MONETARY POLICY REPORT

JANUARY 2004

CENTRAL BANK OF CHILE

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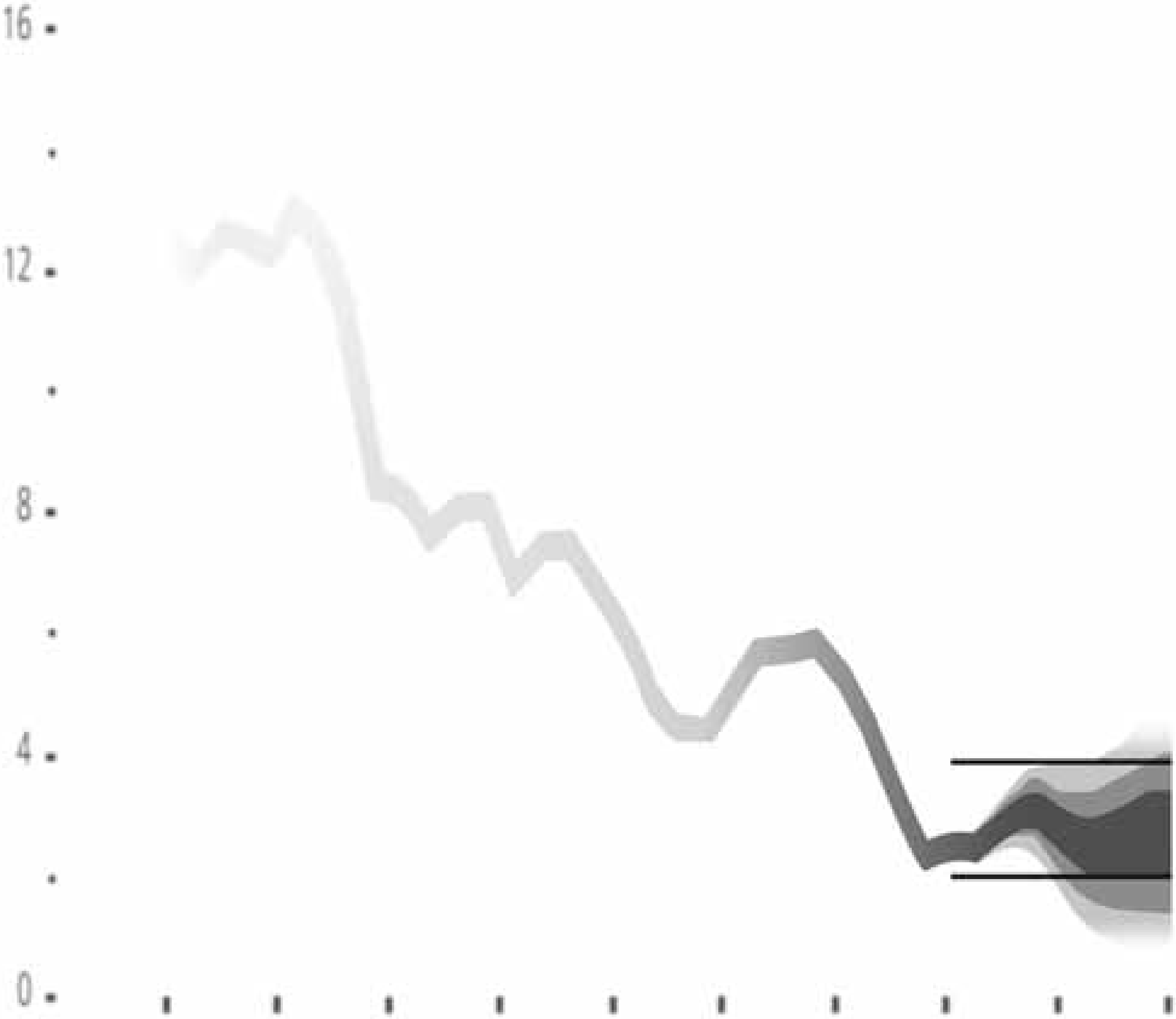

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PREFACE

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% per annum, centered on 3%. 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 the conduct of 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, the current account, the labor market, 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 9 January 2004 and presented it to the Senate's Finance Commission on 14 January 2004.

The Board

In recent months, inflation fell significantly and unexpectedly because of surprisingly low price pressures. This was apparent, first, in a peso appreciation, which has directly and indirectly influenced price trends in the economy, pushing down 12-month CPI inflation to December by around one percentage point; and . second, in the decline in some specific prices, such as nonperishable foods, thanks to efficiency gains and/or increased competition in the retail sector, and contributing about half to one percentage point to the reduction in 12-month inflation. Combined with the inertia of Chile's inflationary process and downward corrections to inflation forecasts, these surprises also drove down inflation projections for the next two years.

Internationally, there have also been some interesting developments. The dollar has depreciated steadily against the main currencies. Growth continues to rally in the United States, as it does in the emerging countries of Asia, while Japan is enjoying the effects of world economic recovery. Global financial conditions have improved somewhat, and as a result of all these factors, the world economy's growth prospects for 2004 have improved, reaching their highest point since 2000. The price of copper also picked up significantly to over US$1 per pound in recent weeks, on the back of world economic recovery and international dollar depreciation.

These changes in the international environment facing the Chilean economy, together with more favorable domestic private and labor prospects, a recovery in private consumption, the strong performance of personal loans, and the current, expansionary monetary policy stance, suggest that this year economic activity and spending will grow more than forecast in the last *Report*. Because of this, idle capacity should decline somewhat more quickly than forecast a few months ago.

Thus, to reduce the risk of inflation falling below the target for too long and thereby delaying inflation's return to 3% within the usual policy horizon, the Board of the Central Bank thought appropriate to cut the policy rate in both December and January, thus boosting the already strong monetary impulse. This more expansionary stance, faster growth of activity and spending, and the Central Bank's commitment with the established targets should make it easier to control inflation, pushing it back up to the center of the 2% to 4% target range toward the end of the projection horizon.

—————§—————

Most recently, the US, Japan and emerging Asia have posted higher growth, and the outlook for the euro zone has become more promising. In the US in particular, the pace of growth in output and productivity has been surprising, with Japan also showing good numbers. This better performance has come with a marked depreciation in the dollar against the world's main currencies, which has strengthened commodity prices and for now is consistent with the gradual correction expected in the US's current-account deficit. As private financing for this deficit has declined, capital flows to emerging economies have picked up, in particular to emerging Asia and Latin America. This recovery is clearer now than it was some quarters ago. The improved prospects for flows have also pushed down emerging economies' sovereign spreads since mid-2003, more than previously observed. Lower long-term interest rates in the main economies suggest that expectations that the favorable monetary impulse worldwide will continue throughout this year, as long as the absence of significant inflationary pressures and the idle capacity remaining in many countries persist.

Most noteworthy in the external scenario were the improved terms of trade in late 2003, in particular the rise in the price of copper and other export products. The higher copper price reflects macroeconomic trends worldwide, particularly recovery in Asia and other major demanders of natural resources, and the dollar's dwindling strength against the main currencies. After some uncertainty during the first half of 2003, the Brent oil price has held to forecasts some months ago, although with its usual volatility, and is expected to fall gradually in 2004 and 2005. In this scenario, the terms of trade are expected to rise somewhat more than 9% over the average for 2003.

Despite these positive developments, risks persist that dollar parities could further adjust in international markets, draining flows to finance the US' large current account deficit. Moreover, ongoing budgetary imbalance in that country could push short- and long-term interest rates in dollars upward, eventually introducing financial instability in developed and emerging markets. On the positive side, a consolidation of the world economy can be expected, that will favor domestic output and spending. In Latin America, meanwhile, the relevant economies still face important challenges in the areas of structural and financial reforms, which are necessary to ensure healthy financial conditions and sustained growth. Finally, the risk of terrorist attacks in the western world remains latent.

Baseline scenario assumptions

Specification	2002	2003(e)	2004(f)	2005(f)
	(annual change, percent)			
Terms of trade	1.3	1.2	9.2	1.6
Trading partners' GDP	2.0	2.6	4.0	3.4
External prices (in US$)	-4.1	10.5	6.6	2.6
	(levels)			
Copper price, LME (US ¢/lb)	70.8	80.7	100.0	102.0
Brent oil price (US$/barrel)	24.9	28.9	27.0	24.0
LIBOR US$ (nominal, 90 days)	1.8	1.2	1.5	3.3

(e) Estimate.
(f) Projection.

Source: Central Bank of Chile.

In Chile, monetary and credit conditions remain expansionary, particularly with regard to personal loans. For over a year, consumer credits have grown at two-digit rates, thanks to lower credit risks, high profitability rates in this segment, and more competition in the system, reflecting the entry of new players. Housing credits continue to post low interest rates and a significant rise in volumes. In contrast, corporate borrowing remains flat, apparently due to demand factors. Corporate bond issues have become an increasingly popular source of financing among the larger companies, while gross capital formation, aside from construction-related sectors, shows no significant turnaround, while the poor performance of company loans is apparent in every segment.

Today, the market expects monetary impulse to last longer than forecast just a few months ago, before the surprises from inflation and the cuts to the Monetary Policy Interest Rate (MPR) in December and January. The interest rate trend suggested by the market structure runs, on average, almost 100 basis points lower than predicted in September. This is consistent with the significant decline in interest rates on medium-term, nominal Central Bank notes. Likewise, medium term, indexed interest rates have held relatively stable, in line with improved growth prospects for the coming years.

In a context of orderly fiscal accounts and a credible inflation target, the floating system allows the exchange rate to adjust to changes in domestic and external prospects for the Chilean economy, as has been apparent in a range of episodes in recent years. Because of this, changes in the external scenario since the September *Report*, especially the dollar's weakness against the main currencies, combined with better terms of trade and more stable financial conditions after turbulence from late 2001 to late 2002, can explain most of the real appreciation of the past few months. Although this has been more obvious in bilateral terms against the US dollar, it has also occurred in multilateral terms. Specifically, in December the real exchange rate, which takes into consideration Chile's principal trading partners, was 13% lower than the monthly peak reached in March 2003, returning to averages perceived in 2001, which were about 10% above the averages in 2000. Although part of these swings in the real value of the peso are associated with the dollar's performance in external markets, the real exchange rate excluding the dollar was 9% higher than in December 2000, and 2% lower than in December 2001. This *Report*'s projections use the methodological assumption that the real exchange rate will remain around the weekly average prior to the closing date for this *Report*.

After slowing slightly toward the end of the first half of 2003, private consumption of durable groups rallied significantly. This reflected improvements in the labor market, a recovery in household confidence, and a rise in consumer credits. Thus, the weaker consumption initially mentioned seems to have been associated with uncertainty about the war in Iraq and the impact of rising fuel prices and some fares —such as public transportation— on households' real income. Once these doubts cleared, private spending picked up. To the degree that external variables, such as the oil price, and domestic ones, such as employment, remain favorable, in 2004 and 2005 both durable and non-durable private consumption should grow more than in recent years.

There's good news from the labor market too. Although the strong recovery in employment during the first half was somewhat influenced by temporary factors associated with a rise in the female labor force and self-employment, more recent information reveals formal employment is performing better and the unemployment rate has fallen significantly, to its lowest point in the past five years. Moreover, trends in the vacancy indicator, based on jobs offered in the newspapers, suggests that wage-paying job creation should strengthen further in coming quarters.

Unlike consumption, and except for residential buildings, gross capital formation has not continued to rally as it did during the second quarter of last year, revealing a lag that seems greater than in previous economic cycles in Chile. In particular, capital accumulation in machinery and equipment has been surprisingly low, considering the favorable domestic and external financial conditions and the consolidation of better growth prospects. In general, this component of domestic demand has been one of the most sensitive to changes in private perceptions and financing possibilities, so its recent lethargy is something of an anomaly. In any case, if the current good conditions continue, this segment of domestic demand should recover more strongly during the first half of 2004.

The short-term fiscal scenario remains in line with September's expectations. The structural surplus target for 2003 was met thanks to several corrections to spending and an increase to value added tax (VAT). The budgetary debate for 2004 also respected the rule. Recent trends in the copper price (higher than assumed) and actual inflation (lower than assumed) will provoke opposite-sign effects in the conventional fiscal balance sheets. In any case, forecasts in this *Report* assume that the target specified by the structural surplus rule will be met.

Information about the international scenario, private prospects and the labor market, along with the obvious expansionary nature of current monetary policy, are consistent with activity and domestic spending growing more quickly than forecast in September's *Report*. The Board expects growth in activity to reach somewhere between 4.5% and 5.5% in 2004. The recovery of the terms of trade, combined with the real exchange rate remaining at current levels, better prospects for capital flows into emerging economies in general, and expectations that domestic spending will rise somewhere between one and two percentage points more than GDP growth are consistent with a current-account deficit somewhat larger than forecast in September, with average annual balances above 1% of GDP in 2004 and 2005, and a larger deficit in 2005.

Economic growth and the current account (1)

Specification	2002(p)	2003(e)	2004(f)
		(annual change, percent)	
GDP	2.1	3.2	4.5 - 5.5
National income	3.1	3.3	6.6
Domestic demand	1.9	3.3	7.1
Goods and services exports	1.3	6.8	8.1
Goods and services imports	0.5	7.4	14.6
Current account (% of GDP)	-0.8	-0.5	-0.4
		(US$ million)	
CURRENT ACCOUNT	-553	-344	-300
Trade balance	2,513	2,937	4,600
Exports	18,340	20,842	26,300
Imports	-15,827	-17,905	-21,700
Services	-957	-922	-1,300
Income	-2,536	-2,768	-4,100
Unilateral transfers	426	409	500

(p) Preliminary.
(f) Projection.
(e) Estimate.

Source: Central Bank of Chile.

This scenario assumes higher growth than did the previous *Report*, which forecast activity rising somewhere between 4% and 5% this year. Private sector projections have also changed since last September, revealing a rise for 2004. According to the Central Bank's survey of economic expectations, growth projections for this year rose from an expected average of 4.2% in September to 4.5% in January, and from 4.6% to 5.0% for the same months in 2005. Meanwhile, *Consensus Forecasts* estimates rose from 4.3% to 4.6% for this year.

With trend growth estimated to rise from 3.5% to 4% in 2004, within the baseline scenario, idle capacity should decline somewhat more quickly than expected, with this being a major element in forecasting price trends. Beyond demand and supply conditions, today the impact of surprises on the costs side is expected to last some time, partly due to the magnitude of changes in these variables, but also because of greater competition and efficiency apparent in different retail sectors, which should mean only minor price effects from margins. Moreover, comparative evidence indicates that today in Chile retail margins are tighter than in other markets.

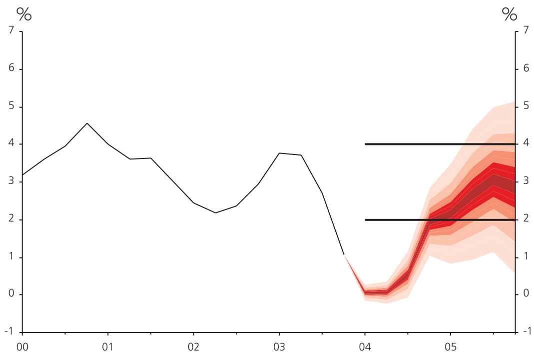
Rapid peso appreciation has also significantly and directly affected inflation's behavior, mainly (although not solely) through its impact on domestic fuel prices and automatic indexing clauses affecting regulated fees and fares, such as public transportation and household utilities. Peso appreciation from September to date is calculated to have reduced the 12-month CPI through December by about one percentage point. This situation will continue to affect the 12-month CPI in the short term, combined with a three–percentage-point decline toward the end of the first quarter as compared to the first quarter of 2003, when the war with Iraq was underway and the oil and derivatives price was rising strongly. Altogether, these factors suggest 12-month inflation should be negative for some months of the first half of this year, before crossing over to the center of the target range toward the end of the projection horizon.

In this sense, although negative figures for 12-month inflation are believed to be an essentially temporary phenomenon, they should contribute to decelerate nominal wage growth. Similarly, lower growth in labor productivity, which at some point caused concern due to its potential impact on costs and inflation, has turned around, especially in the manufacturing sector. Thus, the medium-term scenario shows no signs of major pressures on unit labor costs from the private sector. The limited rise in the public sector at the end of 2003 correctly reflected the changed inflation scenario, and, at the same time, let some steam off medium-term inflationary pressures.

Moreover, new conditions are prevailing that affect the prices of some specific product groups, where efficiency gains along the production and distribution chains and greater competition at the retail sales end have pulled down costs and prices. This aspect—which, combined with recent trends in the foreign exchange rate, accounts for somewhere between half and one percentage point of the decline in inflation in recent months—means that inflation levels of recent quarters will tend to persist for longer, a prospect not considered in previous projections. In effect, the pressure for higher retail margins was an underlying element in inflation projections included in previous *Reports*, but this element now appears to have been accommodated, in part thanks to the cost reductions and efficiency gains already mentioned.

Thus, in evaluating inflation's trajectory in the most likely scenario, the Board believes that the main surprises have come from imported costs and the evidence of decompressed margins due to more competition and improved efficiency. Given their magnitude, these elements have

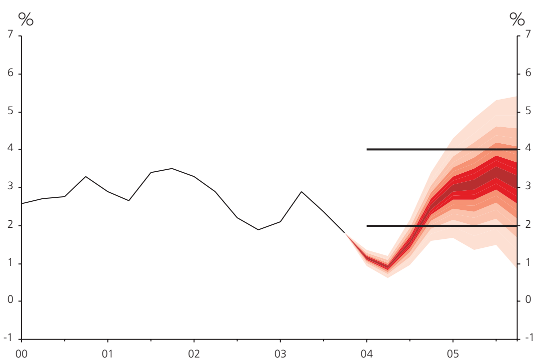
Inflation (CPI) projection (*)
(percentage change over the same quarter of the previous year)



(*) The figure shows the confidence interval for the baseline projection for the respective forecast horizon (colored area). Confidence intervals of 5%, 15%, 25%, 35%, 45%, 55%, 65%, 75%, 85% and 95% are used.
These confidence intervals summarize the Central Bank's risk assessment for future inflation, assuming that the monetary policy rate remains constant at 1.75% for the next two years.

Source: Central Bank of Chile.

Core inflation (CPIX) projection (*)
(percentage change over the same quarter of the previous year)



(*) The figure shows the confidence interval for the baseline projection for the respective forecast horizon (colored area). Confidence intervals of 5%, 15%, 25%, 35%, 45%, 55%, 65%, 75%, 85% and 95% are used.
These confidence intervals summarize the Central Bank's risk assessment for future inflation, assuming that the monetary policy rate remains constant at 1.75% for the next two years.

Source: Central Bank of Chile.

become a significant influence on 12-month inflation and this will be apparent above all in the short term. In contrast, news on idle capacity and employment, although presaging rising pressure, operate with a longer lag and are quantitatively more important, so they will tend to persist over time.

Altogether this suggests that lower 12-month inflation should be a temporary phenomenon, although it will last for longer than originally foreseen. In fact, indicators for 12-month core inflation suggest this will be less pronounced, with no negative figures expected. In particular, 12-month CPIX1 inflation, which excludes several indexed fees and prices, along with perishable products and fuels, has held steady at about 2%, and is expected to remain where it is or fall somewhat before approaching the center of the target range toward the end of 2004. Thus, toward the end of the year, CPI-inflation should move back to around 3%.

Inflation

Specification	2002	2003	2004(f)	2005(f)
	(annual change, percent)			
Average CPI inflation	2.5	2.8	0.7	2.7
December CPI inflation	2.8	1.1	2.0	3.0
Average CPIX inflation	2.6	2.3	1.5	3.2
December CPIX inflation	1.8	1.6	2.7	3.2

(f) Projection

Source: Central Bank of Chile.

More specifically, assuming a scenario in which activity posts growth in the expected range, by the end of this year, CPIX inflation is expected to reach 2.7%, and 3.2% at the end of 2005. Average core inflation should reach 1.5% this year and 3.2% in the next 12 months. As long as the international price for crude oil remains at about US$27 per barrel on average in 2004 and then falls to US$24 per barrel in 2005, annualized CPI-inflation should average 0.7% in 2004 and 2.7% in 2005, reaching December-on-December figures of 2.0% in 2004 and 3.0% in 2005. Thus, peso appreciation should be most strongly felt in 2004, and then gradually fade in the next and subsequent years. Aside from the fact that the strengthened peso has only a one-time effect on prices, part of the decline in nonperishable food prices should gradually turn around, while the main impulse driving inflation back to the target range currently comes from closing output gaps, given the Central Bank's commitment to using its policies to meet its 3% inflation target.

Private expectations also point to relevant changes in expected inflation. Surveys in recent months on foreign exchange desks reveal expectations that inflation will decline both one year and two years hence, from 3% in September, to current levels of 1.5% to 2.5%. Similarly, the Central Bank's survey found that expectations regarding inflation one year hence had fallen from 3.2% in September to 2.0% in January. For two years hence, the survey found expectations that inflation would reach 2.8%, for the first time below the center of the target range, while for a 3- to 5-year horizon, inflation was expected to fall below 2%, according to the differential between rates on nominal and indexed documents.

In this sense, private expectations have reacted strongly to the short-term news, placing expected inflation below the center of the target range for longer than the usual policy horizon. It is important to underline that the Central Bank has ruled out changing the 3% target, because it considers this rate effective in buffering shocks like recent ones, which might push inflation into negative figures for periods longer than currently foreseen. This target also makes it possible to assimilate relative price changes associated, for example, with a long-term rise in productivity, without forcing price cuts in specific sectors, which hurt activity and limit the efficiency of sectoral adjustments (see box on Inflation Targeting).

The main trends outlined in this *Report* constitute the scenario considered most likely. As usual, however, there are some relevant risks to inflation and growth that form part of alternative scenarios. Together these constitute the balance of risks for both variables.

Internationally, the risks identified above persist, particularly the possibility of a further, significant decline in the dollar in world markets. Furthermore, long-term interest rates in dollars may react to a fiscal scenario involving a large deficit and a strongly growing economy. On the positive side, the world's economy may recover even more strongly, thus further boosting commodity prices, although this would also influence trends in interest rates. Scenarios such as these, which would push external interest rates higher, could also affect the region's recovery.

Domestically, the brisker activity expected may not materialize, and there is some uncertainty about how different cost indicators will actually behave. The probability of output rising as expected and spending growing over time, which would help reduce today's gaps, remain linked to the consolidation of the scenario abroad and monetary impulse. The latest information, together with the implementation of various free trade agreements, and ongoing financial conditions favorable to Chile suggest that conditions should improve in the medium term. Still, the possibility should not be ruled out that domestic activity could respond more intensely than forecast to the improved international scenario, or that this last may also establish itself more strongly, favoring growth.

