost or sacrifice required from output to stabilize inflation, and increases its ability to stimulate the economy during a recession, when inflation is below target.

The Central Bank's financial independence is necessary to safeguard the technical nature of its decisions. Autonomy could be seriously affected if it had to request urgent assistance from the State, especially to deal with a financial or balance of payments crisis.

Currently, the Central Government's debt does not provide a complete overview of public debt. The budgetary process does not include the Central Bank's debt and its status is not part of the usual analysis of fiscal conditions. Making this more transparent will bring significant benefits, since it will boost confidence among agents and offer additional information in decision-making. Public debt reflected in the balance sheets of the government and not the Central Bank would promote fiscal discipline and strengthen the country's institutions, since the higher cost of any less than prudent or risky fiscal policies would be assigned to the Treasury itself. Currently, a policy of this kind would result in higher costs affecting almost exclusively the Central Bank of Chile.

Moreover, a capitalized central bank would reduce the danger of resorting to monetary emission to finance itself in times of instability, for example when fulfilling its role as a lender of last resort. Thus, the country and the Bank would be better prepared to face different kinds of crisis situations.

It should be underlined that since Bank capitalization involves the management of assets and liabilities, this would not compete with the use of fiscal resources for other initiatives. In consolidated terms, there is no additional expenditure or rise in total public sector debt, although the allocation of liabilities to the government and the Bank would change. If the Bank is properly capitalized, it could generate profits, which could be distributed to the government as per the regulations included in the constitutional law that governs it. The fact that Bank debt is more profitable or costs more than investing in the fiscal deficit abroad (which is reflected in the country risk premium) also means that Bank capitalization is attractive from a financial perspective.

Finally, although the amount of capitalization included in the draft law would not bring the equity of the Bank up to that of other comparable central banks, it would nonetheless represent significant progress toward the Bank's more effective response to unusual situations and could be justified in the current Administration's budgetary framework.

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[1]/ As of the end of 2005 the Central Bank of Chile had negative capital amounting to 3.8% of GDP, or 5.4% in corrected terms. The difference is explained by assets that do not generate actual flows (such as deferred losses, for example).

[2]/ In this same context, it should be noted that in its last report, April 2006, the agency Fitch Ratings considered Bank capitalization would help to relieve one of the limitations on its risk rating for Chile.

Box A.2: **International reserve management**[1]

International reserves are liquid assets in foreign currency held by the Central Bank of Chile. They support monetary and foreign exchange policy in compliance with the goal of ensuring currency stability and the normal functioning of domestic and external payments. Under the current floating exchange rate, its main purpose is to ensure foreign exchange liquidity to be able to intervene in the foreign exchange market under exceptional and highly controlled conditions.

The purpose of managing international reserves is to provide access to secure, efficient international liquidity, without damaging the Central Bank's financial equity. This occurs within a legal framework provided by the Central Bank's Basic Constitutional Act, which in turn is based on a set of practices and policies consistent with international recommendations in this field.

International reserve investment policy is controlled by legal and liquidity requirements. On the former, the law states that international reserves can only be invested in foreign currency, gold or credit documents, securities or bills of trade, issued or guaranteed by foreign states, central banks or foreign or international banks or financial bodies. Moreover, by their nature, international reserves can only consist of liquid financial assets.

Within these restrictions, international reserve investment policy is designed in terms of results and risks to the Central Bank's financial balance sheet and potential foreign currency liquidity needs. In practical terms, this policy is specified by defining a referential structure for guiding and evaluating investment, and setting limits to market and credit risk decisions that may be taken within this reference structure.

The assets in which international reserves are held can be grouped in two main portfolios. The Investment Portfolio, which is the largest, includes long- and short-term foreign currency assets held to deal with contingencies. The reference structure for the portfolio currently involves 60% in dollars and 40% in euros, with an average duration of 13 months. The Liquidity Portfolio exists to cover short-term requirements. The reference for this structure is defined in currencies and periods with previously defined disbursements[2].

Risk management policy defines a set of allowable deviations from the reference structure in terms of duration, maturity, currency and limits on different types of investment. This policy controls liquidity, market and credit risk, including bank, sovereign, supranational and external financial institution and counterpart risk. Operating risk is controlled by segregating functions and responsibilities and the application of controls and internal and external audits, carried out on a permanent, periodical basis.