Moreover, low growth in investment in recent quarters is considered temporary, due to favorable trends in the factors that determine it. This situation may persist over time, however, leading to lower than forecast actual and trend growth, thus affecting the pace of gap reductions and the inflation path.

In terms of inflation, if trends in nominal wages do not adjust to the lower inflation scenario expected in the short term, unit labor costs could stop falling or even turn around, pressuring core inflation somewhat more. On the other hand, the decline in nonperishable food prices may last longer, and/or margins may show less decompression, thus reducing medium-term price pressures.

With regard to imported components of inflation, the recent strengthening of the peso has caused a drop in prices, that will cause a transitory fall in monthly inflation, and persistent changes in 12-month figures. But in a scenario involving inflation expectations moving further away from the target range, inflation may take longer than expected to return to 3%. Also, scenarios could arise in which the exchange rate is different from forecast. In any case, there is no sign that the passthrough from the exchange rate to inflation will vary from its usual behavior in recent years. Finally, although oil price scenarios other than those considered in the main scenario of this *Report* seem likely, their impact on medium-term inflation in Chile should be limited.

Altogether, the balance of risks for activity and inflation is considered to be even.

In summary, the Board believes that the current expansionary monetary policy stance is compatible with inflation moving toward the center of the target range toward the end of the projection horizon. Thus, in the baseline scenario, CPI inflation is projected to reach about 3% at the end of 2005, but to average less than 2% this year, reflecting the impact of peso appreciation and other surprises. Meanwhile, economic growth will rise, reaching figures over and above potential GDP growth.

In the coming months, the Central Bank will pay special attention to the behavior of core inflation, trends in labor costs, external inflation, private inflation expectations, and the timing of idle capacity absorption, which in turn is linked to the pace of growth in output and spending. One factor particularly relevant to this evaluation will be the behavior of investment growth.

The presence of nominal rigidities in several markets within the economy makes it inconvenient for inflation to remain below target for too long, a situation that also makes it hard for relative prices to adjust. Because of this, the Board reaffirms its goal of achieving inflation centering on 3% during the usual 24-month policy horizon. It will continue to use its policies flexibly, to confront persistent movements in projected inflation, if it threatens to move away in either direction from the 3% target. Possible future scenarios other than the baseline, which will only appear over time, will require different responses from monetary policy.

BOX: INFLATION TARGETING: THE RATIONALE BEHIND THE 2% TO 4% TARGET RANGE, CENTERING ON 3%

The Central Bank's main objective is to ensure price stability. The monetary authority interprets this objective to mean keeping inflation within a 2% to 4% range, centering on 3%, over a 24-month horizon. Currently, inflation stands below 2% and is likely to remain below target for several quarters, or it could even become negative during the first half of this year. In this context, agents may wonder why the Bank does not reduce the inflation target, for example, to a range between 1% and 3%, centering on 2%. This box reviews the rationale behind the current target, presenting the main arguments for why a 3% (symmetrical) center is the most suited to ensure the correct operation of the Chilean economy.

Theory and empirical evidence indicate that high inflation damages economic growth. As a result, the best contribution that monetary policy can make to a country's long-term growth is to keep inflation low. The evidence indicates that, on average, reducing inflation by 10 percentage points should boost growth by from 0.2 to 0.4 percentage points. Nonetheless, these effects are normally found for samples including countries with moderate and high inflation. For countries with low inflation, the evidence is less conclusive and the benefits appear to be less significant.[1/]

At first glance, even when a low inflation target seems appropriate, it is not clear where it should be set or whether or not it should equal zero. Normally, several reasons are used to avoid a near-zero inflation target.[2/] One such reason is that consumer price indices tend to involve some measurement bias, due to differences in the quality of goods and basket substitution encouraged by changes in relative prices, which overestimate the real increase in prices to the consumer. Also, a positive, but low, rate of inflation makes it easier to change relative prices when different shocks occur, particularly in markets where there is some downward price rigidity. When an economy faces a shock, adjustment requires that some prices rise and others fall in relative terms. Although correcting upward is normally easy, some prices, such as nominal wages, tend to be downwardly rigid, which affects activity, employment and resource allocation.[3/] In these cases, therefore, it is less costly to change relative prices by raising some of them rather than applying a nominal cut. Finally, there is some risk of slipping into negative inflation when the target is too low. Periods of persistent deflation can generate financial instability and problems in the economy's functioning, including restrictions on the flexibility of monetary policy. A good example of this phenomenon is the recent history of the Japanese economy.[4/]

This set of arguments has led most countries with inflation targets to choose inflation rates of over 0% as their long-term target. In general, in developing countries targets are close to 3%, while in developed countries they stand at around 2%.

[1/] See Barro (1996), De Gregorio (1996, 1999), Fischer (1996), Bruno and Easterly (1998), Andrés and Hernando (1999).

[2/] These arguments are reviewed in Sinclair (2003).

[3/] In Chile, for example, rulings from the Labor Bureau (Dirección del Trabajo) have established that even when the parties have agreed on CPI-related indexing for a specific period, it is not appropriate to nominally reduce wages if the change in the reference index is negative upon completion of the period covered by wage indexing (see rulings Nº 26430124, 13-07-01; Nº 292876, 23-07-03).

[4/] See, for example, Mishkin (1998) and Bernanke (2000).

Inflation targeting
Selected countries, annual change, percent

Developed economies		Developing economies	
Australia	2 - 3	Peru	2.5 +/-1
Canada	1 - 3	South Africa	3 - 5
Chile	2 - 4	Sweden	2.0 +/-1
Czech Republic	2 - 4	Switzerland	< 2
Israel	1 - 3	Thailand	0 - 3.5
South Korea	2.5	United Kingdom	2
Mexico	3		
New Zealand	1 - 3		
Norway	2.5 +/-1		

Source:
Central Bank of each country.

There are good reasons why Chile in particular, and developing countries in general, should have targets (or target ranges) higher than those of developed countries. On one hand, quality and substitution biases are normally greater in developing countries. Quality biases, because technological changes are adopted at a lower base level and basic baskets are updated less frequently; substitution biases, due to the larger changes in relative prices typically observed in these economies. Studies for the United States indicate that these measurement problems could mean that the real rate of inflation is overestimated by as much as 1%.[5/]

Making it easier to adjust relative prices to sectoral shocks is especially relevant in developing economies with rigid markets, because normally these are more volatile than those of their developed peers and therefore need larger corrections. Although the most recent evidence on microeconomic flexibility in Chile, particularly in the labor market, is mixed, studies for the US, a relatively flexible economy, and the European economies, which are comparatively more rigid, find that inflation rates of over 2% maximize employment and activity.[6/]

Finally, in terms of the risk of falling into deflation when the objective is too low, it should be noted that because Chile has an open economy, in which commodity exports play a key role (and the terms of trade are more volatile), and is located in a region where financial shocks are relatively frequent, price fluctuations can be more pronounced than in other countries. This provides additional justification for maintaining a somewhat higher target than that of more developed economies. The experience of recent months illustrates this very clearly. If the inflation target had centered on 2%, today inflation in Chile would be near 0% and would remain negative for a much longer period than expectedly will.

Along with these arguments, which apply as part of a strategic or long-term decision, it should also be noted that a change in the target range when actual figures are already somewhat distant from the target could affect the credibility of the Central Bank and the effectiveness of the inflation targeting scheme. If the market perceives that the target depends on a momentary condition, or anticipates that it could change in the face of different events, with all the consequences that it entails for prices and wages, the target loses its value as a nominal anchor and, as a result, makes it more costly to keep inflation around the central objective.

Given these considerations, at the monetary policy meetings in December and January, the Board reaffirmed that the Central Bank's objective is to keep inflation within a target rage of 2% to 4%, centered on 3%, over the usual 24-month horizon.

[5/] See Boskin et al. (1996) and Lefort (1998).

[6/] See Akerlof et al. (1996) and Wyplosz (2001).

Background: *Monetary Policy Report*, September 2003

In the baseline scenario of the previous *Report*, the Board estimated that inflation would remain around the center of the target range, averaging 2.7% at the end of the policy horizon, which at that point extended through September 2005. However, this measure was expected to fluctuate significantly in the coming months, due to base changes associated with past trends in perishable goods prices and the most likely behavior of the oil price. Toward the medium term, idle capacity was expected to gradually diminish, margins to slowly decompress, and costs to behave limited by lower external inflation, the slight real appreciation expected for the peso in the next two months, and higher labor productivity. The inflationary impact of the VAT increase was considered temporary and limited, since it represented only a one-off change in price levels. GDP was projected at somewhere between 3% and 3.5% in 2003 and between 4% and 5% in 2004. Among other factors, this was based on the then promising external scenario settling in more firmly and a sustained recovery of the terms of trade, combined with the ongoing impulse from monetary policy.

Internationally, the main sources of risk included uncertainty in the international fuel market; the high fiscal and current account deficits in the United States; structural reforms in Japan and Europe; the fragility of the financial system in China. In both spheres, the risks of a more negative performance remained present, although they were considered less probable than in previous *Report*s. Domestically, a higher growth scenario could not be ruled out, as was apparent in some incipient, but relevant, shifts in the exchange rate, country risk and other financial asset prices, all reflecting greater optimism about the future of the Chilean economy. At the same time, although the low growth in productivity of recent quarters was considered temporary, it could have continued, affecting trends in unit labor costs and idle capacity, generating higher than forecast inflationary pressures. Also, the risk of inflation following a less favorable path and risks to the oil price were also considered. The effects of these scenarios on medium-term inflation seemed to be under control, nonetheless. Overall, the risks for activity and inflation were estimated to be balanced.

Monetary policy meetings between October and December

In October, signs from the previous meeting indicating an improved international outlook had strengthened. These included prospects for higher world growth in 2004, an increase in commodity prices, and better financial conditions. These factors, combined with positive expectations for the Chilean economy, were strongly reflected in domestic financial markets, although they had not yet appeared in output data. In fact, measures of activity remained weak, the labor market was losing ground at the margin, and investment remained flat. Consumer confidence, however, was on the rise and the peso continued to appreciate against the dollar, as it had since early September. Inflation, meanwhile, revealed lower than forecast price pressures. Both CPI and core inflation remained at the bottom of the target range, and CPI inflation was even expected to fall below 2% for some months. These conditions were considered temporary. Inflation was still projected to be around 3% at the end of the planning horizon.

With this information, the most plausible monetary policy options apparent in October were to keep the interest rate the same or raise it by a small amount. Cutting rates was ruled out, because it was reasonable to assume that lower inflation and reduced output would be temporary; the better external and domestic prospects made it unlikely that idle capacity would rise in coming quarters and, if anything, gaps were likely to close more quickly, and additional inflationary pressures could appear. Raising the interest rate could be justified by the generally improved outlook and its effects on expectations and thus the behavior of inflation. Moreover, as discussed at other meetings, and explicitly in the two previous *Report*s, in the baseline (most probable) scenario, the monetary impulse was likely to fade. The policy rate remained particularly low and, with the way the economy was performing, a quicker than expected recovery in activity and spending could not be ruled out. The crucial factor continued to be identifying the exact point at which there was enough data to start normalizing monetary policy.

Keeping the same interest rate and waiting for more information were justified in October for several reasons. First, while the global outlook had strengthened, there was still no objective data in Chile indicating that this increase in growth was a real possibility. Second, the global outlook still showed some vulnerability: there were no conclusive signs regarding labor market performance in the United States; the oil price continued to bounce around and no one yet knew how financial markets would adjust to the changes apparent in parities. Third, there was a risk of shocks to inflation persisting for longer than forecast and that core inflation could continue to fall. Finally, the possibility that peso appreciation was in fact consistent with the baseline scenario in the last *Report*, and not a better one, could not be ruled out, and this involved lower inflation based on this reading, with no compensations in terms of reduced idle capacity. With this information, a more optimistic scenario was possible, although the signs remained weak, but it was also possible that the recovery was not yet consolidated, or that inflationary pressures were somewhat less than assumed in the most likely scenario. In this context, reducing the monetary impulse could have been damaging and ended up representing a timid rise that later failed to continue or even turned around. After weighing these conditions, the Board unanimously agreed to keep the monetary policy rate at 2.7% annually.

In the weeks prior to the November meeting, substantial new information came together. The improvements in the external environment were moving ahead more quickly and intensely than forecast. Both world GDP growth (weighted for GDP share at PPP) and that of Chile's main trading partners (weighted for their share of trade flows) were on the rise. All this was reflected in the copper price and the real value of the peso. Domestically, positive news on manufacturing and mining activity, durable consumption, personal loans and household expectations, was building up. The outlook for short-term inflation was significantly different from a couple of months earlier, mainly due to the impact of temporary supply factors mostly associated with the exchange rate and nonperishable goods prices. Private expectations about long-term inflation were reacting rather strongly to this news. Altogether, this data pointed to a scenario involving a stronger performance from output and spending during 2004 and 2005, thus consolidating the projections for activity from the previous *Report*, but with a tendency for inflation to speed up later than originally expected. The baseline scenario expected inflation to be 1.5 percentage points lower than September *Report* projections for 2004 and 0.5 percentage points lower for 2005.

Based on this information, in November increasing the interest rate seemed less of an option. Although it was possible to argue that behind peso appreciation were factors that would push activity higher, their impact was expected over a relatively distant horizon, with lower inflation being the direct result of appreciation in the coming quarters. Cutting the interest rate, meanwhile, could be justified by the implications of the month's news – price cuts and trends in the exchange rate— on inflation's likely behavior over the next 24 months. The latest projections placed inflation in the baseline scenario at less than 2% for four quarters, reaching 3% in the fourth quarter of 2005. A cut to the policy rate, therefore, would bring average inflation closer to 3% during the projection horizon. Otherwise, there would be more risk of agents maintaining inflation estimates below the target range, which could reduce inflation even more over the next eight quarters. In addition, some argued that the monetary policy rate should be adjusted to avoid a contractionary bias that could lead to lower inflation given a nominal rate, or to ensure the credibility of the nominal anchor.

There were several arguments against the option of reducing the rate in November that had to be considered. First, the situation being dealt with essentially involved cost shocks. In general, whenever credibility is solid and beyond the effects of indexation clauses, these affect prices only, and not inflation. The prospects would be radically different if this were a demand shock, by which medium-term inflation would be more affected, or if the credibility of the nominal anchor were at risk. At that point the Board saw no threats to the credibility of the 3%-based target. Although private expectations regarding longer term inflation had fallen noticeably, given their volatility it was necessary to monitor them for longer before considering them a firm element within the analysis. On the possibility that output gaps could close more quickly and thus push inflation back up to 3% sooner, it was considered that, given the lags involved, an interest rate cut would come into effect at a time when impulse was no longer necessary and would have minor influence on inflation in 2004. After weighing these arguments, the Board unanimously agreed to maintain the monetary policy interest rate at 2.75% annually.

By the December meeting, many of the trends noted in the previous monetary policy meeting, which had already detected changes in the analysis since the September *Report*, were confirmed. The external scenario, especially the terms of trade and growth, continued to firm up in a climate of global financial stability. Domestically, the prospects for growth continued to consolidate, with actual data confirming forecasts. Consumer confidence remained high, consumption indicators continued to improve and the labor market showed signs of renewed strength. However, November inflation was once again lower than expected, although with fewer surprises than in previous months. As with the past two months, these reductions remained associated primarily with supply shocks, particularly price cuts in a specific segment of the retail sector and peso appreciation. This combined with public sector wage increases that were smaller than in previous years, leading to a new downward correction to the average inflation scenario forecast for 2004 and 2005, as compared to November. Indicators for inflation expectations implicit in interest rate differentials, meanwhile, firmed to 1.5% and 2.0% over different horizons.

This meeting considered the analysis sustained during the previous meeting still valid, and the arguments in favor of cutting rates had stronger support. In the most likely scenario, the inflation projection would be lower than 3% for longer than expected last November (and for every projection horizon). Both this low level and its duration represented records since the inflation target range was established. Reducing the monetary policy rate was consistent and symmetrical with the Central Bank's commitment to its 2% - 4% target range. With this in mind, the Board unanimously agreed to reduce the monetary policy rate by 50 basis points, from 2.75% to 2.25% annually. It also confirmed its position that inflation centering on 3% is the right level to accommodate changes in relative prices and prevent unexpected supply shocks from undesirably prolonging low inflation.

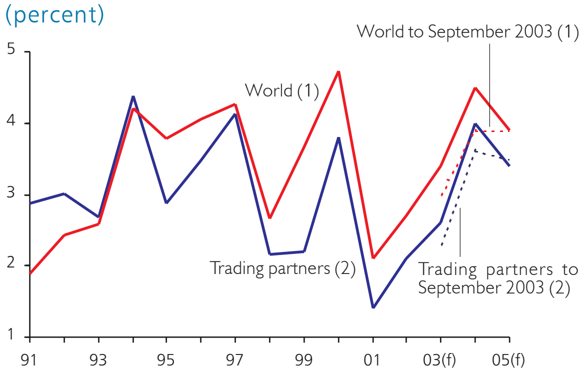
This chapter examines recent developments and prospects for the world's economy over the next two years, outlining the external scenario and the risks that the Chilean economy is most likely to face. It analyzes recent trends in world economic activity, the terms of trade, international inflation, and international financial conditions.

Chapter synthesis

In recent months, an international scenario that should affect the Chilean economy more positively has settled in, and is reflected in better prospects for growth, trade and external financial conditions. The improved growth scenario is based on the better performance posted in 2003, led mainly by the United States, emerging Asia (especially China) and Japan, combined with second-round effects in third countries. At the same time, the more promising prospects for the terms of trade are based mainly on the upward trend in the copper price in 2003. This stronger performance from the world economy is expected to continue, supported by the impact of more expansionary monetary policies applied in most of the world, fiscal impulse in the US, and better financial conditions.

The elements of uncertainty that surrounded the baseline scenario from the September *Report* have declined, making it possible to balance risks over the projection horizon. The possibilities of the dollar declining even further, higher interest rates, and more instability in international financial markets nonetheless remain. For now, significant dollar depreciation has not come with higher interest rates, thus creating the conditions necessary to reduce the imbalance in the United States' external accounts. At the same time, structural reforms still pending in Europe and Japan favor more caution about long-term prospects. Moreover, uncertainty about the oil price, geopolitical risk and terrorist attacks remains. At the same time, because of the tendency for projections to underestimate world growth during global recoveries and recent trends in copper prices, the occurrence of a more favorable external scenario cannot be ruled out, which would help to balance risks.

Figure I.1
World growth
(percent)



(1) Weighted growth by share of world GDP at PPP.
(2) Weighted growth by share of Chile's total exports (2002).
(f) Projection.

Sources:
Consensus Forecasts, corrected using projections from a sample of investment banks.
International Monetary Fund.
Central Bank of Chile.

World growth

Estimates for world growth, based on figures from a sample of investment banks and *Consensus Forecasts*, have been corrected upward for 2003 and 2004, both as weighted for Chile's main trading partners and by purchasing power parity (PPP).[1] In the first case, estimates rose from 2.3% to 2.6% in 2003 and from 3.6% to 4% in 2004. Weighted at PPP, corrections are larger, with projections rising from 3% to 3.4% in 2003 and from 3.9% to 4.5% in 2004. This scenario assumes faster than expected growth for the US, Japan and China, economies that together account for about 40% of world output, with the resulting impulse to the rest of the world. In 2005, recovery is expected to consolidate,

[1]/ World growth weighted by purchasing power parity (PPP) exceeds the weighted figure for Chile 's main trading partners (exports plus imports), because of the difference in Asia's share. China, with high growth rates, accounts for a much larger share of world GDP at PPP than it does within Chile 's exports. Japan's share of Chilean exports is almost double its share of world GDP at PPP.

bringing world growth to 3.4% when weighted by trading partners, and 3.9% when weighted by PPP (figure I.1 and table I.1).

Table I.1
World growth
(percent)

	Average 1990-1999	2002	2003 (f)	2004 (f)	2005 (f)
World (1)	3.3	2.6	3.4	4.5	3.9
United States	3.0	2.2	3.1	4.6	3.5
Europe	2.0	1.0	0.9	2.4	2.3
Japan	1.7	-0.3	2.2	2.2	0.9
Rest of Asia (2)	7.9	6.7	6.6	7.2	6.4
Latin America (3)	2.8	-0.7	1.1	3.9	3.8
Trading partners (4)	3.0	2.0	2.6	4.0	3.4
Trading partners (5)	2.9	1.5	2.5	3.9	3.1

(1) Regional growth weighted by share of world GDP at PPP. Countries included represent 84% of world GDP (2003).
(2) China, Indonesia, Malaysia, Thailand, Singapore, South Korea, the Philippines, Taiwan and Hong Kong.
(3) Brazil, Argentina, Mexico, Colombia, Uruguay, Venezuela, Ecuador, Paraguay, Bolivia and Peru.
(4) Growth of Chile's main trading partners weighted by share of total exports (2002). Countries included account for 92% of total exports.
(5) Growth of Chile's main trading partners weighted by share of non-copper exports (2002). Countries included account for 92% of total exports.
(f) Projection.

Sources:
Consensus Forecasts, corrected using projections from a sample of investment banks.
International Monetary Fund.
Central Bank of Chile.

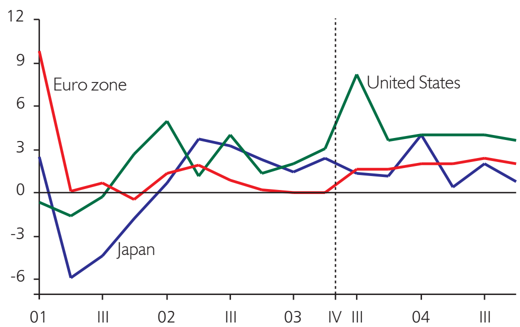
Estimated GDP growth for Chile's main trading partners has risen to 2.6% for 2003 and 4% for 2004. This last figure is one percentage point higher than average growth during the 1990s.

The recovery in the United States' economic activity has consolidated since the last *Report*. In fact, although that economy's recovery was visible in results for output during the first half of 2003, it was reinforced by annualized growth during the third quarter, which reached a surprising 8.2%, showing strong performance of domestic demand, mainly in investment. Moreover, recent positive trends in the labor market, along with strong consumption, manufacturing, real estate and service activity, have helped to dispel concerns about the pace and sustainability of US economic growth. On this basis, the main scenario has corrected growth projections for this economy upward, to 3.1% in 2003 and 4.6% in 2004. Toward 2005, growth should reach 3.5%, although some concerns remain about what form corrections to public and external accounts that are undoubtedly unbalanced will take. To begin with, the current account deficit stands at around 5% of GDP. However, this should fade, given the marked depreciation of the dollar, which should continue throughout the projection horizon. Also, the US federal government deficit is very large and, according to official projections, it will remain in the red for the next eight years. Although it shouldn't go beyond the almost 6% of GDP posted in the early 1980s, the need to spend more on social security and health care poses some challenges to fiscal account management in the medium term. However, with public debt standing at around 35% of GDP, fiscal solvency remains solid, especially compared to other industrialized countries.

The euro zone, although lagging behind other developed economies, has started to show signs of recovery. This region posted 1.6% annualized growth during the third quarter, driven mainly by the external sector. The positive prospects for 2004 are reflected in results from surveys about the business climate, mainly in Germany and France. This scenario is helped along by ongoing low interest rates, the recovery in external demand, and countercyclical fiscal policies, which for now have not produced any adverse effects, despite not complying with the zone's Stability and Growth Pact. Overall, although this outlook reinforces growth projections for 2003 and 2004, there have been no significant changes from the previous *Report*, while the pronounced multilateral appreciation of the euro remains a contractionary element.

Japan, meanwhile, has continued to perform well, after it did significantly better than expected during the first half of 2003, which brought corrections to growth projections for 2003 and 2004. This positive tendency was essentially associated with the manufacturing sector, which received the benefits of more dynamic exports, mainly to the US and emerging Asia, which together account for almost half of its export basket. In addition, private investment has picked up and surveys show improved business expectations. However, sustained recovery requires progress in still weak structural reforms that would strengthen domestic demand. In particular, conditions in the Japanese financial market still act as a brake on financing to small and medium-sized firms.

Figure I.2
Annualized quarterly GDP (*)
(percent)



(*) From the fourth quarter of 2003, projections.

Sources:
Consensus Forecasts, corrected using projections from a sample of investment banks.
International Monetary Fund.
Central Bank of Chile.

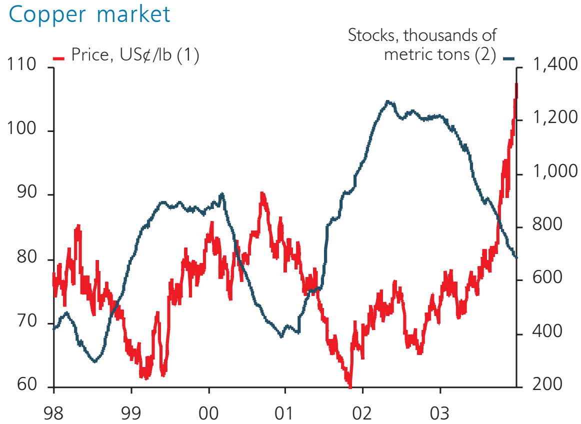
The outlook for emerging Asia is more encouraging than forecast in September, and along with the US this region has become the motor driving the world economy, with growth projected at 6.6% in 2003 and 7.2% in 2004, that is, 0.6 percentage point higher than expected in September for both years. Although the external sector has led the region's recovery, growth has also been boosted by stronger domestic demand. Especially outstanding is the upward correction to China's growth projections, which have risen to 8.5% in 2003 and 2004 (figure I.2).

For Latin America, growth estimates for 2003 have remained stable. Argentina received the benefits of more favorable prices for its export commodities last year. Brazil's 2003 growth estimates have declined, due to the lagging effect of the restrictive monetary policy applied early in the year to strengthen market confidence in the inflation target. Mexico still shows no effects from the stronger performance in the US, its main trading partner, due to external competition from China and its delay in approving structural reforms. For 2004, in line with the recovery in world activity, prospects are more positive. In Argentina, although doubts persist about whether public debt restructuring and bank system capitalization will be resolved, activity should rise (although less than in 2003), due to idle capacity and impulse from abroad. The Brazilian economy, meanwhile, will benefit from a better external climate and monetary relaxation implemented early in the second half of 2003, which already helped manufacturing activity along in the fourth quarter. Similarly, suitable management of its public debt and compliance with targets agreed upon with the IMF have reinforced investor confidence, encouraging increased investment flows into this economy. As a whole, the region is expected to grow 1.1% in 2003 and 3.8% on average over the next two years.

Commodity prices and terms of trade

Since the closing of the last *Report*, the price of copper has risen steadily and significantly, thanks especially to manufacturing activity, which has recovered in the main consuming countries (the US, Japan and China),

Figure I.3
Copper market



(1) Daily prices on the London Metal Exchange.
(2) Daily stocks on the London Metal Exchange and New York.

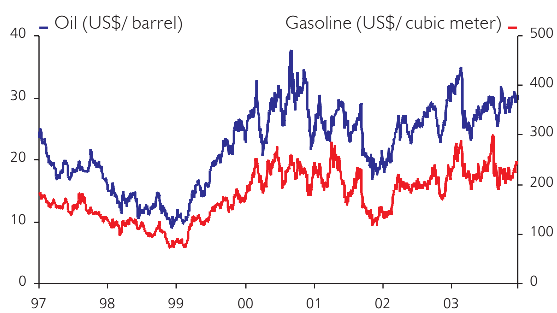
Source: Bloomberg.

Table I.2
Copper price projections
(US¢/lb, London Metal Exchange, average)

	2003	2004(f)	2005(f)
Central Bank	80.7	100.0	102.0
Cochilco	-	92-96	-
Goldman Sachs	-	101.0	112.0
JP Morgan Chase	-	92.0	100.0
Deutsche Bank	-	100.0	106.0
Merrill Lynch	-	94.0	96.0
Scotiabank	-	105.0	110-115
Futures (*)	-	96.8	95.6

(*) Average over the 30 days prior to 5 January 2004.
(f) Projections.

Figure I.4
Oil and gasoline prices (*)



(*) Daily Brent oil prices and 87 octane gasoline.

Source: Bloomberg.

Table I.3
Brent oil price projections
(US$/ barrel, average)

	2003	2004(f)	2005(f)
Central Bank	28.9	27.0	24.0
JP Morgan Chase	-	24.6	21.2
Goldman Sachs	-	23.5	-
Deutsche Bank	-	23.0	21.0
Futures (*)	-	27.7	25.5

(*) Average for the 30 days prior to 5 January 2004.
(f) Projections.

and dollar depreciation against the main currencies (Box I.1). This has brought a steady decline in copper inventories and caused speculators to take positions in this asset. In December of 2003, the copper price bounced between US$0.95 and US$1.05 per pound, bringing the average price for the year to US$0.807 per pound, above last September's projection of US$0.775. Considering the current price, the strong performance expected from world activity, low total inventories, and the deficit forecast for this market over the next two years, the price projection has risen from US$0.83 per pound in 2004 and US$0.86 in 2005, as reported in September, to US$1 in 2004 and US$1.02 per pound in 2005 (figure I.3 and table I.2).

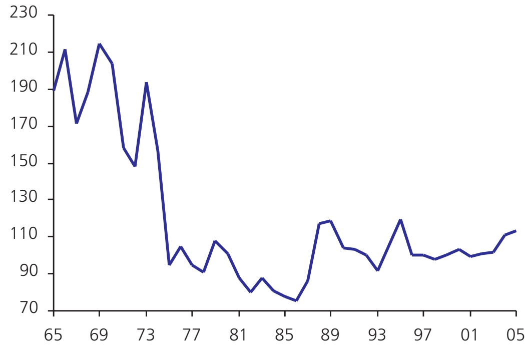
In line with the recovery in world activity, other export commodity prices are also rising, particularly wood pulp. Since the closing of the previous *Report*, the price of wood pulp has risen steadily, to average a 13% increase in 2003. This mainly reflects increased demand from North America and Asia, regions that account for a combined 60% of world consumption. Meanwhile, fishmeal has continued to recover, ending 2003 with an average 11% rise over the year before. This is due to strong demand from China and Japan and lower production from Chile and Peru, the world's two largest suppliers, due to cuts to catch quotas. For the future, supply and demand conditions are expected to continue, which should keep the price similar to its level at the end of 2003 (US$680 per metric ton).

Conditions in the oil market have not changed since September. After a slight drop to US$25 per barrel that month, the price of crude oil has ranged from US$28 to US$31. The persistence of these prices is associated with low inventories in the United States, the 900,000 barrel cut to daily production decreed by OPEC in September, higher demand for crude oil to produce derivatives (especially heat), dollar depreciation, uncertainty about the status of Iraqi oil, and increased world activity. Overall, 2003 ended with an average price of US$28.9 per barrel, slightly higher than the US$28.5 per barrel estimated in the previous *Report*. For the next two years, given the current oil price, the recovery in world activity and the slim likelihood of any increase in oil supply, the price should decline more gradually. This brings the projection for the average oil price up by US$1, to US$27 in 2004 and US$24 in 2005. Unresolved geopolitical risks continue to contribute some uncertainty to baseline scenario projections (figure I.4 and table I.3).

All this means that the terms of trade are expected to recover more quickly than estimated in the previous *Report*, with annual growth reaching 1.2% in 2003, up from the 0.8% forecast in September, and an average increase of over 9% annually in 2004 and from 1% to 2% the next year (figure I.5).

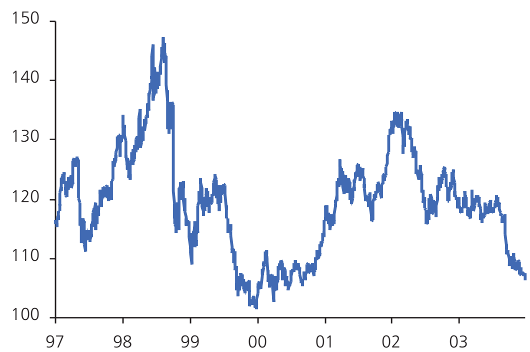
The baseline scenario assumes a substantial improvement in the terms of trade over the September Report*, mainly thanks to the significant rise in the copper price.*

Figure I.5
Terms of trade index (1996=100)



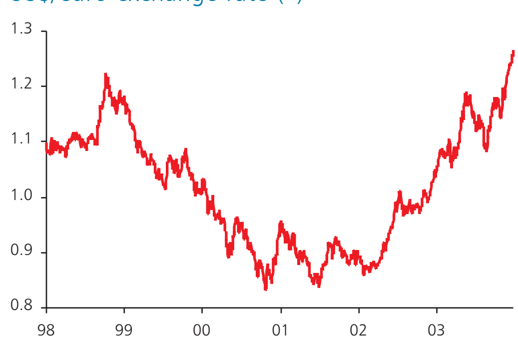
Source: Central Bank of Chile.

Figure I.6
Yen/US$ exchange rate



Source: Bloomberg.

Figure I.7
US$/euro exchange rate (*)



(*) Before 31 December 1998, figures are for the US$/ecu.

Source: Bloomberg.

International inflation

As expected last September, the United States inflation in 2003 is estimated at 2.3%, with core inflation standing at 1.5%. In 2004, actual inflation should fall to 1.4%, based on the expected behavior of the oil price. In Europe, the baseline scenario is similar to that of two months' ago, with inflation standing at 2.2% in 2003, while for 2004 and 2005, the average should be somewhat lower than 2%. In Japan, 2003 closed with deflation (with an annual average estimated at –0.3%) and consensus projections forecast a similar outlook for the next two years. However, the consolidation of the Bank of Japan's more expansionary monetary policy stance could change this (table I.4).

Table I.4
World inflation
(percent)

	Average 1990-1999	2002	2003 (f)	2004 (f)	2005 (f)
			(average change in local currency)		
United States	3.0	1.6	2.3	1.4	1.8
Europe	3.1	2.2	2.2	1.9	1.9
Japan	1.2	-1.0	-0.3	-0.2	-0.1
Rest of Asia (1)	7.6	0.9	1.8	2.9	2.7
Latin America (2)	387.0	13.6	9.2	6.5	7.0

(1) China, Indonesia, Malaysia, Thailand, Singapore, South Korea, the Philippines, Taiwan and Hong Kong.
(2) Brazil, Argentina, Mexico, Colombia, Uruguay, Venezuela, Ecuador, Paraguay, Bolivia and Peru.
(f) Projections.

Sources:
Consensus Forecasts, corrected using projections from a sample of investment banks.
International Monetary Fund.
Central Bank of Chile.

In 2003, world inflation relevant to Chile, measured in dollars and calculated using the External Price Index (EPI),[2/] was 7%, half a percentage point higher than estimated in the September *Report* (6.5%), due to dollar depreciation in international currency markets, which deepened in the last quarter of 2003. For the current year, consensus projections assume the euro will appreciate more than forecast in September, although most of this has already occurred. Thus, estimated external inflation for 2004 should reach 6.6%, compared to the 2.8% forecast in the previous *Report*.[3/] In any case, the actual and projected trend in unit value indices for imports, in dollars, has remained below these amounts, at averages of around 4.5% in 2003 and estimates of between 3% and 4% in 2004 (figures I.6 and I.7).

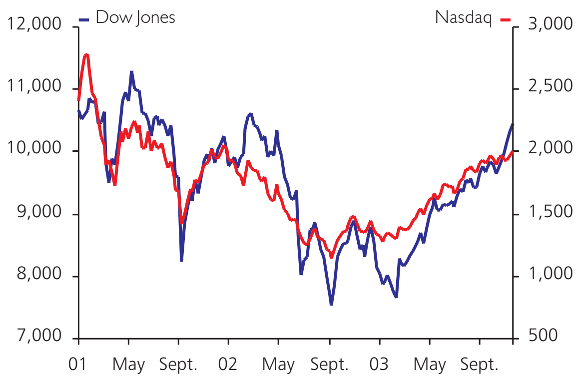
International financial markets

The most significant characteristic of developed financial markets has been the marked dollar depreciation against the main currencies. Compared to September, the euro has grown stronger by 16% against

[2/] The external price index is calculated using dollar-denominated WPIs for Chile's main trading partners, weighted for their relative importance to imports and exports (excluding copper, oil, derivatives and other fuels) to and from Chile. The main shares for 2003 are: the US (25.7%), Brazil (9.1%), Japan (8.4%), China (7.5%), Argentina (7.4%), Mexico (5.6%) and Germany (4.4%).

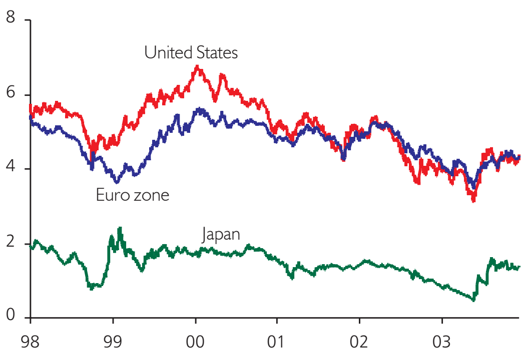
[3/] In terms of evaluating imported inflation pressures on medium-term inflation, changes in external inflation are not as important as the import unit value (IVUM). Beyond changes in currency parities, the IVUM reflects the actual dollar cost of importing goods, so the imported component of costs is more closely linked to it.

Figure I.8
Stock price indices
(1996=100)



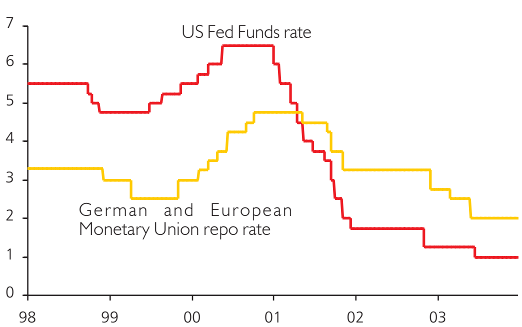
Source: Bloomberg.

Figure I.9
10-year government bond yields
(percent)



Source: Bloomberg.

Figure I.10
Monetary policy interest rates
(percent)



Source: Bloomberg.

the dollar and is currently trading at about US$1.27 per euro, a record since its launching. Dollar depreciation against the yen in the past four months reached 9%. Similarly, interest rates on long-term US treasury bonds have been somewhat volatile, and today are down 4.3% from last September. This is associated with expectations that inflation will not rise quickly, despite better prospects for growth, the negative gap between income and spending maintained by that economy, and the elimination of the risk of deflation. In Europe, however, keeping growth prospects and prices the same has left yields on their longer-term bonds practically unchanged. Finally, stock indices remain on the rise as they have been since the second quarter of 2003, except for Japan, where the stock exchange has been very volatile in recent months. Overall, current financial conditions are considerably better than in last September (figures I.8 and I.9).

Meanwhile, market expectations point to a delay in the start of rising cycles for monetary policy interest rates in the United States and the euro zone, to mid-year. In fact, as the US Federal Reserve has stated, the economy is still showing idle capacity and very controlled inflation levels, which would make it possible to keep rates low for some while. In the euro zone, although fiscal deficits are higher than specified in the stability pact, euro appreciation could slow recovery and limit possible inflationary pressure, which would not necessarily rule out an additional cut to the policy rate (figure I.10).

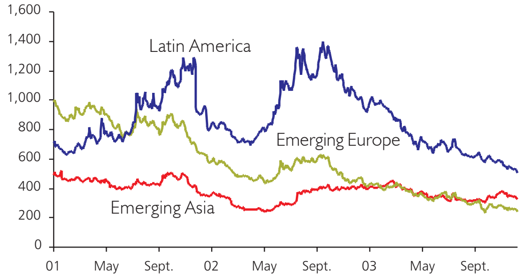
US monetary policy interest rates are expected to remain stable, with rates not starting to rise until mid-year. In the euro zone, meanwhile, an additional cut to the policy rate cannot be ruled out in the short term, because of the effects that euro appreciation may have on activity.

Emerging financial markets

The markets of emerging economies reveal more favorable financial conditions than some months ago. Changes in interest rates and sovereign spreads show that borrowing costs to emerging economies have fallen, making domestic interest rate cuts and currency appreciation easier, especially in Latin America. For all emerging economies, sovereign risk has fallen almost 100 basis points since September, which reflects agents' growing willingness to invest in riskier papers. Chilean bond spreads, meanwhile, have performed similarly, with the premium on the 2012 bond, for example, falling 35 basis points since September. Stock indices have posted significant rises, following a trend that began in the second quarter of 2003. Despite the good performance of financial indicators for Latin America, Mexico and Argentina have behaved somewhat unevenly. In Mexico, the economy has not benefited from improvements in the United States, due to greater competition from China and difficulties implementing public sector reforms, among other factors. Argentina, despite strong growth, continues to raise doubts, because debt restructuring remains unresolved and there has been little progress in the structural reforms necessary for sustained growth (figures I.11, I.12 and I.13).

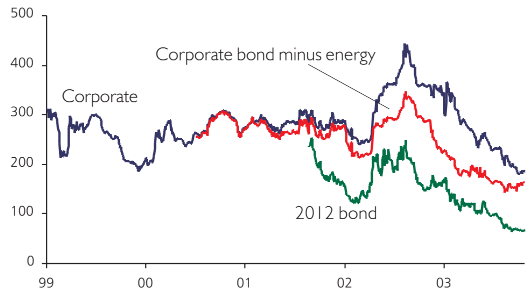
In addition to these signs of improved financial conditions and international prospects, projections for capital flows into emerging economies have been corrected upward and by substantial amounts.

Figure I.11
Regional sovereign spreads
(basis points)



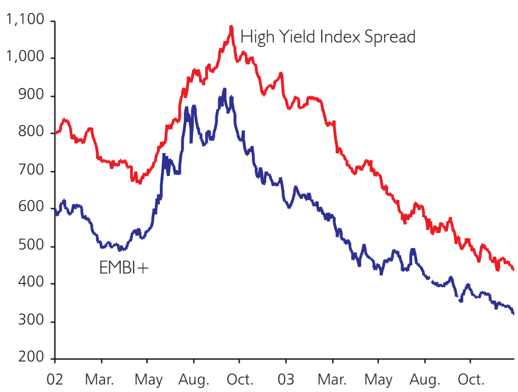
Source: JP Morgan Chase.

Figure I.12
Chile's spreads
(basis points)



Source: JP Morgan Chase.

Figure I.13
High Yield Index Spread for the US and EMBI+ (corrected for Argentina)
(basis points)



Sources:
JP Morgan Chase.
Goldman Sachs.

Figures from JP Morgan Chase indicate that in 2003, capital flows into emerging economies in general probably doubled those of the previous year, while for 2004, the same body estimates they will be 50% higher than capital inflows in 2002. These will go primarily to Asia, which, in line with its improved growth prospects, should receive more than half the capital heading into emerging economies. Latin America, while receiving less, should average almost three times the flows of 2002 in 2003 and 2004, with most heading to Mexico and Brazil.

External financing conditions for emerging economies have improved substantially.

BOX I.1: THE COPPER MARKET AND THE MAIN PRICE DETERMINANTS

Changes in the copper price and its future trajectory are especially relevant to Chile's economy. In light of this, this box describes the characteristics of the copper market and some of the factors determining its price.

Chile is the world's largest copper producer, followed by Indonesia and the US, according to data for world mine production in 2002 (table I.5). The copper market shows evidence of little concentration, with a reduced share controlled by the State, since investment and production decisions are mainly made by the private sector. This situation, combined with a somewhat elastic demand, explains suppliers' limited ability to influence prices.

Most copper is extracted from open-pit mines. This process enjoys significant economies of scale, which nonetheless do not pose an entry barrier. This is reflected in the operation of many small mining companies.

The main uses for copper are associated with the construction, electric power, and electronic equipment manufacturing sectors. Its use in making machinery and equipment, in transportation and consumption is also significant. Although there are many substitutes for copper (e.g., optic fiber, aluminum and PVC) its use in production explains why it is so intimately linked to world economic growth.

Figures for 2002 show that China is the world's biggest copper user and per capita consumption figures indicate that its potential for growth is enormous.[4/] This economy, despite producing copper, is a net importer. The world's second largest consumer, the United States, has lost share compared to the Asian economies (table I.6). In fact, an analysis of demand by region indicates that Asia accounts for more than 40% of world consumption, while the euro zone accounts for around 24%. In part, these changes reflect changes in production and not final consumption.

Several factors influence shifts in the copper price. In general, large mining investment tends to occur when prices are high, while the high costs of cleanup associated with mine closures tend to delay a closure decision when prices are low. This limits the long-term volatility, supporting evidence that to some degree the copper price tends to return to the average.[5/] Likewise, the copper market accumulates inventories in exchanges during excess supply periods, particularly the metal exchange in London and the commodity exchange in New York (Comex), so inventory levels versus consumption is an indicator of how the market is treating excess supply. Cyclical movements in global activity, reflected for example in the US's output gap, are another possible indicator of demand-side pressures (figure I.14).