To complement the internal management of international reserves, the Central Bank has maintained an external program since 1995, for a fraction of reserves. The purpose of this element is to have an active standard for comparison to evaluate internal management, add economic value to the Investment Portfolio and facilitate the transfer of knowledge and technology. Currently there are two programs of this kind, including one for managing a general long-term investment portfolio and one involving a specialized mandate of Mortgage-Backed Securities (MBS), involving mortgages issued by financial agencies in the US.

As of 30 June 2006, total international reserves stood at US$17.57 billion, of which US$12.87 billion were part of the Investment Portfolio and US$4.48 billion part of the Liquidity Portfolio. Of total international reserves, 67.2% were held in dollar instruments, 25.5% in euros and 7.3% in other currencies[3] (table A.3).

Likewise, as of 30 June 2006, 45.3% of reserves were invested in instruments with a AAA risk rating, issued by sovereign financial agencies in the US or internationally. The remaining 54.7% was invested in instruments with a rating between A and AA+, mainly in the banking sector (table A.4).

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[1]/ Summary of a longer paper with a similar title to be published in September 2006 on the Central Bank of Chile website.

[2]/ Handling of the Investment Portfolio allows deviations from the reference structure of up to five percentage points in the actual composition in dollars and euros, as well as accepting investment in secondary currencies.

[3]/ The Liquidity Portfolio contained more dollars and fewer euros than the Investment Portfolio, reflecting the currency breakdown of short-term foreign currency commitments.

Table A.3

International reserves by portfolio and currency through June 2006

	US$ million	Percent
Investment portfolio	12,872.6	73.3
Dollar	8,214.4	46.8
Euro	4,484.2	25.5
Other currencies	174.0	1.0
Liquidity portfolio	4,479.4	25.5
Dollar	3,579.5	20.4
Euro	0.0	0.0
Other currencies	899.8	5.1
Other assets	218.1	1.2
Total international reserves	17,570.0	100.0
Dollar	11,805.4	67.2
Euro	4,484.2	25.5
Other currencies	1,280.4	7.3

Source: Central Bank of Chile.

Table A.4

International reserves by credit risk through June 2006

(percent)

Type of credit risk (1)	Credit rating (2)						
	AAA	AA+	AA	AA-	A+	A	Total
Bank	0.0	0.0	9.8	30.3	5.6	6.6	52.3
Sovereign	33.9	0.6	1.4	0.0	0.0	0.4	36.3
Agency	8.8	0.0	0.0	0.0	0.0	0.0	8.8
Supranational	2.6	0.0	0.0	0.0	0.0	0.0	2.6
Total	45.3	0.6	11.2	30.3	5.6	7.0	100.0

(1) Credit risk associated with investment in bank financial instruments (deposits, forex-spot/forward-pfandbriefes); of sovereign states (deposits, bills, floating rate notes, nominal and indexed bonds); of financial agencies in the US (bills, nominal bonds, mortgage-backed securities) and from an official multilateral issuer (deposits, bills, floating rate notes, nominal bonds), respectively.
(2) Average ratings from Fitch, Moody's and Standard and Poor's.

Source: Central Bank of Chile.

From 2000 to 2005, the average annual return from international reserve management stood at 4.12% measured in foreign currency, that is, in terms of the currency reference basket used for the Investment Portfolio, and 3.96% measured in pesos, in line with relevant interest rates. The differential return obtained to evaluate investment management averaged 0.26% annually (table A.5).

Table A.5

International reserves: total return and differential

(percent)

Year	Measured in foreign currency (*)		In pesos		
	Total return (IRR) (a)	Benchmark return (b)	Total return (IRR) (c)	Benchmark return (d)	Differential return (a)-(b) = (c)-(d)
2000	6.88	6.65	12.92	12.70	0.22
2001	5.57	5.27	18.08	17.78	0.30
2002	5.25	4.69	17.89	17.32	0.57
2003	2.31	1.78	-12.84	-13.37	0.53
2004	1.84	1.95	-2.36	-2.25	-0.11
2005	2.90	2.85	-9.92	-9.97	0.05
Annual average 2000-2005	4.12	3.87	3.96	3.70	0.26

(*) The benchmark currency basket used by the investment portfolio, which currently consists of 60% dollars and 40% euros.

Source: Central Bank of Chile.