In addition, shifts in dollar parity against other currencies are typically linked to shifts in the copper price: if the dollar depreciates in world markets, the copper price, measured in dollars, rises. Now this is predictable, to the degree that the dollar's value fluctuates as a function of a group of goods and services, it will also do so with regard to copper. An associated question is whether, beyond

Table I.5
World copper production: 2002

	Mine production	
	In metric tons	% of total
Chile	4,565	33.9
Indonesia	1,143	8.5
US	1,130	8.4
Australia	856	6.4
Peru	828	6.1
Russia	680	5.0
Canada	605	4.5
China	560	4.2
Other	3,109	23.1
Total	13,476	100.0

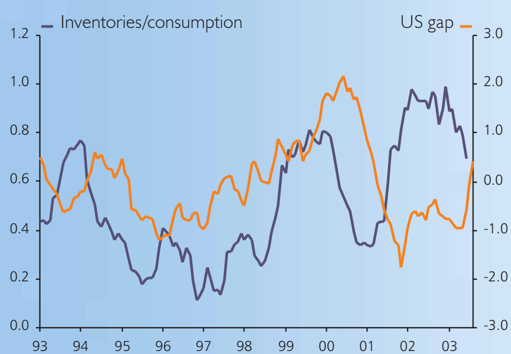
Source: Cochilco.

Table I.6
World copper consumption: 2002
(percent of total)

	% of total
China	18.2
US	15.6
Japan	7.6
Germany	7.1
South Korea	5.9
Italy	4.4
Taiwan	4.3

Source: Cochilco.

Figure I.14
Inventories/copper consumption and idle capacity in the US

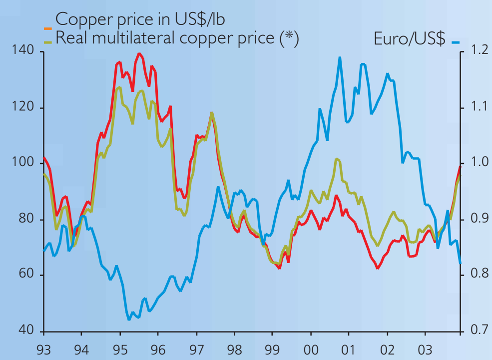


Sources:
Central Bank of Chile.
Bloomberg.

4/ 2001 figures indicate that in developed economies, per capita copper consumption is on average about five times that of China.

5/ Engel and Valdés (2002) show that a process AR(1) performs better than a random path for predicting the future price of copper.

Figure I.15
Nominal copper price and euro/US$ parity (copper: US¢/lb)



(*) This was re-scaled to equate the average for 1993-2003 with the current dollar price.

Sources:
Central Bank of Chile.
Bloomberg.

this trivial denomination-related effect, there is a relationship between the relative price of copper and the dollar, both measured in multilateral terms.[6/] Although the copper price in dollars and the copper price measured in multilateral terms[7/] behave similarly over time, there are gaps between both measures that are associated with dollar parity, for example against the euro (figure I.15).

Two variants arise with regard to the factors determining the copper price (table I.7). The first variable on the left side is the copper price measured in current dollars. The second is the copper price measured in multilateral terms. These two measures are related to the real parity of the dollar in multilateral terms, with idle capacity in the US, and with stocks on exchanges.[8/] The evidence indicates that at least for the period selected, from 1992 to 2003, inventory movements and the US output gap are statistically and economically associated with copper price movements both in current dollars and in real multilateral terms. However, the dollar's real multilateral parity is only statistically associated with the current price of copper in dollars. This seems to indicate that there is no additional effect other than denomination in the relationship between the dollar and the copper price.

The above does not imply that dollar depreciation in international markets or the increase in the copper price measured in dollars is not beneficial to Chile's economy. In fact, the outlook for the terms of trade has improved significantly, in part because dollar depreciation has not translated into an equivalent rise in the dollar prices of Chile's main imports. The evidence indicates that the real multilateral parity of the dollar is associated with changes in Chile's terms of trade (table I.7).

Table I.7
Long-term relationship between the copper price, the terms of trade, and some fundamentals

	Copper price				Terms of trade (*)	
	Nominal		Multilateral		Nominal	
	Coefficient	T statistic	Coefficient	T statistic	Coefficient	T statistic
Real dollar parity	-0.64	-2.31	-0.08	-0.27	-0.83	-3.64
US gap	3.06	1.88	3.32	1.73	3.11	2.00
Inventories	-0.10	-1.79	-0.09	-1.78	-	-

(*) Based on the updated monthly index of export and import prices (Bennet and Valdés, 2001).

Source: De Gregorio, García and Jaque (2004).

[6/] Before the euro, the German mark was used.

[7/] This is a weighted average of the copper price in US dollars, yens and euros, each deflated using the producer price index for the respective economic zone, and the share of world copper consumption as the weighting factor.

[8/] Alternative variables, such as other countries' manufacturing output and the relationship between consumption and inventories make no better contributions to statistical changes in the copper price. For a more detailed treatment of these issues, see De Gregorio, García and Jaque (2004).

This section reviews recent trends in financial markets' main variables from a monetary policy perspective, and evaluates general conditions affecting the banking sector in recent months.

Chapter synthesis

From September to date monetary and credit conditions on local financial markets remained expansionary, and this became even more so with the latest cuts to the Monetary Policy Rate (MPR).

This situation has reflected in a strong rise in personal loans, which have posted double digit 12-month growth rates since the middle of last year, with consumer credits, which in nominal terms are even higher than in 1997, accounting for a significant share. In contrast, financial system loans to companies remain stagnant, mainly due to demand factors, reflecting major corporate bond issues and still slow investment growth. Growth in monetary aggregates has slowed, especially for the broadest, M2 and M7, which toward the end of 2003 were clearly stagnant, mainly due to corrections to AFP (private pension fund managers) portfolios, which boosted their investment abroad to the detriment of time deposits.

The floating system has continued to ensure that the exchange rate is the main variable when correcting for domestic and external changes affecting Chile's economy (Box II.1). Thus, the dollar's weakness in the main financial markets, better financial conditions, and the improved terms of trade associated with the trends in the copper price, explain most of the real appreciation experienced by Chile's peso since last September.

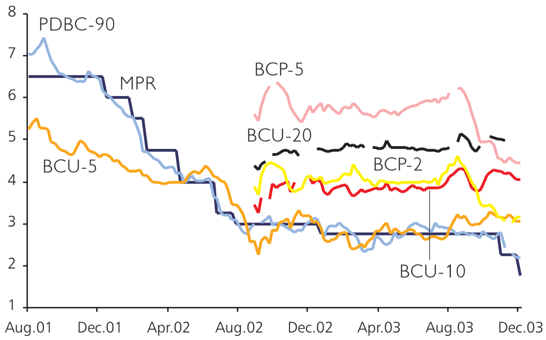
In terms of the stability and solvency of the financial system, during this period equity and profitability remained high, with market risks under control and credit risks low.

Monetary policy, interest rates and monetary aggregates

Price trends in recent months were lower than expected, due to the impact of supply factors, such as peso appreciation and less compressed margins in specific sectors, reflecting greater competition and/or efficiency gains in production and distribution chains. Given these conditions, to reduce the risk of inflation remaining under the target for too long, thus delaying inflation's convergence to 3% within the usual policy horizon, the Board of the Central Bank decided to reduce the MPR in December and January (by 50 basis points each time), thus boosting the already strong monetary impulse.

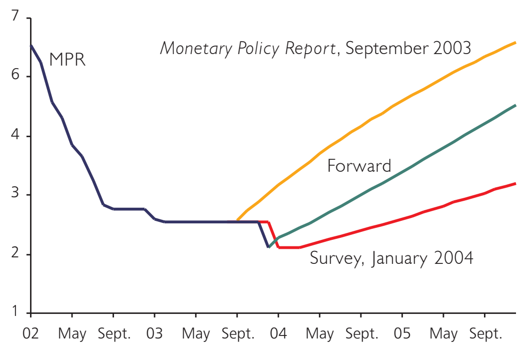
Lower than forecast inflationary pressures led to a total 100-point cut to the MPR in December and January, bringing it to 1.75%.

Figure II.1
MPR and interest rates on Central Bank of Chile instruments
(weekly average, percent)



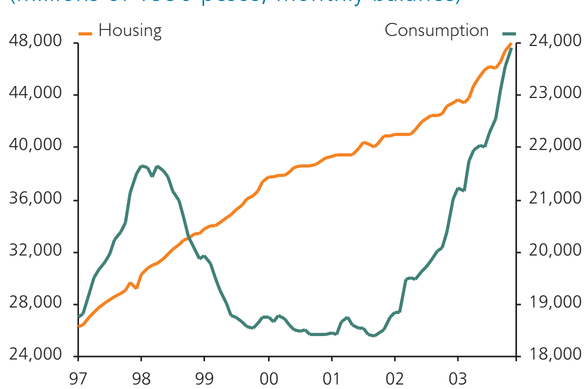
Source: Central Bank of Chile.

Figure II.2
MPR (policy rate), expectations and the forward curve
(percent)



Source: Central Bank of Chile.

Figure II.3
Personal loans
(millions of 1996 pesos, monthly balance)



Source: Superintendence of Banks and Financial Institutions.

Since publication of the September *Report*, interest rates on the Central Bank's medium-term nominal promissory notes have fallen to new historic lows. Interest rates on BCP-2 went from 4.6% in late September to about 3% to date, while interest on the BCP-5 has been higher (200 basis points), currently standing at 4.5%. The size of this shift reveals the impact that the news on prices, including peso appreciation, has had on expectations for inflation and changes in monetary policy.

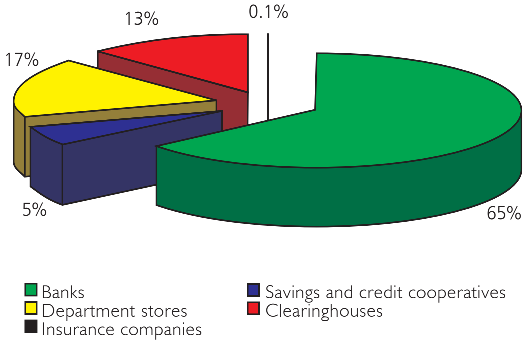
Similarly, trends in interest rates on indexed notes have bounced around somewhat, but in ranges similar to those of recent quarters, although on average they currently exceed values prevailing at the time of the previous *Report*. Factors such as more optimism about world economic recovery, lower than expected inflation, portfolio corrections associated with the significant drop in current inflation, and the rise in the supply of fixed income instruments, both private (corporate bonds) and public (Treasury) have encouraged this rise (figure II.1). In this sense, real domestic interest rates in recent months have not directly followed the performance of similar rates abroad, as they did in the past. These last have been more stable since mid-2003.

Interest rates on debt securities expressed in dollars, but payable in pesos (PRD and BCD) have remained at about 3% for those maturing in two years and 4% for those maturing in five years, representing a rise compared to other alternatives for financing in dollars, such as Chile's sovereign bonds or the usual yield on international reserves. It should be noted that until October 2003, the Central Bank applied a renewal policy, without altering its net position in foreign currency as compared to the market, thus developing a neutral foreign exchange policy, consistent with its floating exchange regime. To reduce the financial costs of its net position in foreign currency, since November 2003 the Central Bank has offered the possibility of exchanging notes falling due in 2004 for equivalent notes payable in dollars, and has not continued to renew when its dollar-indexed notes come due, given that interest and amortization payments on the new instruments will be made directly in dollars. This policy has also kept the Central Bank's foreign exchange position with regard to the private sector unchanged.

Rates on short-term nominal notes (PDBC) have moved, on average, around the MPR. Despite this, from November to date, the forward curve has gradually reduced its slope, postponing the expected increase of the MPR to mid-year (between 25 and 50 basis points). This scenario implied that monetary policy normalization would occur several months earlier than suggested by the January expectations survey, which postpones a rise in the MPR until the end of 2004 (figure II.2).

Since the last *Report*, financial system credit conditions reflect the expansionary monetary policy stance. Specifically, loans in pesos maturing in more than 90 days, which account for more than half total bank credits, posted stable average interest rates throughout 2003 (at about 15% annually), with rate charges standing out for their stability (7%) on operations for amounts greater than UF5,000, which go mainly to companies and which account for more than half of the total in this category. Moreover, during some months, rates on credits under UF500, associated mainly with consumer loans, fell significantly because of seasonal bargains that banks typically offer in this segment.

Figure II.4
Consumer credit suppliers
(market share, estimate to September 2003)



Sources:
Superintendence of Banks and Financial Institutions.
Chilean Federation of Savings and Credit Cooperatives *(Federación Chilena de Cooperativas de Ahorro y Crédito)*.
Association of Clearinghouses *(Asociación de Cajas de Compensación)*.
Balance sheets of department store credit card issues.

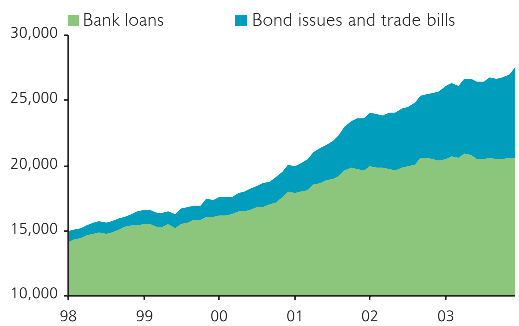
Overall, 2003 stood out for an important rise in personal loans, which increased by a real annual rate of around 17% on consumer credits, thereby outdoing 1997 peaks, and 11% in the case of mortgages. It should be pointed out that new participants have joined banks in the consumer credit market, among them savings and credit cooperatives, department stores, *cajas de compensación* (clearinghouses for funds from the state's contribution to family dependants), and insurance companies. These agents represent more than one-third of total consumer credits placed on the market, which should be an important source of financing mainly for lower income borrowers, and encourage more competition in this market segment (figures II.3 and II.4).

Commercial loans have performed more flatly, as they have for the past two years. This is probably due to demand factors, given the wide range of other financing sources associated with the securities market[1/] that have lately emerged, and listless investment growth, in a context in which bank's conditions for company borrowing have not changed. It should be noted that alternative financing sources for small and medium-sized firms, leasing and factoring, although still representing small amounts, have grown at high rates recently. Similarly, information on bank credits by amount indicates that in 2003 the number of commercial loans for less than UF200 rose considerably (20,000 new borrowers between February and October), while the number of credits involving more than UF3,000 fell, although to a lesser degree. Finally, it is important to point out that according to more disaggregated information, bank mergers in recent years have not affected this kind of credit, whether in terms of interest rates or the amounts offered.

In any case, the outlook for corporate credit in coming quarters looks more promising, thanks to the ongoing expansionary monetary policy stance and better external and domestic demand conditions expected in 2004 and 2005. In fact, the results of the last survey on bank credit, conducted in November 2003, indicates that for the first time financial institutions perceive a rise in demand for credit from the business sector. At the same time, banks have become more willing to lend to individuals and firms.

Personal loans continue to perform strongly, with two-digit annual growth rates.

Figure II.5
Corporate loans
(millions of pesos, monthly balance)

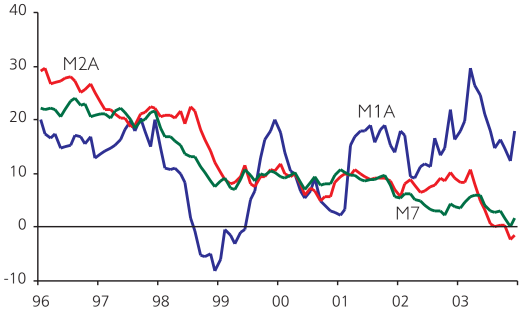


Sources:
Superintendence of Securities and Insurance.
Superintendence of Banks and Financial Institutions.

In the fixed income market, corporate bond issues added up to over UF100 million in 2003, with almost one-third focusing, rather unusually, on December. This brought the stock of debt in bonds to around UF400 million (30% of total company borrowing in the local market). In general, until 2002 bond issues were used to restructure company liabilities, but in 2003 they gradually came to be used to finance long-term investment. In fact, the information on borrowing by companies trading on the stock exchange suggests that early in the 1990s bank debt due in over one year accounted for almost 50% of total debt, a ratio that has fallen to just under 15% today, given the growing importance of bond issues. This preference for direct debt issues among companies reflects the lower interest rates of recent years and the possibility of operating with more flexible maturities (figure II.5).

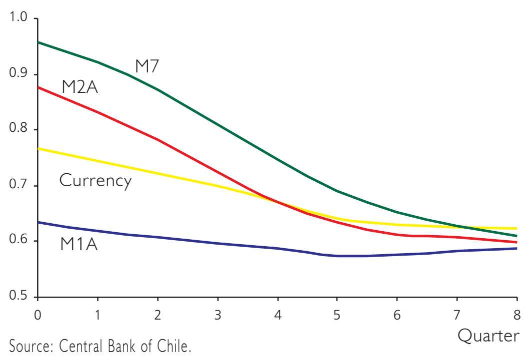
[1/] Bonds, trade bills and, recently, initial public offerings on the exchange.

Figure II.6
Monetary aggregates
(nominal annual change, percent)



Source: Central Bank of Chile.

Figure II.7
Correlation between monetary aggregates and inflation
(nominal annual change, percent)



Source: Central Bank of Chile.

With regard to the average Internal Rate of Return (IRR) on fixed income instruments, the downward trend followed by corporate bond rates until they bottomed out in November (UF + 4.5%) stands out, although it may be somewhat distorted by specific operations by some major companies. In December, nonetheless, they bounced back to levels from some months earlier, reaching UF + 5.2%. At these levels, the surcharge on the BCU is about 140 basis points, indicating a 70-point drop, approximately, over the 2002 average. The IRR on mortgage notes behaved similarly, although in recent months it has been steadier than previously, reaching today UF + 5.2%, which represents an average 150 basis point mark-up over the BCU IRR, with this average down somewhat from the previous year (180 basis points).

In terms of monetary aggregates, the M1A ended 2003 with nominal 12-month expansion of 18% which, while rather higher than in previous months, reflected the unusually reduced expansion of December 2002. It is hoped that during the first quarter of this year this rate will fall to single-digit figures, the result of the high rate of comparison in 2003, when the *Corfo-Inverlink* case affected the most liquid components of private sector monetary aggregates. Similarly, the broadest aggregates have weakened notoriously, especially during the last quarter of 2003, with 12-month rates of change ranging from –2% to 2%, reflecting AFPs' preference for investing abroad. This has brought portfolio changes after the announced increase in limits in March 2004, and less bank intermediation, the result of reduced company loans (figure II.6).

In 2003 it became evident that there is no clear link between monetary aggregates' behavior and changes in inflation, as instances of demand for money in local episodes (such as the *Corfo-Inverlink* case), coincided with geopolitical turbulence (war in Iraq) and a slowdown in inflation. In any case, empirical evidence suggests that M1A growth has been no better an indicator of future price trends than other aggregates, for 1986-2003, over horizons relevant to monetary policy. However, over longer periods, the relationship between M1A and prices seems crucial (figure II.7).

Exchange rate

Since last September, the US dollar has weakened significantly against the peso, reaching between 570 and 580 Chilean pesos per US dollar for the first time since late 2000. This shift has brought peso appreciation against the dollar by about 17% since early September and 23% compared to its peak in March 2003. During this period, the real multilateral exchange rate has been the key variable in absorbing important changes in the financial and real international environment facing Chile's economy, reflecting the generalized weakness of the US dollar against the main global currencies, but also the effect, perhaps somewhat lagging compared to other currencies, of better prospects for world growth (table II.1).

Behind this important peso appreciation against the dollar are several factors, among them in particular strong dollar depreciation in international markets, after several years of appreciation. It should be noted that the US currency's decline against other important currencies reflects structural conditions in the US economy, which already appeared among some developed countries' currencies, such as New Zealand, Sweden, Canada and Australia. Since the last *Report*, the Chilean peso has accumulated nominal appreciation of about 17%, similar to the euro and other major currencies during the same period. Overall, using a broader currency basket, that is the Multilateral Exchange Rate (MER) and MER-5, it is clear that since the last *Report*, nominal peso appreciation is actually lower, ranging from 11% to 13%.

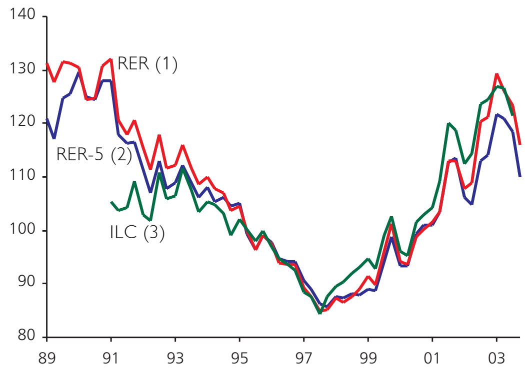
Table II.1
Observed (OER), multilateral (MER) and real exchange rate (RER)
(OER: pesos/US$, monthly average; MER and MER-5:
2 January 1998=100; RER and RER-5: 1986=100)

	Sept. 2003	Oct. 2003	Nov. 2003	Dec. 2003	Jan. 2004 (1)
OER	675.4	646.1	625.5	602.9	587.0
MER (2)	122.1	118.7	114.7	111.4	109.7
MER-5 (3)	157.2	154.2	149.3	146.7	144.6
RER (2)	102.8	100.4	97.5		
RER-5 (3)	93.5	92.1	89.5		

(1) Average through 5 January 2004.
(2) Represents the nominal and real value of the peso against a broad basket of foreign currencies, ordered by importance: the US, Brazil, Japan, China, Argentina, Mexico, Germany, France, the United Kingdom, Spain, Italy, South Korea, the Netherlands, Colombia, Canada, Taiwan, Ecuador, Venezuela, Belgium and Peru.
(3) Brings together values for the Chilean peso against the currencies of the US, Japan, the United Kingdom, Canada and the euro zone.

Source: Central Bank of Chile.

Figure II.8
Real exchange rate index
(average 1995=100)



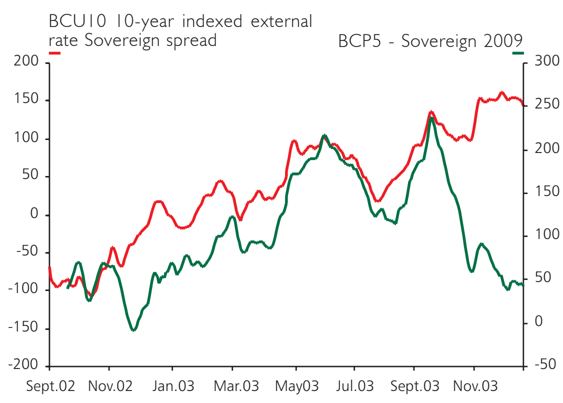
(1) Calculated based on parities with Chile's main trading partners, in order of importance: the US, Brazil, Japan, China, Argentina, Mexico, Germany, France, United Kingdom, Spain, Italy, South Korea, the Netherlands, Colombia, Canada, Taiwan, Ecuador, Venezuela, Belgium and Peru.
(2) Includes the US, Japan, Canada, the United Kingdom and the euro zone.
(3) Index for labor competitiveness (ILC).

Source: Central Bank of Chile.

Moreover, the better financial conditions facing emerging economies and the turnaround in the copper price in world markets have naturally contributed to the growing strength of the peso in real terms. In fact, the total real exchange rate (RER), which includes Chile's main trading partners, today stands 13% lower than its peak at the end of the first quarter of last year. Despite this recent real peso appreciation, the RER today stands at levels similar to the 2001 average and somewhat higher (10%) than the average posted in 2000. In terms of levels posted in recent years, current trends for the RER and the RER-5 are consistent with other real exchange rate measures, based on the commercial unit value or unit labor costs (figure II.8).

Since the last Report*, the peso has accumulated nominal appreciation of about 17% against the dollar, and almost 13% against the broader currency basket (MER).*

Figure II.9
Differential between domestic and foreign interest rates
(weekly average, percent)



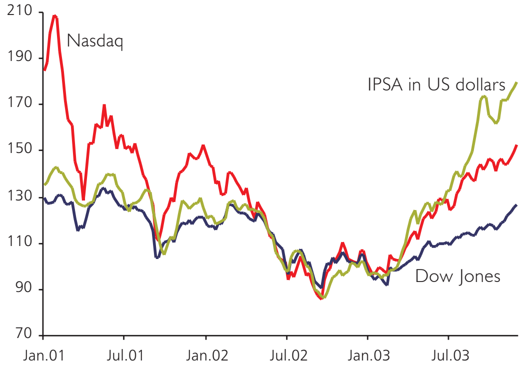
Sources:
Bloomberg.
Central Bank of Chile.

Expectations for the future performance of the US dollar, based on Bloomberg quotes, place it at about 580 Chilean pesos in 2004. The Central Bank's expectations survey for January points to a stable exchange rate for the next two months and nominal depreciation of between 3% and 4% toward year's end.

The difference between real, long-term domestic and external interest rates since September has risen slightly, while the nominal differential plunged almost 200 basis points, a gap due to expectations that domestic inflation will be lower than international inflation. The fact that the real differential currently stands where it did last September suggests that peso appreciation in recent months reflects more permanent conditions, related to changes in long-term, fundamental variables, rather than changes in interest rates (figure II.9).[2/]

[2/] For an analysis of the information behind the discussion over the real, long-term exchange rate, see Box 2 «*Tipo de cambio real de equilibrio* (The Equilibrium Real Exchange Rate),» in the volume, *Modelos Macroeconómicos y Proyecciones* (Macroeconomic Models and Projections), Central Bank of Chile 2003.

Figure II.10
Stock indices
(30 December 2002=100)



Source: Bloomberg.

Stock exchanges

International stock indices have reflected more optimistic expectations worldwide for growth, pushing both the Dow Jones and the Nasdaq up 11% from September to year's end, for accumulated rises in 2003 of 25% and 50%, respectively. Latin American ADRs performed even better, rising 28% since September and 72% in 2003 (figure II.10).

Table II.2
Stock indices (1)
(monthly change, percent)

		IPSA	Dow Jones	NASDAQ	ADR Latina (2)	BOVESPA	MERVAL
1998	Average	-1.9	1.4	3.2	-2.3	-2.4	-2.5
1999	Average	2.0	2.0	5.6	3.9	6.3	2.6
2000	Average	-0.8	-0.4	-3.3	-1.7	-1.1	-2.0
2001	Average	-0.3	-0.5	-1.1	-0.6	-1.5	-1.2
2002	Average	-1.7	-1.3	-2.8	-2.0	-3.2	-3.7
2003	Average	4.9	1.9	3.5	4.7	8.0	7.6
2002	Jan.	-2.3	-1.0	-0.8	-1.2	-10.1	-24.1
	Feb.	-2.4	1.9	-10.5	2.7	12.9	-14.6
	Mar.	4.1	2.9	6.6	4.1	-4.2	-17.8
	Apr.	-0.3	-4.4	-8.5	-1.8	-2.7	-15.1
	May	-3.8	-0.2	-4.3	-6.7	-8.0	-33.7
	Jun.	-8.9	-6.9	-9.4	-14.3	-22.2	4.0
	Jul.	-2.5	-5.5	-9.2	-16.9	-28.5	5.0
	Aug.	-2.5	-0.8	-1.0	8.6	22.1	6.9
	Sept.	-12.4	-12.4	-10.9	-18.8	-34.9	2.4
	Oct.	1.2	10.6	13.5	13.1	24.2	16.4
	Nov.	4.8	5.9	11.2	4.1	2.5	11.6
	Dec.	5.2	-6.2	-9.7	2.7	10.8	14.7
2003	Jan.	-2.6	-3.5	-1.1	-3.8	-1.9	9.0
	Feb.	-1.8	-2.0	1.3	-3.4	-7.6	8.3
	Mar.	-0.3	1.3	0.3	5.2	17.3	2.2
	Apr.	19.4	6.1	9.2	17.7	28.4	18.2
	May	8.0	4.4	9.0	3.1	3.7	4.5
	Jun.	-1.0	1.5	1.7	2.1	0.5	16.3
	Jul.	8.8	2.8	6.9	4.7	1.0	-5.4
	Aug.	3.3	2.0	4.3	5.6	11.9	-6.9
	Sept.	8.8	-1.5	-1.3	3.2	6.8	17.9
	Oct.	10.8	5.7	8.1	7.3	14.6	13.9
	Nov.	-0.6	-0.2	1.5	4.4	9.3	3.0
	Dec.	5.6	6.9	2.2	10.8	11.8	9.8

(1) Expressed in US dollars.
(2) Latin American ADRs.

Sources:
Bloomberg.
Santiago Stock Exchange.

In Latin America, meanwhile, local stock exchanges saw important rises, as they became the most profitable option among world stock exchanges[3/] (table II.2). The Santiago Stock Exchange enjoyed excellent results throughout September and most of October, trading significant amounts (27 billion pesos daily on average), with the selected stock index (IPSA) peaking on 21 October (at 1,586) offering a 10% yield from early September to the end of 2003. Thus, in the past four months, the local exchange rose 8%, accumulating a 48% rise in pesos and a 76% rise in US dollars during 2003. The economic sectors driving these results have been linked to natural resource exports and consumption.

[3/] According to the Bloomberg ranking.

Solvency, risk and profitability of Chile's financial system

In recent months, Chile's financial system capitalization, measured using the Basle Index, has held steady at over 14% of risk-weighted assets, well above the legal minimum (8%). Moreover, in recent months, 26 banks have posted Basle indices of over 11%.

The main indicators of financial system credit risk show some improvement in recent months, with the non-performing loans index falling steadily since mid-2003, to its lowest point since February 2002 in November (1.7%). The Superintendence of Banks and Financial Institutions' risk index has also fallen, reaching 1.8% in October, down from June (2%). The provisions to non-performing loans ratio has remained at over 1.3 times in recent months, a figure that offers sufficient capital to deal with any possible declines in the quality of the loans portfolio.

Maturity matching indicators for 30- and 90-day instruments have remained stable in recent months, as they did throughout the year, and their exposure is well below the required maximums.

In recent months, bank exposure to interest rate risk has risen slightly, to average about 6% of base capital. The financial system remains with very little exposure to foreign currency risk, at a stable level that does not average more than 3% of base capital.

The financial system's profitability, measured as return on equity (ROE), rose slightly in recent months, to about 17% during the second half of 2003. This reflects a decline in spending on provisions, due to the better quality of the loans portfolio. Among the items making up gross operating income, lower income due to interest has been offset by higher income from commissions and a rise in exchange rate gains thanks to peso appreciation.

In summary, in recent months the main indicators reveal that the financial system remains stable and solvent. Financial institutions operating in the local market continue to show high indices for equity and profitability, controlled market risks and lower credit risks.

BOX II.1: THE FLOATING EXCHANGE RATE REGIME

The Central Bank's decision to adopt a floating exchange rate aimed directly at strengthening the macroeconomic policy framework based on an inflation targeting system as the economy's nominal anchor. This framework also includes a fiscal surplus rule and financial integration with the rest of the world.

It is precisely this context of full financial integration that makes the objectives of developing both an autonomous monetary policy stance and fixing the foreign exchange incompatible. Because of this, during the 1990s swelling capital flows created an international tendency to move away from intermediate exchange regimes in favor of floating or fixed systems.[4/] While early in the 1990s almost 50 countries had intermediate foreign exchange systems, by the end of 2001, 44 countries used this type of arrangement. In contrast, the number of countries with fixed or flexible exchange rates almost doubled during the same period.[5/]

Intermediate exchange regimes proliferated in Latin America in the years prior to the Asian crisis. Thus the number of Latin American countries with intermediate regimes rose from six in 1991 to 17 in 1997. However, in 1997 the number of countries with flexible exchange rates began to rise significantly, from two early in the decade to 13 in 2002. The number of countries using fixed exchange rates remained stable, while intermediates fell to five.[6/]

Countries adopting a fixed exchange rate in its «hardest» form do so mainly to benefit from its association with anti-inflationary credibility. However, monetary policy credibility is not associated with the fixed exchange rate itself, but rather the existence of a credible nominal anchor. In general, the success of a foreign exchange regime is determined by its application within a consistent set of macroeconomic policies. In Chile's case, this consistent policy framework is provided by the inflation targeting system, financial integration abroad, and the application of the fiscal surplus rule.

What is the empirical evidence on the impact of the foreign exchange system on macroeconomic performance? Although limited,[7/] the evidence shows that the choice of the foreign exchange regime does seem to have an impact. In the first place, countries with fixed exchange rates post lower inflation than countries with more flexible regimes. This result, however, should be carefully examined. For high- and medium-income countries, the relationship between inflation and foreign exchange regime is not linear: flexible and fixed regimes have lower inflation rates than intermediate regimes. Moreover, the differences among the different regimes only holds when considering fixed regimes that last through time. Secondly, the evidence on the effects of the foreign exchange regime on growth is less conclusive. Some studies show that developing countries that use

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[4/] A floating regime can be managed or free-floating. A free-floating regime is one in which market forces determine the short- and long-term exchange rate. In a managed floating system, the authorities limit the short-term fluctuations in the exchange rate by getting involved in the foreign exchange market and making monetary policy corrections. It should be noted that in this system there is no implicit or explicit policy commitment to keeping the exchange rate within a certain range or band. For a detailed study of foreign exchange regime classifications, see Reinhart and Rogoff (2002).

[5/] Between 1990 and 1997, only five countries dollarized, with Panama being the main one. Toward 2001, 18 countries had a common currency or were dollarized.

[6/] Calderón and Schmidt-Hebbel (2003) provide additional evidence in this sense.

[7/] A partial list of these studies includes: Edwards and Levy-Yeyati (2003), Ghosh et al (1997), Levy-Yeyati and Sturzenegger (2001, 2003) and Rogoff et al. (2003).

a flexible exchange rate post higher growth rates than those with a fixed or intermediate exchange rate.[8/] However, recent evidence indicates that only developed countries with a flexible regime post higher growth rates, but not developing or emerging countries.[9/]

This last evidence is consistent with the view that countries in the early stages of financial development and integration would be benefited, in terms of their anti-inflation credibility, by the application of fixed or intermediate foreign exchange regimes, with no apparent losses in terms of economic growth. As countries develop economically and institutionally, becoming more financially integrated with the rest of the world, they should be favored by more flexible exchange rates, without losing their anti-inflationary credibility.

As mentioned, the floating exchange rate has allowed the Central Bank to apply independent monetary policies. The flexible exchange rate makes it easier for the economy to adjust to real shocks and avoid a more costly correction, given that the alternative, a price and wage correction, takes longer and, as a result, involves a greater sacrifice in terms of output volatility.[10/]

The empirical evidence tends to sustain the hypothesis that less flexible foreign exchange regimes are associated with a more volatile product in the face of real shocks. Recent studies show that the decline in output when dealing with an adverse shock to the terms of trade over a two-year period is practically 10 times greater with a fixed exchange rate than with a flexible one.[11/] Because Chile is integrated into the world, its economic cycle is significantly affected by changing international financial conditions and shifts in its terms of trade. In this context, a flexible exchange rate smoothes the peaks and troughs of the economic cycle and, as a result, is associated with greater economic wellbeing.

Recently, the presence of debt denominated in foreign currency has become an argument against a flexible exchange rate. Some argue that exchange rate fluctuations make the economy less stable, due to their negative effect on the financial system and companies' stability.[12/] This argument does not consider the fact that foreign exchange risk associated with this debt can be covered.[13/] In this sense, a flexible exchange rate acts as a suitable incentive to agents to cover this risk. Moreover, the evidence shows that financial crises, in which among other elements a strong currency mismatch may have played a fundamental role, have been associated with fixed exchange rates.[14/]

By definition the floating exchange system involves a more volatile exchange rate in foreign currency markets over shorter periods. This short-term rise in volatility does not necessarily imply that the present value of these fluctuations will be greater for flexible exchange regimes. As the international evidence shows, it is precisely fixed exchange regimes that suffer the most serious misalignments of their real exchange rates. In the vast majority of cases, the

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8/ See Levy-Yeyati and Sturzenegger (2001, 2003).

9/ See Rogoff et al. (2003).

10/ The classical argument in favor of the flexible exchange rate is presented by Friedman (1953).

11/ See Broda (2003).

12/ See Céspedes, Chang and Velasco (2000, 2003) and Cowan and Bleakley (2002) for theoretical and empirical developments.

13/ The Central Bank of Chile's regulations establish that financial institutions can sign foreign exchange risk coverage contracts with each other or third parties domiciled in the country. These operations can adopt the form of futures contracts, forwards, swaps, and combinations of same.

14/ See Kaminsky and Reinhart (1999).

latter have been corrected by applying large nominal devaluations, so the true volatility of these regimes may be underestimated. Moreover, international evidence indicates that when the economy is more highly developed, a volatile exchange rate does not negatively affect international trade, investment or economic growth.[15/]

Finally, according to the experience of other countries that adopted the floating exchange rate before Chile, the initial increase in volatility in more mature foreign exchange markets later gives way to broader possibilities for coverage. The reason is that this scheme, as mentioned, provides the right incentives to economic agents so they obtain suitable foreign exchange risk coverage.[16/] It is therefore to be expected that local financial markets will advance toward the greater development of this kind of instrument in the near future.

[15/] See Naudon (2003) for more information.

[16/] In April 1999, the Central Bank of Chile improved regulations governing exchange rate risk, permitting hedging operations at different local and foreign interest rates and fixed income instruments, issued by the Central Bank, banking and financial firms.

This section reviews the factors influencing recent trends in output, domestic and external demand and employment, to explore possible inflationary pressures arising from goods and factor markets.

Chapter synthesis

GDP growth in 2003 is estimated to have been about 3.2%, falling within the 3.0% and 3.5% range forecast in September. Domestic demand also remained within estimates from some months ago, but with consumption pushing harder than investment, amidst more confidence among households and better prospects for consumer loans, all in the context of more favorable labor conditions.

Investment, except for that associated with the construction of housing, did not continue to recover in the third quarter of 2003 as it had during the previous period. Specifically, capital accumulation in machinery and equipment was low, given domestic and external financial conditions and stronger prospects for growth in activity. If these conditions remain favorable, domestic demand should rise more during the first half of 2004.

In the labor market, although the strong recovery in employment during the first half was in part temporary and associated with the secondary labor force, recent information shows primary and formal employment performing better, while the unemployment rate has fallen significantly.

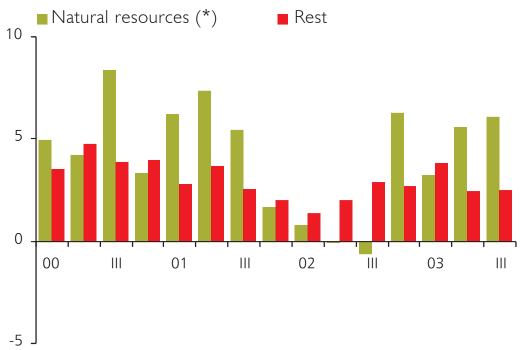
Domestic activity and spending

In the second half of 2003, economic activity unfolded amidst weaker performances from natural resource related sectors,[1/] while other sectors grew more (figure III.1).

The sluggish performance of the natural resource sector reflected a poorer than expected behavior from all its components. Mining, the sector with the most weight in this group, suffered technical difficulties that hampered compliance with programs. Fishing activity, despite its low weight in aggregate GDP, dropped several times, affected by a decline in salmon and trout exports, due to supply corrections.

Among the remaining sectors, manufacturing played an important role during the second half of 2003, due mainly to areas supplying the domestic market,[2/] while other manufacturing sectors, export and import-substituting areas posted weak performances in recent months (figures III.2).

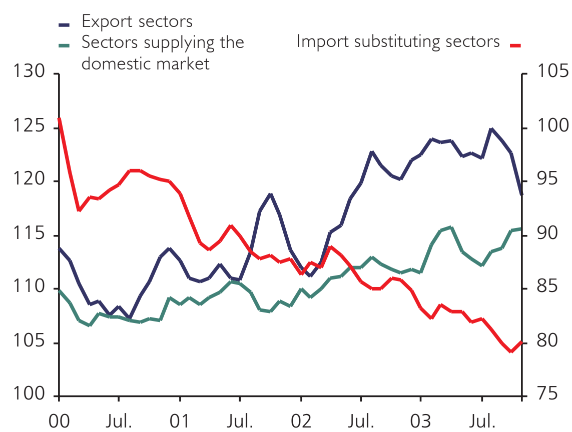
Figure III.1
GDP by origin
(annual change, percent)



(*) For the sectors: mining, electricity, gas and water, and fishing.

Source: Central Bank of Chile.

Figure III.2
Manufacturing production by destination
(seasonally adjusted moving average)

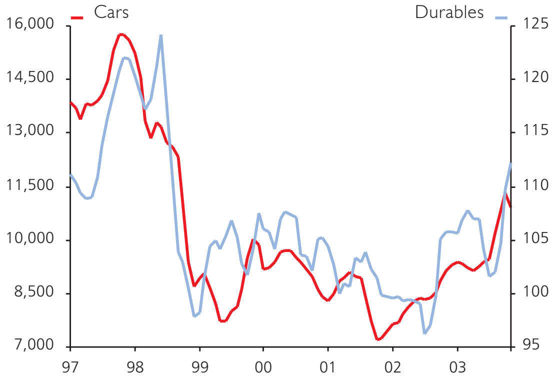


Sources:
National Statistics Bureau (INE).
Central Bank of Chile.

[1/] Fishing, mining, and electricity, gas and water, which accounted for 12.5% of GDP in 2002.

[2/] Equivalent to almost 70% of manufacturing production.

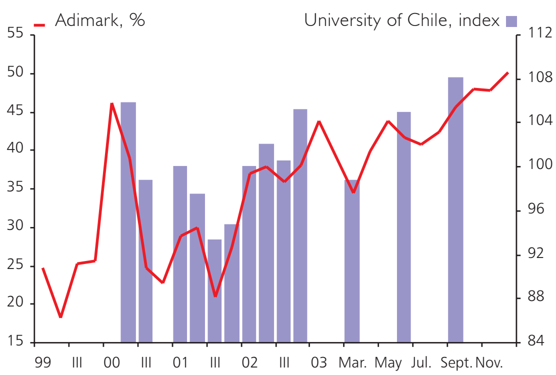
Figure III.3
Sales of new cars and durable goods (*)
(cars: units; durables: index average 2002=100)



(*) Moving quarterly average, seasonally adjusted series.

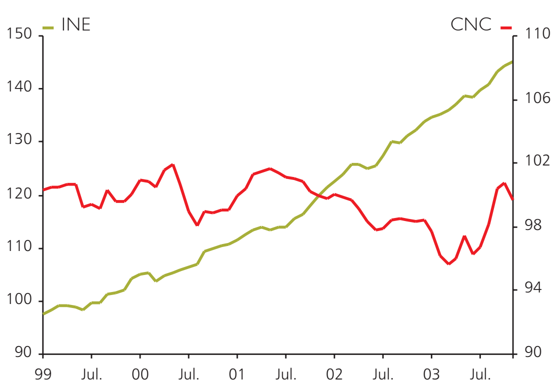
Sources:
National Association of Car Dealers (*Asociación Nacional Automotriz de Chile*).
National Chamber of Commerce (*Cámara Nacional de Comercio*).

Figure III.4
Consumer confidence
(those surveyed who believe the economy will improve)



Sources:
Adimark.
University of Chile.

Figure III.5
Supermarket sales (*)
(indices 1999=100)



(*) Moving quarterly average, seasonally adjusted series.

Sources:
National Statistics Bureau (INE).
National Chamber of Commerce (CNC).

The wholesale and retail sector improved as 2003 progressed, with activity averaging about 3.5% in the first half of the year, and between 4.5% and 5% in the second. Favorable trends in manufacturing sales from September onward were decisive in this sense.

In construction, activity improved in the second half of 2003 over the first half. The strongest performance came from engineering (which accounts for 35% of sectoral GDP), explaining a significant part of this trend, while building did not improve until year's end.

In the first quarter of 2004, GDP should grow more than it did in the last quarter of 2003, while for the year as a whole, GDP should grow somewhere between 4.5% and 5.5%. Growth in the short term will be determined by trends in consumption and investment, while over the longer term, the better external scenario, the rise in national income and favorable financial conditions will also be relevant.

In 2003, domestic demand is estimated to have risen in line with GDP, led by consumption, which was offset by lower than forecast investment. For the future, domestic demand is expected to grow more than GDP. The impact of the impetus expected from the better terms of trade on consumption, the improved outlook for the terms of trade, and their impact on national income will further enhance the growth expected in investment, thanks to the favorable conditions for both its development and its normalization.

In 2003, GDP is estimated to have risen 3.2%.

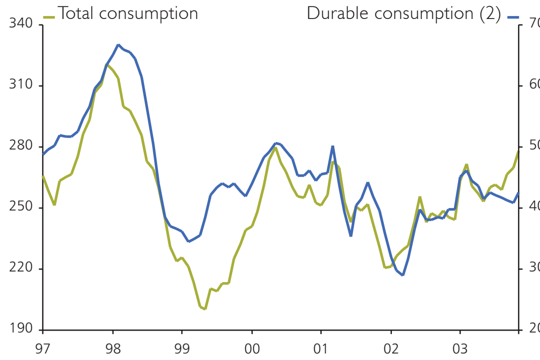
Consumption and inventories

After slowing slightly at mid-year, growth in private consumption, in particular of durable goods, surged again, reflecting more optimism among households, better conditions in the consumer credit market and, in general, the more favorable labor outlook. Car sales averaged almost 11,400 units per month, similar to sales in 1998. After falling in the second quarter, retail sales of these goods (CNC), recovered quickly to levels from the end of 2002 (figure III.3).

According to Adimark's Economic Perception Index, consumers' expectations improved from mid-2003 onward, reaching by December levels not seen since the third quarter of 1998. Based on information from September, the University of Chile's survey of perceptions and expectations also revealed positive results, similar to Adimark's index (figure III.4). Other surveys on consumer perceptions also revealed some recovery in expectations toward year's end.