The Central Bank of Chile Board recently established an institutional policy involving the provision of information on international reserve management to the President of Chile, the Senate, and the public in general, through the Bank's website. This decision consolidated current Central Bank practices in this sense, thereby complying with transparency guidelines recommended by the International Monetary Fund to ensure clarity and accountability with regard to activities and results from international reserve management.

Appendix B: Main Central Bank of Chile measures in 2006

January

6 The Central Bank of Chile presented its open-market securities auction schedule for 2006, which came into effect on 9 January.

As part of the process of modernizing its monetary policy instruments and to bring its practices into line with those of other central banks, the Central Bank of Chile announced that as per the schedule for peso-denominated bond auctions it would offer two- and five-year peso-denominated and five- and ten-year UF-denominated bonds, which belong to the BCP-2, BCP-5, BCU-5 and BCU-10 series once a month, while the 10-year, peso-denominated bond, BCP-10, would be auctioned off on a quarterly basis, starting in March.

February

9 At its monthly monetary policy meeting, the Board of the Central Bank of Chile agreed to raise the monetary policy interest rate by 25 basis points, to 4.75% per annum.

After reviewing the technical specifications for banknotes and coins in circulation, the Board decided to add tactile marks to 10,000, 5,000 and 1,000 peso banknotes for people with seeing disabilities. Similarly, in the case of coins, it decided to make some changes to bring its technical specifications into line with international practice.

27 The Central Bank of Chile approved a new regulation covering credit card issues and operations, which it had developed with the Superintendency of Banks and Financial Institutions. This established prudent requirements that non-bank firms and operators issuing credit cards must meet to ensure broad acceptance.

The new rules covering non-bank credit cards define the relevant means of payment, strengthening safeguards and procedures for controlling and managing credit, liquidity, financial, operating and technological risk, to be applied by the respective issuers and operators using these cards.

The requirements set by these companies were scaled up according to the relevance of the respective card as a generally accepted means of payment and the associated risks faced by the wholesale and retail trade and other affiliates. In particular, all card systems involving payments and other transactions in bodies not related to the issuer for annual amounts of one million *unidades de fomento* or more.

The Superintendency of Banks and Financial Institutions is responsible for enforcing this regulation as well as other legal requirements applicable, including those regarding the so-called maximum conventional interest rate. These regulations came into effect on 30 April 2006.

March

3 As of this date, the Bank's regulations for the functioning of the clearing house for checks and other documents in Chilean pesos came into full effect, as part of payment system modernization. These limited clearing house use to swapping, exchanging and cashing demand deposits and other similar documents payable in Chilean currency worth less than 50 million pesos. Larger amounts must be processed through the High-Value Interbank Payment System managed or regulated by the Real Time Gross Settlement System (RTGS system) and the High-Value Payment Clearing House in Chilean currency, *CCAV*.

8 Based on the reserve period starting 9 March, the Central Bank approved the use of bills of credit issued by banking firms used in providing mortgages, as instruments eligible for buy-back (*repos*) operations between the Central Bank and banking firms as part of monetary regulation. It should be noted that to date these financing operations allow only bills of credit issued by the Central Bank itself.

For the purposes of this authorization, bills of credit issued by banking firms with risk ratings of AA and A or higher are eligible, except for bills of credit extended to the banking firm itself and only after approval of these instruments by the Central Bank.

13 The daily operating cycle of the Gross Real Time Payments system was changed to facilitate the functioning of the Central Bank's electronic payment system.

April

13 At its monthly monetary policy meeting, the Board of the Central Bank agreed to raise the monetary policy interest rate by 25 basis points, to 5% per annum.

May

18 The Central Bank changed regulations governing operating aspects within the clearing house for settling checks and other peso-denominated documents, to make settlement more efficient, timely and secure. These changes completed consolidation of the check settlement process at the national level.

A new way for banks to deposit funds in the Central Bank was added, referred to as the "liquidity deposit in Chilean pesos for financial and banking firms". This deposit, relevant to monetary regulation objectives, works through electronic communication among banks and the Central bank, through the open market operations system, according to the supply and conditions that the Central Bank establishes on each occasion.

This change came into effect on 9 June 2006.