Non-durable consumption, which had been rather stable in recent periods, also tended to perform more strongly from the third quarter of 2003 on (figure III.5). Changes in this component of consumption, which accounts for about 70% of private consumption, are extremely relevant to demand's performance, so that as the improved domestic and external outlook consolidates, demand is also expected to rise more quickly.

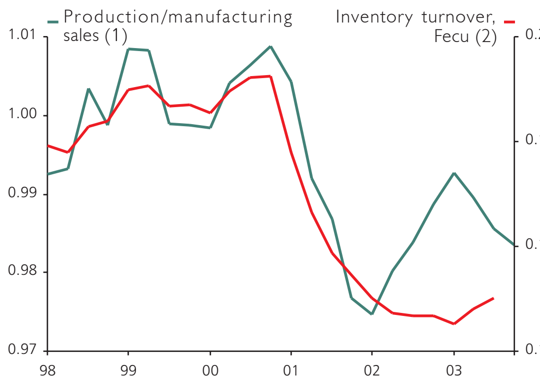
Figure III.6
Real imports of consumption goods (1)
(US$ million)



(1) Moving quarterly average, seasonally adjusted series.
(2) Excludes imported cars.

Source: Central Bank of Chile.

Figure III.7
Inventories
(moving annual average)



(1) Seasonally adjusted series.
(2) Moving annual average.

Sources:
Fecu, Santiago Stock Exchange.
National Statistics Bureau (INE).
Central Bank of Chile.

Figure III.8
Capital goods sales and imports (*)
(imports: US$ million; sales: index 1999=100)

(*) Moving quarterly average, seasonally adjusted series.

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

Consumer imports, measured in real terms, have risen steadily since May 2003. This reflects imports of durable consumption goods, particularly cars. Excluding the latter, durable goods imports[3/] have been relatively stable, a trend that could improve in light of the rise in sales of these goods (figure III.6).

During the third quarter of 2003, inventories fell significantly in annual terms, which dulled the performance of the «other» component of demand, aside from consumption.[4/] Quarter-on-quarter changes in partial inventory indicators for the third and fourth quarters of 2003 continued to accumulate as they had since the year began. The national statistics bureau INE's measure for the ratio of manufacturing production to sales rose during the second half of 2003, after falling during the second quarter. Similarly, information from the stock exchange's standardized statements FECU[5/] also reveals higher inventories in the third quarter of the year compared to the previous quarter, especially in the manufacturing sector (figure III.7).

Fixed investment

In the second half of 2003, and particularly the third quarter, despite higher expectations and improved financial conditions, investment dropped off, particularly in the machinery and equipment component (Box III.1). In 2003, gross fixed capital formation at constant prices reached 22.6% of GDP. Now, consistent with changing expectations and the more settled outlook for the domestic and external economies, investment rates should pick up over average growth for the economy as a whole.

The machinery and equipment component, which accounts for about 40% of gross fixed capital formation, performed weakly during the second half of 2003, mainly associated with lower volumes of capital goods imports, in particular during the third quarter, although it picked up again in recent months. INE's sales of capital goods rose more in the last third of 2003, although its low weight does not change the aggregate for this category of investment (figure III.8). Trends in this investment component were especially surprising, since its determinants suggested a much better performance. In the future, and in line with its determinants, investment in machinery and equipment is expected to rise significantly (Box III.1).

Despite recent figures, in contrast with the above, the real estate sector, almost 20% of gross fixed capital formation, has posted strong growth. Despite the fact that since the middle of the third quarter the pace of new housing sales slowed, levels remain at just under 1000 units per month, a significant figure when compared to historic records (figure III.9). Other sources[6/] indicate that third quarter sales, almost 1600 units per month based on accumulated figures for the quarter, outdid the 1999 peak. This sector's good performance is expected to strengthen

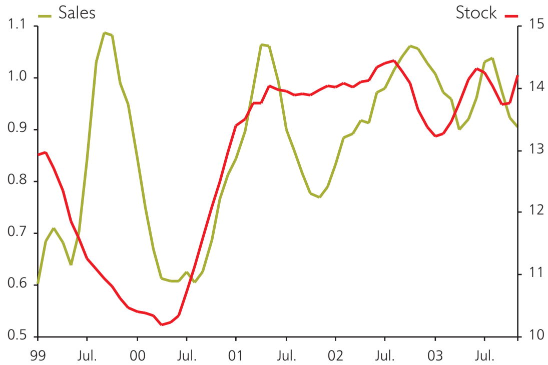
[3/] This subgroup of durable consumption imports accounts for 15% of total consumption goods entering the country.

[4/] An important part of this annual decline reflects the behavior of mining sector inventories during the third quarter of 2002, when they rose significantly.

[5/] *Fichas estadísticas codificadas uniformes*.

[6/] *Consultora Collect*, which unlike the CChC, includes all the municipal areas in Greater Santiago.

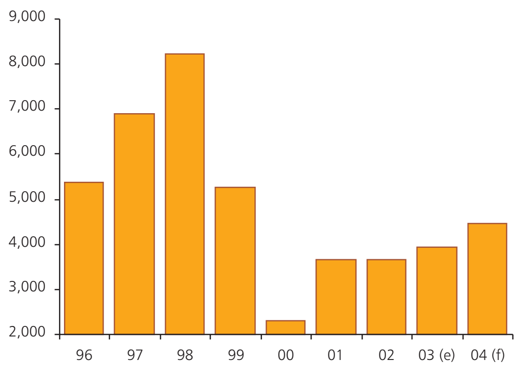
Figure III.9
Sales of new housing and months of stock (*)
(thousands of units)



(*) Moving quarterly average, seasonally adjusted series.

Source: Chilean Chamber of Builders (*Cámara Chilena de la Construcción*).

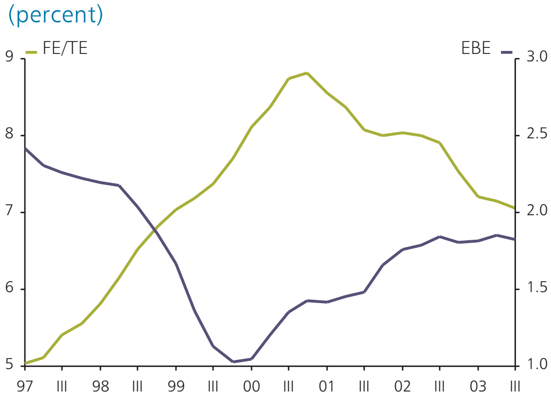
Figure III.10
Investment list
(US$ million)



(e) Estimate.
(f) Projection.

Source: Capital Goods Technological Development Corporation (*Corporación de Desarrollo Tecnológico de Bienes de Capital*).

Figure III.11
Corporate earnings and financing expenses (*)
(percent)



(*) Moving annual average.
FE/TE: financing expenses over total expenses.
EBE: EBITDA (earnings before interest, tax, depreciation, amortization) over equity.

Source: Santiago Stock Exchange.

yet again, given improved conditions in the labor market and improved access to credit. This is confirmed by sectoral projections, such as those of the Chilean chamber of builders (*Cámara Chilena de la Construcción*, CChC), which indicate that investment in housing construction in 2004 will rise 5.0%, a substantial improvement over the 2.1% achieved in 2003.

In terms of engineering works, the investment project list prepared by the capital goods corporation through September 2003 showed a rise of almost 1.5% in projected investment for the year, over the previous list (June), bringing the estimated rise in the total for the year up 9% over 2002. For 2004, engineering works are expected to rise about 11%, although this information could still vary, according to the same source (figure III.10).

Business profitability figures gathered from the FECU[7/] show some stability in the third quarter of 2003, in particular in the wholesale and retail sector. Manufacturing and exports, meanwhile, saw profitability rise over previous periods with yields returning to 2002 levels (figure III.11).

Fiscal policy

The short-term fiscal scenario has been in line with September's expectations. Thus, the budget implementation through October 2003 showed an overall balance for the Central Government of –1.1% of accumulated annual GDP,[8/] the result of two elements combined. First, total real income slowed constantly, reflecting lower net tax revenues. Second, total spending experienced constant real 12-month growth[9/] (figures III.12 and III.13).

Information for the fourth quarter of 2003 should reveal a slight surplus, thus meeting the government's accounting deficit target for the year (0.8% of GDP), thanks to more income from the VAT increase, the better economic cycle, and the increase in the copper price, combined with spending cuts, considered temporary.[10/]

The 2004 budget law, approved in November of last year, is in line with the structural surplus rule. It includes a real increase in public spending with macroeconomic impact of about 4%, and a 6% rise in total revenues. Even when the Free Trade Agreement with the US comes into effect, fiscal revenues should still rise a real 4.4%, up from 2003 (2.8%). Higher domestic demand, the rise in imports and the VAT, along with higher business profits are behind this result. Overall, the conventional balance is expected to reach 0.6% of GDP in 2004. Recent higher than estimated rises in the copper price and lower than expected inflation will produce opposite-sign effects in the conventional fiscal balance sheet. In any case, the projections in this *Report* assume that the structural surplus rule target will be complied with.

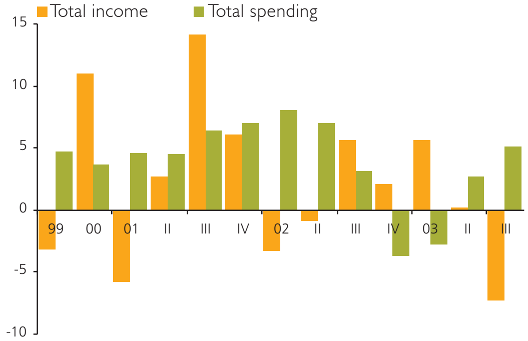
[7/] Defined as the ratio between operating results and equity.

[8/] Calculated based on accumulated GDP over the past 12 months, unlike figures reported by the budget division (*Dirección de Presupuestos*), which considers accumulated and estimated figures for the calendar year.

[9/] This reflects trends in spending on pension recognition bonds, consumer and production goods and services, and interest and financial expenditures.

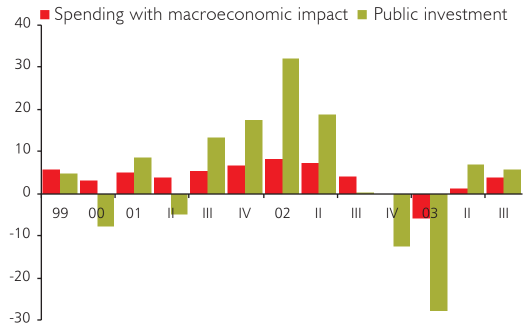
[10/] In particular, those related to retroactive benefits to be applied as the New Labor Deal comes into effect.

Figure III.12
Total Central Government income and spending
(real annual change, percent)



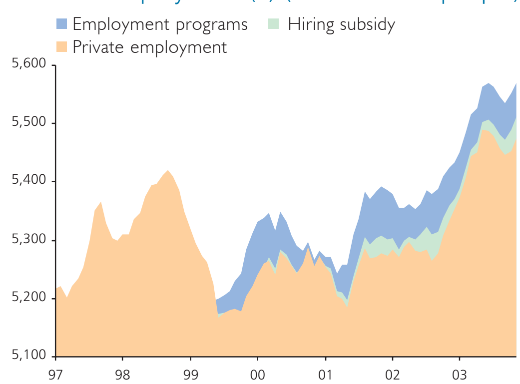
Source: National Budget Division *(Dirección de Presupuestos)*.

Figure III.13
Public expenditure with macroeconomic impact and public investment
(real annual change, percent)



Source: National Budget Division *(Dirección de Presupuestos)*.

Figure III.14
National employment (*) (thousands of people)



(*) Seasonally adjusted series.

Sources:
National Statistics Bureau (INE).
Ministry of Labor and Social Security.

Table III.3
Current account (US$ million)

	2002	2003 (f)	2004 (f)
CURRENT ACCOUNT	-553	-344	-300
Goods and services	1,556	2,015	3,300
Goods	2,513	2,937	4,600
Exports	18,340	20,842	26,300
Imports	15,827	17,905	21,700
Services	-957	-922	-1,300
Income	-2,536	-2,768	-4,100
Unilateral transfers	426	409	500

(f) Projections.

Source: Central Bank of Chile.

External sector

Net external demand

In 2003, export goods volumes are estimated to have risen by almost 6.5%, as forecast in the previous *Report*. This marks a clear recovery over 2002, which is visible in practically every sector (table III.1). Import volumes rose between 8% and 9% in 2003, more than forecast in September (7%), mainly reflected in the rise in the volume of intermediate goods (table III.2).

Table III.1
Export goods volumes
(annual change, percent)

	2002					2003				
	I	II	III	IV	Year	I	II	III	IV	Year
Total	3.5	5.4	-4.0	1.0	1.4	5.9	1.8	14.4	6.9	6.5
Mining	2.6	2.9	-15.8	-1.3	-2.9	2.4	-1.2	18.1	6.7	5.7
Agriculture, forestry and fishing	5.5	14.2	7.3	25.0	10.8	6.3	13.3	19.2	4.5	9.1
Manufacturing	3.2	7.2	5.4	1.2	3.7	12.1	1.0	11.0	8.7	7.4

Source: Central Bank of Chile.

Table III.2
Import goods volumes
(annual change, percent)

	2002					2003				
	I	II	III	IV	Year	I	II	III	IV	Year
Total	-7.6	3.2	1.9	3.8	0.2	6.7	5.7	4.9	17.4	8.8
Consumption	-12.8	9.5	7.0	14.5	3.9	22.2	9.3	8.3	26.0	16.3
Intermediate	-5.2	2.7	0.8	0.0	-0.4	5.0	0.4	6.3	22.2	8.4
Capital	-8.7	4.4	0.4	9.1	0.9	-0.8	10.9	-10.5	-0.3	-0.2

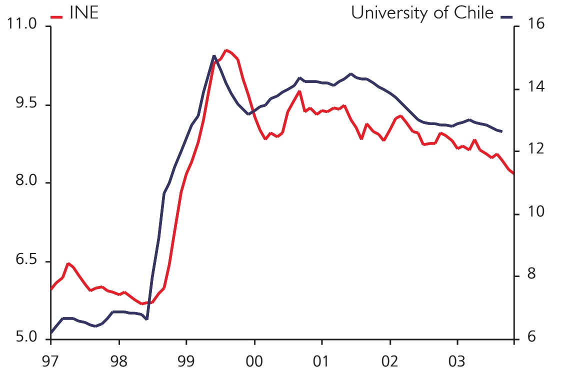
Source: Central Bank of Chile.

For export prices, the main difference from September's forecast came from mining shipments, with the aggregate price of sales abroad estimated to have risen 7% in 2003. For imports, prices are estimated to have risen almost 4% in 2003, due to higher intermediate goods and capital costs. Overall, the terms of trade performed better than expected, with an estimated rise of over 1% for 2003, an improvement over the 0.8% forecast in September. This rise reflects better export prices in the last quarter of the year.

Current account and balance of payments

In 2003 the current account of the balance of payments is estimated to have closed with a deficit of somewhat more than US$340 million or about 0.5% of GDP. This deficit, which is lower than the previous year's, reflects a larger surplus in the trade balance and a lower deficit in services. Income showed a larger deficit and revenues due to transfers were down. The larger income deficit mainly reflected an increase in net outflows due to profits and interest on direct and portfolio investment, much influenced by the higher copper price and interest on bonds issued abroad, partly offset by lower net outflows due to interest under the «other investment» item.

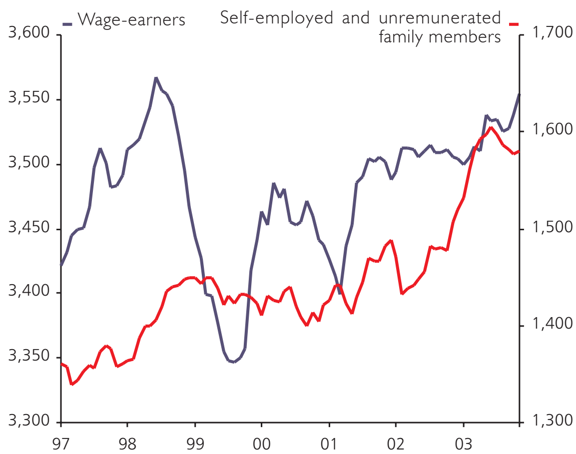
Figure III.15
Unemployment rate (*)
(percent)



(*) Seasonally adjusted series.

Sources:
National Statistics Bureau (INE).
University of Chile.

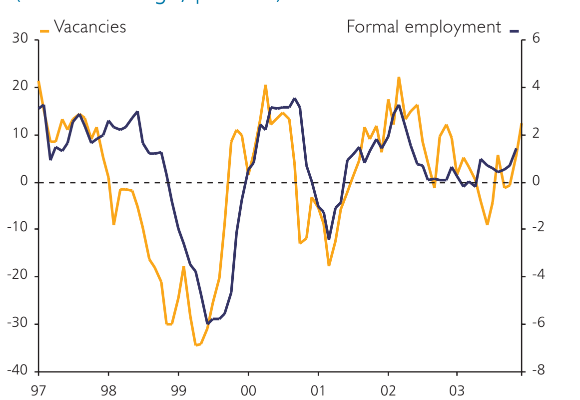
Figure III.16
Breakdown of employment (*)
(thousands of people)



(*) Seasonally adjusted series.

Source: National Statistics Bureau (INE).

Figure III.17
Vacancies and formal employment
(annual change, percent)



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

The outlook for 2004 suggests the current account deficit as a percentage of GDP will be lower than in 2003 and will then rise in 2005, consistent with recovered investment not offset by a rise in domestic saving, and a moderate increase in capital flows into Latin America in general and Chile in particular (table III.3).

Labor market

Recent information from the INE for the labor market points to a stronger performance from employment, with employment levels rising and the unemployment rate falling, after some weakness in the third quarter of 2003. The recent rise in employment, unlike the one that occurred at the end of 2002 and early 2003, has affected primary and formal sectors (figure III.14).

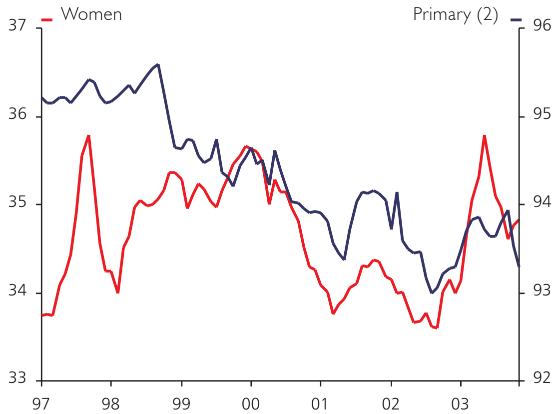
The seasonally adjusted unemployment rate fell slightly but steadily from April on, bottoming out in the moving quarter ending in November (8.2%). This trend, although with September data, was also apparent in the University of Chile's quarterly employment and unemployment survey. In September, the seasonally adjusted unemployment rate in Greater Santiago was 12.6%, its lowest point since December 1998 (figure III.15). It should be noted that the primary unemployment rate, that covers men between 25 and 54 years of age, has behaved rather strangely from April on, stabilizing at around 6.4% according to INE information, when seasonally adjusted. This contrasts with information reported by the university, which indicates that this unemployment rate fell during 2003.

In terms of the breakdown of employment, in recent months part of the rise noted during the first half in secondary sectors disappeared, giving way to jobs in the more formal sector. In November, formal occupation, about 64% of total employment, confirmed the change in the falling trend that began in October, adding 27,000 jobs over September (when seasonally adjusted). At the same time, family and self-employment fell by around 11,000 jobs (figure III.16).

The rise in employment linked to more formal sectors of the economy reflects trends in the vacancy index in the past six months, a period of sustained recovery, especially last December, when it reached its highest point since June 1998. In December 2003, the annual change in this indicator reached two digits for the first time since the end of 2002 (figure III.17).

By occupational groups, which identify workers in the labor market according to investment in human capital and/or specialization, the change in the professional and technical group (about 11% of total employment) stands out. This is the group that probably has access to the highest educational levels. Seasonally-adjusted figures for November indicate that the number of jobs in this group rose by 8,000 over September, after smaller increases in the year. This, along with favorable trends in formal employment, as opposed to the situation affecting independent workers, could be a sign of a more permanent recovery in employment in the coming months.

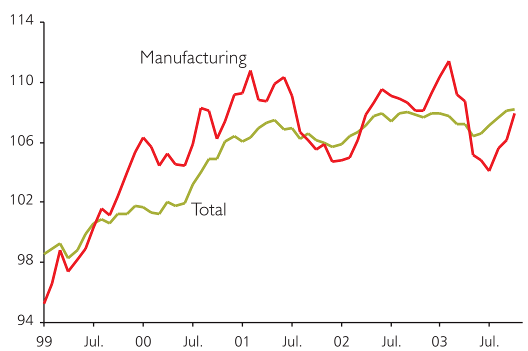
Figure III.18
Participation rate (1)
(percent)



(1) Seasonally adjusted series.
(2) Men between 25 and 54 years of age.

Source: National Statistics Bureau (INE).

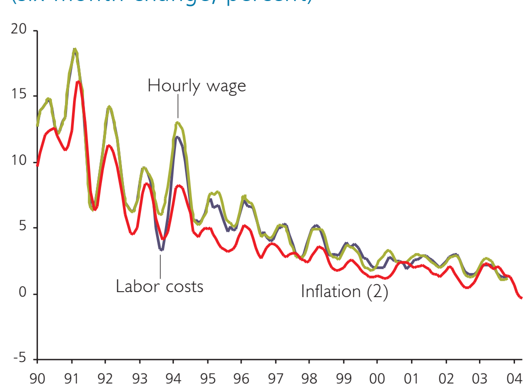
Figure III.19
Average productivity (*)
(index average 1999 = 100)



(*) Imacec to employment ratio. Seasonally adjusted series.

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

Figure III.20
Inflation and nominal wages (1)
(six-month change, percent)



(1) Moving quarterly average.
(2) Four months ahead.

Source: National Statistics Bureau (INE).

Changes in women's participation in the labor force also stand out. In the past six months, women turned around a noteworthy rise in their participation that occurred between late 2002 and the first half of 2003, confirming the hypothesis that this behavior was temporary, as suggested in the previous *Report*. In contrast, at the national level, the primary population shows a somewhat more stable participation for this group in 2003, which averaged 93.7% (figure III.18).

Productivity and wages

Recent information confirmed the temporary nature of the decline in average labor productivity during the first half of 2003, which started to recover in August, especially in manufacturing (figure III.19). The implications of this for inflation and growth in the medium term, accompanied by wage increase rates compatible with productivity trends, are in line with expectations some months' ago.

The recent recovery in average productivity reflects more efficiency in employment correction by companies faced with shifts in output that are believed to be temporary. Thus, the breakdown of employment that has occurred in recent months could be more persistent, in which case productivity trends would be more directly linked to productive sectors' cost structures. Generally speaking, labor market performance has become more important in recent years, due to its impact on both aggregate economic stability and social welfare. The papers presented at the last Central Bank's annual conference, held in November 2003, review several relevant aspects of this subject (Box III.2).

Meanwhile, although it fell during the first half of 2003, the annual growth rate for nominal wages tended to stabilize in the second half. In the coming months annual growth in wages is expected to continue to decline, in line with inflation, which has been falling since the first quarter of 2003. It should be noted that wages have risen less than expected, given nominal indexation clauses that lag four months behind inflation, a situation that had not occurred in the recent past. Moreover, the moderate rise (2.7%) in public sector wages is worth noting, as it is down from previous years, which has probably helped to keep the lid on service costs (figure III.20).

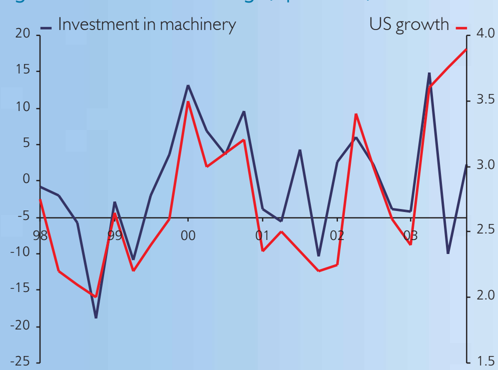
BOX III.1: INVESTMENT AND EXPECTATIONS

Table III.4
Capital goods imports and investment in machinery
(real annual change, percent)

		Imports	Investment
Average 1989-97		11.0	14.4
1998		2.7	0.9
1999		-29.3	-26.9
2000		21.3	22.5
2001		2.2	1.4
2002		-6.7	-0.5
2003	I	-0.8	-0.4
	II	10.9	9.0
	III	-10.5	-4.7

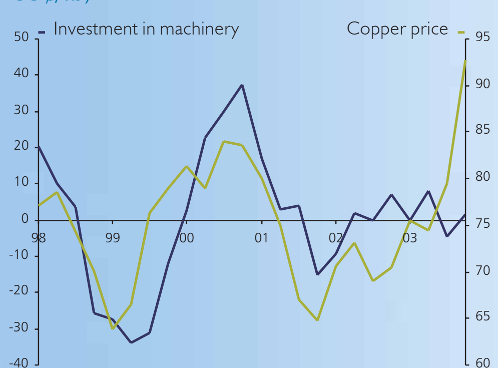
Source: Central Bank of Chile.

Figure III.21
Investment in machinery and growth expected in the US
(investment: quarter-on-quarter change; growth: annual change, percent)



Sources:
World Economic Outlook (IMF).
Central Bank of Chile.

Figure III.22
Investment in machinery and copper price
(investment: annual change, percent; copper: US¢/lb)



Source: Central Bank of Chile.

According to information through the third quarter of 2003, machinery imports fell slightly (0.1% annually). Preliminary data suggests this did not improve in the fourth quarter of 2003. Considering that most investment in machinery is in imported items, this behavior has meant little growth in the gross formation of capital in the form of machinery, which accounts for 40% of total investment, and has implications for GDP growth, for estimating its potential and for the performance of domestic spending. This box presents the main arguments supporting that the stagnation apparent in capital imports in the second half of 2003 and gross formation of machinery should turn around in 2004.

Growth in investment and machinery imports in 2003 was low not only compared to average annual growth from 1989-1997, but also seems out of line with monetary impulse arising from interest rate cuts and the appreciated exchange rate (table III.4). The capital cost of machinery is estimated to have fallen an annual 8% during the first three quarters of 2003.

The delayed reactivation in machinery imports is not consistent with improved expectations for external economic growth in the medium-term horizon. The high correlation between quarterly growth of gross formation in machinery and expected growth to one year in the United States reveals the role that expectations about world growth play in investment decisions[11/] (figure III.21). The unusual divergence apparent in this data suggests this sluggish performance from investment in machinery is temporary.

Another argument regarding the role of expectations is apparent in the close relationship between annual growth in investment in machinery and the copper price (figure III.22). The copper price plays a role that goes beyond the mining sector, because it is also a broad indicator regarding the country's prospects. For the latest observations of these variables, this parallel movement has broken down. Again, this discrepancy supports the idea that gross capital formation in machinery will perform more strongly in the future.

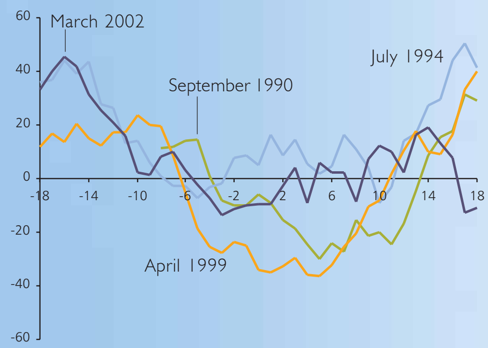
The better growth prospects for the near future are consistent with a recovery of imports and investment in machinery. Evidence of this can be obtained from watching how capital imports have evolved in previous cycles of economic recovery. To do so, we arbitrarily choose cycles with a 37-month duration, whose center (month «zero») is set at the month of least annual growth in the Imacec monthly index of economic activity. In each of these historic cycles, centering on September 1990, July 1994 and April 1999, respectively, imports showed a very direct correlation with shifts in the Imacec (figure III.23).

The last low point in Imacec growth occurred in March 2002, when its 12-month change was zero. Given that this was the lowest point of growth since September 1999, March 2002 can be taken as the center of a new cycle. This analysis reveals that the recent behavior of capital imports is unusual, compared to changes in this variable during previous recovery phases.

Multiple signs support the conclusion that this unusual behavior by capital investment should correct itself in coming quarters. First, investment should respond to the low cost of capital resulting from reduced interest rates and

[11/] Quarterly information for the first of these series comes from preparing a quarterly version of the annual National Accounts series using the change in the amount of capital goods imports from the Balance of Payments, since most are imported. In fact, their annual growth rates are rather similar. The second series was extracted from information published in *World Economic Outlook*.

Figure III.23
Capital goods imports during the cycle
(annual change, percent)



Source: Central Bank of Chile.

peso appreciation against the US dollar. Second, better prospects for growth in the US and the copper price support a more favorable outlook for investment in machinery. Finally, the recovery in machinery has a role to play in the expected consolidation of economic reactivation next year. A reevaluation of growth scenarios for output and potential output will be determined, among other factors, by the expected recovery in investment and machinery imports in coming quarters.

BOX III.2: MAIN CONCLUSIONS FROM THE 2003 ANNUAL CONFERENCE: «LABOR MARKET AND INSTITUTIONS»

The central issue at the Seventh Annual Conference of the Central Bank of Chile, held in November 2003, was the labor market and its institutions, a subject of enormous national concern in light of the market's behavior since the 1998 crisis. This period has been marked by high and persistent unemployment rates and a great number of reforms to Chile's labor legislation. The opinions and judgments about Chile's labor market during the conference do not necessarily reflect the Central Bank's position on this subject.

The conference dealt with the issue of the optimum design for labor institutions, concluding that employment protection systems are necessary and efficient when their design is optimum, although the result will depend on the initial conditions in each country.[12/]

One of the papers[13/] argued that unemployment insurance and a severance tax payment should be seen as the two pillars of a system for protecting employment. The first should encourage the search for and acceptance of jobs and consist of payments below normal wages that gradually decrease over a defined period. Insurance should be managed by an agency external to companies, which receives their contributions and monitors the effort that the unemployed put into their job search. This mechanism must include an element of solidarity to cover the higher likelihood of unemployment during the first years of working life, when the individual's contribution is insufficient. The severance tax payment, which consists of the business responsible for the severance paying a specific amount to the government (instead of paying an indemnity for years of service) would finance part of the unemployment insurance and serve to ensure that companies internalize the cost of unemployment. Overall, a single reduced payment is recommended, that would rise slightly with years of service, and be paid by the employer at the time of severance.

The paper about the experience of countries in the Organization for Economic Cooperation and Development (OECD) shows that severance costs associated with the payment of an indemnity for years of service stabilize employment in this cycle, without increasing it.[14/] When examining workers with different (wide-ranging) productivity levels and focused policies, the effect depends on the initial state of the economy and how volatile job productivity is:[15/] in a labor market with very high reserve wages (people are willing to work if they are very well paid) and high unemployment, reducing severance costs of those who are least productive substantially reduces unemployment among this group and slightly increases unemployment among those who are most productive. Conversely, if reserve wages are low (people are willing to work for less) and there is less unemployment, unemployment affecting the two types of employees could rise, increasing turnover.

Concern about the degree of workers' protection is due to its impact on labor market rigidity and its repercussions regarding inequality and economic growth. The former, because of wage's downward inflexibility, which passes the effects

[12/] This is suggested by several of the papers presented (all are available at the website www.bcentral.cl), but particularly Olivier Blanchard's presentation and Giuseppe Bertola's work, «Distribution, Efficiency and Labor Market Regulation: Theory, OECD and Latin America».

[13/] Blanchard (2003) «Design of Labor Market Institutions».

[14/] Bertola (2003), op. cit.

[15/] Juan J. Dolado, Marcel Jansen and Juan F. Jimeno «Targeted Employment Policies and Partial Labor Market Reforms: Theory and Some Empirical Evidence».

of negative shocks onto the employment level for a group of individuals, instead of distributing them across all of society; the latter, because it does not facilitate the optimal relocation of workers. These issues were dealt with in another study,[16/] which concluded that economic growth rises as regulations are reduced, specifically those dealing with collective bargaining and the minimum wage, but by very small magnitudes; that a higher minimum wage increases inequality; and that the degree of unionization, maternity leave and the percentage of government jobs over the total are associated with better income distribution.

Another interesting issue was the distinction made between *de jure* (on paper) and *de facto* (in practice), underlining the importance of respecting laws in different countries. De *jure* legislation, based on regulations and legal codes and not common law, is associated with more inequitable income distribution.

Also relative degrees of labor rigidity were defined at the conference. One paper[17/] estimated it according to labor income (defined as the difference between the present value of future income flows expected for an employed worker and an unemployed worker with similar characteristics) as a rigidity indicator, finding that some European countries have liberalized their labor markets (Ireland, Denmark, Italy and Spain), while others have moved in the opposite direction (the Netherlands, Belgium and Austria).

Another study[18/] estimated labor rigidity based on the average duration of unemployment after productivity, terms of trade, labor force and monetary shocks. As a result, South Korea, Hong Kong, Chile and the United States appear to be the most flexible countries, while Germany, Sweden, Spain and Colombia are the most rigid.

A third study measured the degree of labor rigidity based on microeconomic flexibility, reflected in how quickly the gap between labor productivity and wage costs closes,[19/] finding that Brazil, Chile and Colombia are more flexible than Mexico and Venezuela, and that Chile's microeconomic flexibility decreased between 1997 and 1999.

Some specific issues regarding Chile's labor market were also dealt with.[20/] It was argued that Latin America has relatively rigid labor markets and that Chile is no exception; that nominal wages are more inflexible in Chile, which leads it to absorb shocks by adjusting the unemployment rate instead of wages. Here, as elsewhere in the world, the premium on education has risen (more skilled workers are preferred for hire), which negatively affects income distribution. Regarding the latter, one study[21/] explored the causes, concluding that the changes observed in wage differences and the makeup of the labor force primarily reflects Stolper-Samuelson effects of international trade (where goods intensive

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16/ César Calderón and Alberto Chong «Labor Market Regulation and Income Inequality: Evidence for a Panel of Countries» and César Calderón, Alberto Chong and Rodrigo Valdés «Are Labor Market Regulations an Obstacle for Long Term Growth?»

17/ Gilles Saint Paul «Did European Labor Markets Become More Competitive in the 1990s? Evidence from Estimated Worker Rents».

18/ Elias Albagli, Pablo García and Jorge Restrepo «Labor Market Flexibility and Structural Shocks: An International Perspective».

19/ Ricardo Caballero, Eduardo Engel and Alejandro Micco «Microeconomic Flexibility in Chile».

20/ Presentation of the Inter-American Development Bank's Report on Economic and Social Progress 2004, «Good Jobs Wanted. Labor Markets in Latin America».

21/ Olga Fuentes and Simon Gilchrist «Trade Liberalization and Labor Market Evolution: Evidence from Chilean Plant Level Data».

in an abundant factor are exported and in turn receive a larger relative payment) in export-oriented sectors, and technological changes biased toward skilled work in the import-substituting sector.

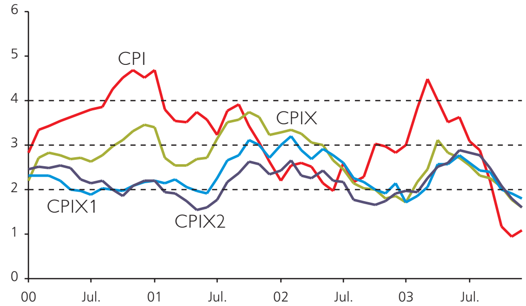
Moreover, a study of wage dynamics among Chilean workers[22/] found that individual income follows an inverted «U» curve throughout the life cycle, with education having a powerful effect, and that uncertainty is lower than in the United States, and increases with age. This gives rise to questions about the cause of this difference in uncertainty, which could be related to the reduced flexibility of the labor market, and its implications for policy design, for example for insurance and financial market development.

Finally, different effects were found for policies protecting employment and minimum wages,[23/] leading to the conclusion that those who suffer the most in terms of access to employment are the youngest, least skilled workers, who are precisely the ones these policies seek to benefit.

[22/] Cristobal Huneeus and Andrea Repetto «The Dynamics of Earnings in Chile».

[23/] Claudio Montenegro and Carmen Pagés «Who Benefits from Labor Market Regulations? Chile 1960-1998».

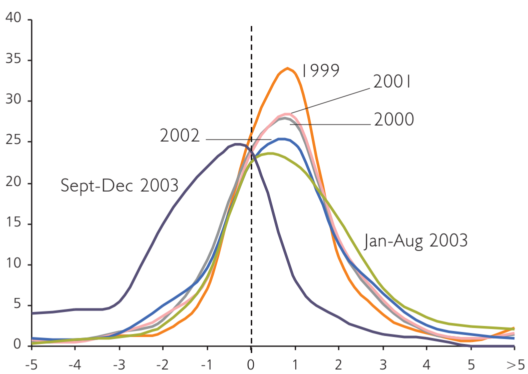
Figure IV.1
CPI, CPIX, CPIX1 (1) and CPIX2 (2) inflation
(annual change, percent)



(1) CPI inflation minus fuel prices, perishables, regulated utilities, indexed prices and financial services, which account for 70% of the total basket.
(2) Minus the same products as the CPIX1 and medical product prices: accounts for 60% of the CPI basket.

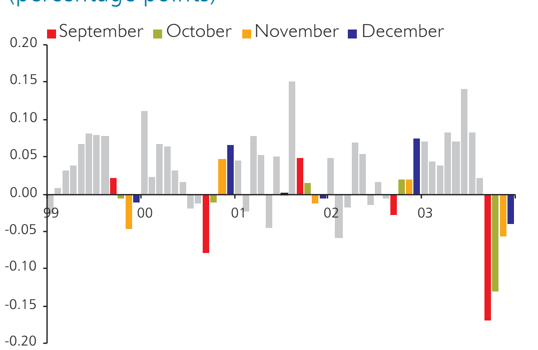
Sources:
National Statistics Bureau (INE).
Central Bank of Chile.

Figure IV.2
Price of nonperishable foods
(distribution of monthly changes, average for the period)



Source: Central Bank of Chile.

Figure IV.3
Incidence of nonperishable foods on monthly CPI
(percentage points)



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

This section analyzes recent trends in inflation, costs, and margins, identifying possible sources of future inflationary pressures.

Chapter synthesis

A relevant set of developments, almost all associated with supply-side factors, has built up since September, causing a significant drop in annual CPI-inflation. Peso appreciation against the dollar, the lower fuel price and more competition among some wholesale and retail sectors contributed to the -0.6% decline in accumulated CPI inflation between September and December, with negative inflation for three of the four months. This brought 12-month CPI inflation to 1.1% at the end of 2003.

Trends in core inflation were also lower than forecast, accumulating an annual rise of less than 2% by year's end, which can be attributed to the impact of the exchange rate on some utility and other rates, and on imported costs in general, but also to greater competition and/or efficiency in some retail and wholesale sectors. All this has also changed forecasts for trends in short-term prices, suggesting that the recent drop in inflation will last longer than initially expected, a factor not considered in September projections.

In this scenario, some measures of private prospects for inflation have dropped sharply, placing expected inflation below the center of the target range beyond the usual policy horizon. This trend is not totally consistent with the medium-term inflation target centering on 3% set by the Central Bank.

Other factors determining medium-term inflation have suffered no substantial changes. External inflation measured in dollars, unit labor costs and output gaps have evolved as forecast in September.

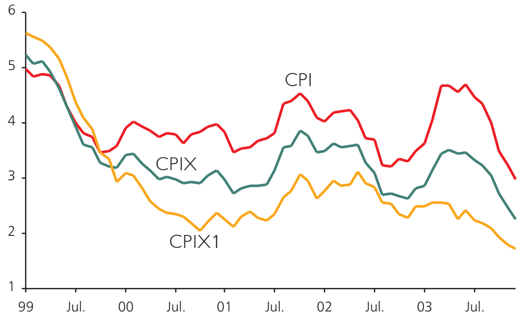
Recent inflation trends

For 2003 as a whole, annual CPI inflation reached 1.1% and the CPIX 1.6% (figure IV.1). CPIX1[1/] inflation, meanwhile, fell to 1.8%. Important news regarding supply factors that arose from September to date led to a substantial drop in annual inflation, as measured by these indices.

Peso appreciation against the dollar —about 17% since the last *Report*— has caused unexpected drops in fuel prices and regulated utility and other rates, at the same time as it has pushed down imported cost pressures. As for utility and other rates, the exchange rate's rise against the dollar has been decisive in reducing busfares[2/] (20 pesos in the last quarter) and in specific changes in basic utility rates (electricity, water

[1/] This is the calculation of CPI inflation, minus fuel prices, perishables, regulated utilities indexed prices and financial services, which account for about 70% of the total basket.
[2/] The foreign exchange rate affects the indexation formula through the cost of replacing the bus (37% of the polynomial) and diesel (26%).

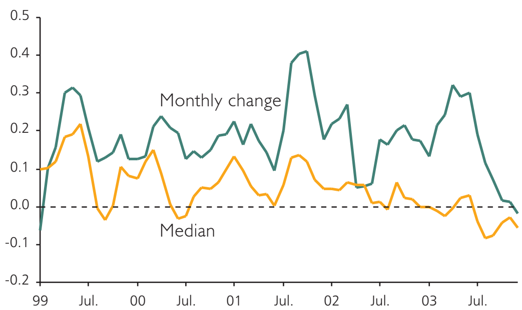
Figure IV.4
Trimmed means (*)
(annual change, percent)



(*) An indicator for core inflation that eliminates outliers from weighted change distributions in the different inflation measures, with the rest reweighted and the corresponding price index thereby recalculated.

Source: Central Bank of Chile.

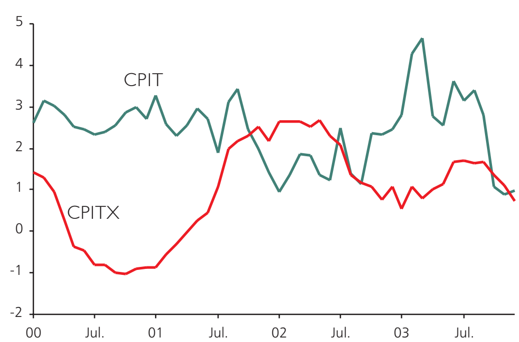
Figure IV.5
CPIX1 (1) (2)
(percent)



(1) CPI inflation calculated without fuel prices, perishables, regulated utilities, indexed prices and financial services, which account for 70% of the total basket.
(2) Seasonally adjusted series. Moving quarterly average.

Source: Central Bank of Chile.

Figure IV.6
Tradable inflation: CPIT and CPITX
(annual change, percent)



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

and telephone). These items are estimated to have pushed inflation in the last quarter of 2003 down by about 0.6 of a percentage point below last September's estimate.

This has combined with the impact of the cheaper dollar on fuel prices, which has been compounded by their trend on the international market. Since September, the domestic price of gasoline (the fuel with the most weight within the CPI) has fallen just under 20%. Given that almost half the domestic price depends on external prices and the exchange rate (the rest depends on taxes), the exchange rate and the decline in the international fuel price have had virtually equal effects. Thus, between September and December fuels accumulated a negative impact that went beyond the September forecast by almost 0.3 of a percentage point of the CPI.

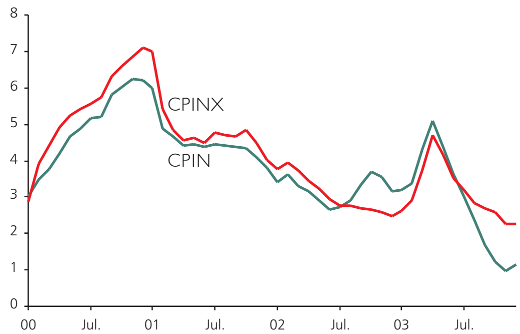
Similarly, different sources report greater competition in some retail and wholesale sectors, which has been particularly evident in the declining price of nonperishable foods.[3/] Since September these prices have fallen about 3%, altogether pushing the CPI down by about 0.6 of a percentage point. Regarding the CPIX and the CPIX1, this effect has been enhanced by the greater weight these products have in each index. In particular, in the case of the CPIX1, this accounts for the main difference in the estimate developed in the previous *Report*.

The drop in nonperishable food prices has occurred across the board, affecting virtually all items in this area. In fact, in September and October, 28 of 30 categories saw their prices fall, a number that declined in November and December, but remained significant compared to previous trends. Similarly, the distribution of monthly nonperishable food price changes moved toward negative amounts compared to other months in 2003 and to the average for comparable years (figure IV.2). The possibility that this behavior is in response to a deepening of seasonal factors has been ruled out due both to the nature of the products themselves as well as to the fact that in light of the recent history of these prices, their impact on the CPI seems to have changed in recent months (figure IV.3). Finally, lower accumulated inflation has meant smaller increases in indexed prices. It is estimated that because of this, CPI inflation has been 0.3 of a percentage point below expectations of last September.

Meanwhile, last 1 October the one percentage point rise in the Value Added Tax (VAT) came into effect. In September, this increase was expected to affect the CPI by around half of a percentage point in the fourth quarter, given that about 70% of products and services included in the basket are subject to this tax. Although it is premature to estimate the size of its effect on inflation, information gathered in the last quarter of 2003 indicates that minus nonperishable food prices, CPIX prices have reflected the passthrough of the higher tax, rising 1.3% more than prices not subject to the VAT.