23 With Resolution 1267-04-060518, the Board changed regulations governing the content and frequency of information about the main macroeconomic statistics provided by the Bank, as per article 53 of the Basic Constitutional Act, to ensure full compliance with International Monetary Fund recommendations in this sense. These changes consist mainly of regrouping monetary aggregate components that are published, reducing their number and expanding the coverage of financial instruments.

July

10 The process of adjusting hours of operation for the Central Bank's Real Time Gross Settlement system (RTGS system) was completed, with the closing time for daily operations set at 5.30 pm. It should be noted that the RTGS system is the main means of interbank payment through individual settlement operations, and that it transfers funds in Chilean currency among the accounts that banks hold in the Central Bank. So far this year there have been some 600 operations daily, worth a total of 3.5 billion pesos, including instructions to transfer funds issued by banking firms, settlement of net cycles in interbank settlement clearing houses, and Central Bank operations with banking firms.

13 At its monthly monetary policy meeting, the Board of the Central Bank agreed to raise the monetary policy interest rate by 25 basis points, to 5.25% per annum.

August

11 In response to a request from the Superintendency of Banks and Financial Institutions, the Board clarified the coverage of its regulation covering credit cards managed by non-banking issuers and operators, approved via Resolution 1250E-01 (27 February 2006), especially on compliance with registration requirements and other aspects involved in application and supervision by that Superintendency.

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Glossary

Commodity exporters: Australia, Canada and New Zealand.

CMOX: Total labor costs minus community, social and personal service, EGW, and mining.

CPIX: Core Consumer Price Index. CPI minus fuel, fresh fruit and vegetable prices, leaving 92% of the total basket.

CPI, CPIX and CPIX1 trimmed averages: Indicator for core inflation that eliminates the extremes of distribution in weighted inflation measures. The remainder are reweighted and the respective index is recalculated.

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

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

EPI: Index of external prices relevant to Chile. External inflation is calculated using the WPIs, expressed in dollars (or CPIs where the WPI is not available) of countries included in the MER. WPIs and exchange rates are included as monthly changes.

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

Expansion velocity: For monthly data, this is estimated as the annual change in the moving quarter of the seasonally adjusted series. For quarterly data, this is obtained using the annualized quarterly change in the seasonally adjusted series.

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

M1: Currency plus checking account deposits net of float held by the private non-financial sector plus demand deposits other than demand checking and saving accounts.

M2: M1 plus time deposits, time savings deposits, mutual funds, mutual investment instruments maturing in up to one year and deposits in savings and credit cooperatives, minus term deposits belonging to the mentioned mutual funds and savings and credit unions.

M3: M2 plus deposits in foreign currency, Central Bank documents, Treasury bonds, mortgages, bills of trade, company bonds, other mutual fund and AFP volunteer savings amounts, minus whatever mutual funds and AFPs have invested in assets included in M3.

MER: The multilateral exchange rate. A measure reflecting the nominal value of the peso against a broad basket of weighted currencies equal to the RER. For 2006: Germany, Argentina, Belgium, Brazil, Canada, China, Colombia, South Korea, Spain, the United States, Finland, France, Italy, Japan, Mexico, the Netherlands, Peru, the United Kingdom, Sweden, Taiwan and Venezuela.

MER-5: MER, including currencies from: Canada, the US, Japan, the United Kingdom and the euro area.

MER-X: MER, minus the US dollar.

NR: natural resources. EGW, mining and fisheries.

RER: The real exchange rate. A measure reflecting the real value of the peso against a currency basket. Constructed using MER country currencies.

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

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

Trading partners' growth: Growth of Chile's main trading partners, weighted for their share of total 2005 exports. Countries included receive 91% of total exports.

ULCX: ULC considering only formal sector employment, and wages and output, excluding natural resource-related sectors.

World growth: Regional growth weighted by share of world GDP at PPP, published by the IMF in *World Economic Outlook* (*WEO*, April 2006). World growth for 2005-2008 is calculated using a sample of countries representing 87% of world GDP. Assumes 5.9% growth for the remaining 13%.

World growth at market exchange rate: Growth at market exchange rate. Each country is weighted according to its GDP expressed in dollars, as published by the IMF in *WEO*.

Abbreviations

BCP: Central Bank of Chile bonds expressed in pesos
BCU: Central Bank of Chile UF-indexed bonds
CCNN: National Accounts
MPR: Monetary Policy Rate
PDBC: Central Bank discount promissory note

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