[3/] Foods included in the CPI, other than fruit, vegetables, meat and fish, which account for about 15% of the total basket.

Figure IV.7
Non-tradable inflation: CPIN and CPINX
(annual change, percent)

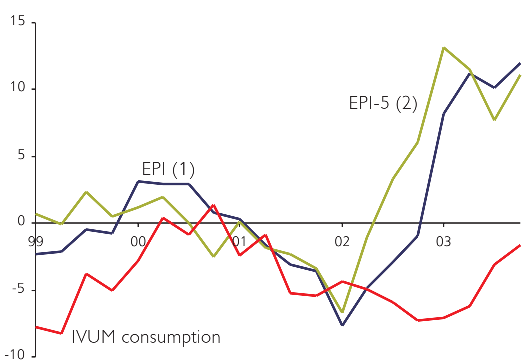


Sources:
National Statistics Bureau (INE).
Central Bank of Chile.

Figure IV.8
Total domestic and imported WPI
(annual change, percent)

Source: National Statistics Bureau (INE).

Figure IV.9
External inflation in US dollars
(annual change, percent)



(1) External price inflation (EPI) is calculated using the WPI, expressed in US dollars (or CPI where the WPI is not available), for the main trading partners, weighted for their relative share of Chile's imports to and exports from each, minus oil and copper. Both the WPI and the exchange rates for countries are included as monthly changes.
(2) This uses the same definition as (1), grouping Chile's trading partners from the following industrialized countries: the US, Japan, the United Kingdom, Canada and the euro zone (Germany, France, Spain, Italy, the Netherlands, and Belgium).

Source: Central Bank of Chile.

Alternative core measures

Other underlying measures also posted a general fall during the last four months of 2003. After a 12-month increase of almost 2.5% in September, the CPIX2[4/] gradually fell for an accumulated rise of 1.6% in 2003. The trimmed means for annual CPI, CPIX and CPIX1 inflation also posted declines, beyond the differences that may occur when compared to inflation measured by each of these indices (figure IV.4). Finally, the average monthly change in the CPIX1 has been lower since September (figure IV.5).

Components of inflation

Between September and December, tradable product prices moved mainly in terms of fuels and nonperishable foods. Thus, tradable goods inflation ended December with an annual rise that was lower than in August, with some important internal changes during this period. Given the underlying trend in this component, its 12-month change moved in line with CPIX1 inflation (figure IV.6).

As for non-tradable products, their annual inflation rate has plunged sharply, associated with the decline in the exchange rate. A similar situation is apparent in the underlying measure for these prices (figure IV.7).

Wholesale prices

In the last third of 2003, the Wholesale Price Index (WPI) moved clearly downward, in part due to lower refinery costs for fuels included in the domestic WPI and the one-on-one effect of the lower exchange rate on the WPI of imported products (figure IV.8). In the specific case of fuel prices, which do not include operation of the oil price stabilization fund, this was completely due to trends in the international price and the exchange rate. It should be remembered, however, that there is no direct passthrough in price increases between the WPI and the CPI, because the products making up the basket of each make it impossible to establish a direct relationship between changes in wholesale and retail prices. Empirical evidence specifically points to the absence of such a relationship, except for comparable products where there is an objective relationship between wholesale and retail prices.

Short-term prospects for inflation

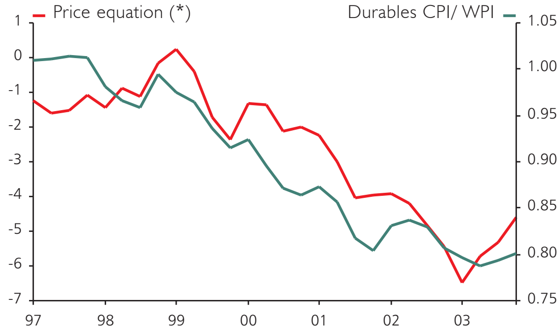
Cost pressures and margins

Recent news is believed to have affected not only current indicators but will also continue to influence short-term trends.

In terms of imported inflation, the exchange rate's behavior in the last four months of 2003 has left its mark on costs, determining lower

[4/] This eliminates the same products as the CPIX1 and also excludes the prices of medical products, based on the assumption that these are less volatile. This accounts for about 60% of the CPI basket.

Figure IV.10
Margins
(moving annual average, percent)



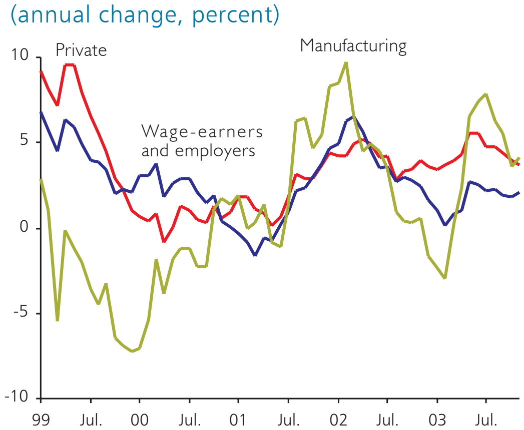
(*) Based on the CPIX1, unit labor costs, service wages and the IVUM, in pesos.

Source: Central Bank of Chile.

Figure IV.11
Companies' operating margin
(moving annual average, percent)

Sources:
Fecu, Superintendence of Securities and Insurance.
Central Bank of Chile.

Figure IV.12
Unit labor costs (*)
(annual change, percent)



(*) Seasonally adjusted series.

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

pressures on that front. External inflation, measured by the external price index (EPI), rose again toward the last quarter of the year, in line with dollar depreciation in world markets. The import product unit values (IVUM) continued to fall in the third and fourth quarters of the year, with expectations that this would turn around early in 2004. Thus, the annual change in the IVUM for consumption goods was –3.1% in the third and –1.6% in the fourth quarter of last year (figure IV.9). It should be emphasized that, beyond the recent rising trend in the EPI, the behavior of inflation and prices relevant to measuring imported cost pressures is mainly linked to the IVUM, since this measure reflects the actual cost of bringing goods into the country.

Trends in wholesale and retail margins have also meant a significant change in inflation prospects. Commonly used theoretical measures[5/] show less compression compared to previous periods, to an important degree because of peso appreciation, behavior also apparent in the relationship between the prices of durable products included in the CPI and the WPI, which have been recovering since the second quarter of 2003 (figure IV.10). Alternative measures for margins, such as operating margin based on the FECU, also indicate an improvement, which in this case began early in 2003. This behavior, with some variations, is also apparent in all companies examined and sectors associated with the wholesale and retail trade (figure IV.11).

Short-term inflation

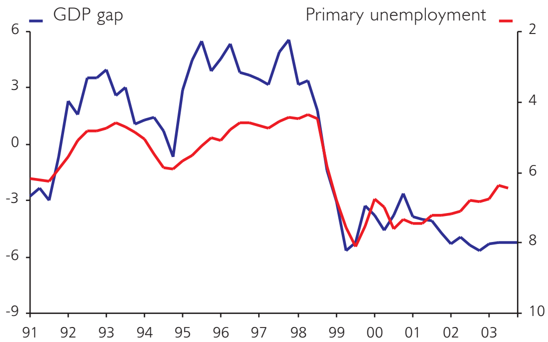
In the first half of 2004, estimates for 12-month CPI inflation suggest it will stay below the floor of the target range, with negative figures continuing into the start of the second quarter. This not only reflects recent news, but also the basis for comparison with the first quarter of 2003, when external conditions led to an important increase in the value of the dollar and fuel prices. The basis of comparison effect alone will contribute about three-tenths less to year-on-year inflation next March.

These negative 12-month inflation figures basically reflect temporary conditions. The oil price is not expected to post significant changes over current levels and those expected in September. Moreover, as usual, no major shifts are expected in the exchange rate used to prepare projections. Public utility and other rates will reflect these conditions, with busfares possibly declining again in the first quarter of 2004. Perishable product prices, meanwhile, should follow their usual seasonal patterns.

Increased competition, which is also apparent in some retail and wholesale sectors — and which played a significant role in price drops during the last part of 2003— suggests that margins are not especially compressed. Efficiency gains along the production and distribution chains, thanks to new technologies, the rise in human capital and more competition, among other factors, will have a permanent effect on the relationship between prices and margins, making lower prices possible without significantly affecting margins. Likewise, the economy's growing openness encourages integration into larger scale markets, which will push local margins closer to comparable international ones, extending

[5/] This definition uses the CPIX1 as the inflation measure and, as cost factors, imported inflation and unit labor costs.

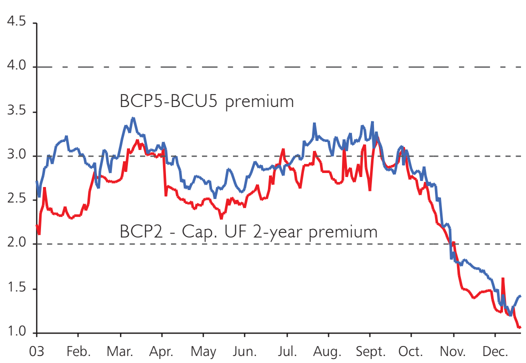
Figure IV.13
Idle capacity (1) and primary unemployment (2)
(percent)



(1) Trend GDP calculated using the Hodrick-Prescott filter.
(2) Unemployment rate for men aged 25 to 54 years. Seasonally adjusted series.

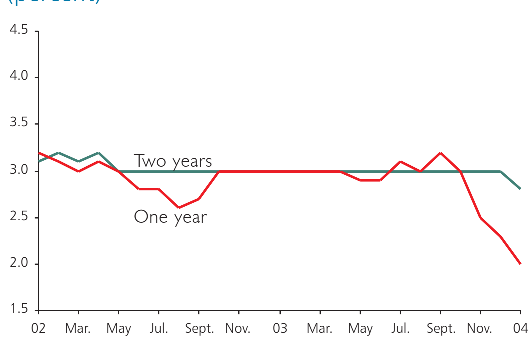
Sources:
National Statistics Bureau (INE).
Central Bank of Chile.

Figure IV.14
Premium paid on nominal and indexed 2- and 5-year instruments
(percent)



Source: Central Bank of Chile.

Figure IV.15
Inflation expected one and two years hence
(percent)



Source: Expectations survey, Central Bank of Chile.

the duration of tighter margins. This leads to the conclusion that a substantial turnaround in underlying prices to restore compressed wholesale and retail margins in recent months is less likely (Box IV.1).

Trends in wages and especially average labor productivity have created a situation characterized by lower unit labor costs, which is in line with expectations some months ago (figure IV.12). Recently wages have behaved somewhat differently from expectations, based on their historical pattern, since the current wage increase has been lower than the inflation applied in cost of living indexation clauses. Average productivity, meanwhile, started to recover in the third quarter, in line with trends in employment and activity. Overall, the productivity of formal and employer sectors, those most associated with INE's wage figures, has been more stable over time.

Output gaps for the different markets have remained without any significant changes, posting an outlook for potential and actual growth that is similar to forecasts. Primary unemployment has not changed significantly either, although the recent recovery in employment, more concentrated in formal sectors, could bring an increase to this segment (figure IV.13).

Private expectations

Private expectations have reacted strongly to the short-term news, placing expected inflation below the center of the target range for longer than the usual policy horizon. In fact, the survey of foreign exchange desks in financial institutions reveals expectations that inflation one and two years hence will remain under 2%. Similarly, expectations deduced from the interest rate differential between nominal and indexed operations to two and five years reveals expectations that are under 1.5% (figure IV.14). Finally, the Central Bank's survey of private analysts' expectations indicates that one year hence inflation should have fallen gradually from 3.2% in September to 2% in the last measure. Two years hence, expectations gathered in the survey fall to 2.8% in January, after remaining in line with the center of the target range for almost two years (figure IV.15).

Recent trends in inflation expectations are not completely consistent with the Central Bank's medium-term inflation target, which is 3%. This was one of the factors that the Board of the Central Bank considered in December and January when it reduced the Monetary Policy Rate by 50 basis points each time and reaffirmed its commitment to the inflation target centering on 3%.

BOX IV.1: COMPETITION AND RETAIL MARGINS

The notorious decline in the prices of some goods associated with specific sectors of Chile's wholesale and retail trade, with first-order effects on inflation during the last part of 2003, raises the question about how long this will last and how it will affect margins in the long-term.

In general, a more competitive market initially drives corrections through margin compression. At the same time, it pushes a search for ways to reduce costs that may come from productivity and efficiency gains in the production and distribution chains, among other factors. How long the competition lasts and who is able to resist it will be associated with the ability to correct margins through greater efficiency and lower costs, without necessarily giving up price competition.

International evidence indicates that at least part of the effects of greater competition on prices is lasting.

Margins and inflation

Different inflation models are based on the premise that there is a long-term relationship between costs, wholesale and retail margins, and final prices. What happens with nominal labor costs, labor productivity and imported cost pressures are all relevant to the cost structure. Margins, meanwhile, are built on the difference between final costs and prices and, for the purposes of short-term inflation's dynamics, their current level compared to their long-term level is relevant.

Figure IV.16
Theoretical margins (*)

(*) Based on the CPIX1, unit labor costs, service wages and the IVUM in pesos.

Source: Central Bank of Chile.

In the baseline projection model used in this *Report*,[4/] the observed level of margins is obtained empirically through estimation using statistical methods, while the long-term level is based on a judgment-based process. With the data available, it is apparent that margins have fallen steadily since 1999 and have only recovered partially since the second quarter of 2003, due to trends in labor costs and particularly in the exchange rate (figure IV.16). The current level of this measure for margins is lower than that considered to be long-term, so the future behavior of inflation and costs includes a gradual convergence, which will not necessarily complete itself within the relevant projection horizon (eight quarters).

Margins and competition

It is generally accepted that a rise in market competition drives price levels downward, at least once. How long this effect lasts depends on the nature of the competition itself and its impact on margins.

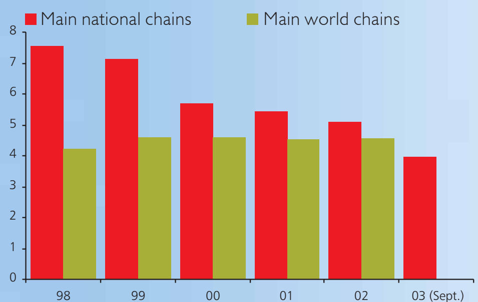
Different outcomes may occur. At one extreme, a rise in competition and lower prices make market participants cut their costs, maintaining or even increasing their margins through efficiency gains, thus ensuring that lower prices last over time. This outcome, which is favorable from the consumer's point of view, also brings productivity gains for the economy and a rise in its ability to correct prices. At the opposite extreme, competition may lead to the survival of one or more participants, thus transforming the market structure and eventually triggering future price increases.

[6/] A more detailed explanation of this model is available in the volume *Modelos Macroeconómicos y Proyecciones*, Central Bank of Chile 2003.

In general, greater competition is associated with lower long-term margins. Thus, markets with more players or integrated into more competitive markets constantly adjust to lower long-term margins. Different studies reveal competition's effect on margins and inflation levels, indicating that an important part of the differences between countries' inflation can be explained by their different market structures.[7/] Episodes during which competition among specific wholesale and retail sectors rises in other countries such as England[8/] have occurred in a context of lasting corrections to price levels combined with margins that do not necessarily show a significant compression.

In Chile, since last September, different sources point to greater competition in some retail and wholesale sectors, which has affected inflation and has been apparent mainly in the decline in nonperishable food prices. In fact, prices for these foods have fallen by almost 3.5%, contributing to a decline in CPI inflation through December 2003 of 0.6 of a percentage point compared to the September's estimate. The likelihood of this lower price level becoming permanent or not depends on what happens with the current process of competition and participants' margins.

Figure IV.17
Retail trade operating margins
(percent)



Sources:
Fecu, Superintendence of Securities and Insurance.
Central Bank of Chile.

On one hand, the operating margins of the wholesale and retail sectors associated with nonperishable sales have fallen steadily since 1998, in line with the market's growing sophistication and the aggregate behavior of prices and the economy, among other factors. Thus, they have fallen from 7% to almost 5%. Data through September 2003 shows an even more noticeable plunge, to figures around 4%, which in principle could be associated with an assumed rise in competition (figure IV.17).

On the other hand, by comparing averages for the main chains worldwide in similar sectors, Chile's margins show a gradual convergence toward levels that, while still lower, could be considered long-term. Given the growing openness of the economy and incentives to integrate into larger-scale markets that this involves, it is to be expected that market characteristics, including margins, become more comparable internationally.

Conclusion

Growing competition in markets has rather substantial effects on price levels. Although episodes of greater competition can give rise to important one-off price changes, it is possible that, depending on how the process unfolds, and in particular affects margins, these impacts may be more permanent, meaning that in the future, prices may settle at a lower level. International evidence shows that episodes of competition in the retail trade elsewhere have led to permanent price level changes, at the same time as margins have not compressed significantly.

International evidence shows that other episodes of retail trade competition have changed price levels permanently, while margins have not been significantly compressed.

7/ For example, for a group of OECD countries, Neiss (2001) and Cavelaars (2003) point to a negative relationship between the degree of competition and inflation.

8/ The Bank of England's Inflation *Reports* from November 1999 and May 2000 point to the effect that competition levels within the retail trade have had on recent price trends.

With the information that has built up pointing to greater competition in some retail and wholesale sectors in Chile, it is believed that at least part of the recently observed reduction in prices could be permanent. On one hand, although margins have fallen in recent years, they are approaching the average of the large chains worldwide in comparable sectors. On the other, efficiency gains in the production and distribution chains, resulting from the use of new technologies, the rise in human capital and greater competition, among other factors, imply a change in the ability to correct margins. Finally, the ongoing integration into larger-scale markets has pushed the structure of the domestic market, including margins, toward comparable levels, making it possible to set the long-term equilibrium at a lower point than in the past.

This section presents the Board's evaluation of Chile's economic prospects for the next two years, as discussed in the monetary policy meeting of 8 January 2004. It provides projections for the most likely course of inflation and economic growth, and examines the main risks. These projections are based on the methodological assumption that the monetary policy rate will remain at 1.75% for the next 24 months and that financial asset prices will follow a path along the current structure of market rates. Projections also depend on a series of events that make up the baseline, or most likely, scenario. New information will modify this scenario and associated projections. Forecasts are presented in the form of confidence intervals, to reflect the future risks to monetary policy.

The baseline scenario: main assumptions

International outlook

In recent months, most of the uncertainty about the outlook for the global economy, which lasted throughout the first half of 2003, finally cleared. The most recent information shows that the pace of growth in the United States was very robust, in particular in the third quarter of last year, after some time during which economic recovery seemed just a distant speck on the horizon. The labor market's recent performance and the ongoing thrust of consumption and manufacturing, real estate and service sector activity have increased estimated growth for 2003 and the prospects for 2004 by half a point. In the euro zone, after the weakness apparent during the second quarter of 2003, positive growth began in the third, making it possible to sustain forecasts for this year performing better than last. Surveys exploring expectations about the business climate have also helped, as have the ongoing low interest rates, recovery in external demand and countercyclical fiscal policies.

In Japan, meanwhile, there were also some positive surprises thanks to trends in the manufacturing sector, which have benefited from stronger exports, which in turn have turned around private investment and improved business expectations. The outlook for emerging Asia is also more encouraging than anticipated in the previous *Report* and, combined with the US, it has become the motor for world growth, thanks in particular to the Chinese economy's sustained growth and, to a lesser degree, India's.

For Latin America as a whole, meanwhile, growth prospects remain stable, but with differences among countries. While Argentina grew more than forecast in 2003, Brazil and Mexico grew less. The improved scenario abroad and monetary relaxation in Brazil, combined with the lag between US recovery and the Mexican economy should push regional growth in 2004 to just under 4%, after slim results of 1.1% in 2003. Thus the main scenario for a recovery in global activity has continued to materialize, pushing estimated growth for to 2.6% in 2003, 4.0% in 2004 and 3.4% in 2005, about three-tenths higher than September estimates.

Despite recent positive developments, the risk of weaker or less lasting scenarios remain present, although somewhat mitigated, and are detailed in the Balance of Risks section.

After flatlining for several quarters, the copper price soared to over US$1 per pound, bringing the average for 2003 to US$0.81, up more than 4% over projections some months ago. For this year, the average price should reach US$1.00 per pound, while in 2005 it should average US$1.02 per pound, about 20% more than forecast. Better prospects for global growth and the strong performance from manufacturing sectors in the main consuming countries (the US, Japan, and China) are behind this trend.

Although part of the increase in the copper price in dollars can also be associated with the dollar's weakness in world markets, this has mainly affected prices for Chilean imports. In particular, the Brent oil price in dollars averaged US$28.90 per barrel in 2003, which was just slightly higher than the previous *Report*'s forecast. For the next two years, assuming recovery in world activity and lack of opportunity for an increase in oil supply, the price of crude oil will probably decline gradually, with projections holding at US$27 per barrel in 2004 and US$24 per barrel in 2005. Thus, altogether this information combined with prospects for other import and export products point to an improvement in Chile's terms of trade of more than 9% this year and somewhere between 1% and 2% in 2005. In any case, ongoing risks associated with possible terrorist attacks on the western world keep a thread of uncertainty running through baseline scenario projections, mainly for the oil market.

The outlook for global growth continues to strengthen, while the terms of trade should recover significantly this year, by more than 9%.

Although the risk of deflation in the developed world as a whole has been ruled out and the pace of world activity has picked up, expectations have tended to postpone interest rate increases in the main economies. Long-term interest rates have moved back to levels of four months ago. This outlook, involving continued monetary expansion, is associated mainly with the absence of inflationary pressures in the US, due to significant idle capacity, and in Europe, due to the deflationary effect caused by euro appreciation. In fact, the main surprise in financial markets has been precisely the intense dollar depreciation against the main currencies since the middle of last year, in part associated with still pending corrections to the US's current account. Moreover, stock indices remain on the rise as they have been since the second quarter of 2003, except in Japan, whose exchange has been very volatile in recent months. Altogether, current international financial conditions are considerably more favorable than those included in the previous *Report*.

This is also apparent in emerging financial markets. Trends in interest rates and spreads show that the costs of emerging countries' borrowing have been reduced, making it easier to cut domestic interest rates, especially in Latin America. For all emerging economies, sovereign risk has fallen almost 100 basis points since September, reflecting agents' greater willingness to invest in riskier documents. Spreads on Chilean bonds, meanwhile, have followed a similar trajectory, reflected, for example, in the 35-basis point reduction since September in the 2012 bond, to an all-time low of 65 basis points. Similarly, stock indices have posted significant increases, following a path begun in the second quarter of 2003. In addition to these indicators of better financial conditions and prospects for the international scenario, projections for capital flows into emerging economies have been corrected upward by substantial amounts. In the region, nonetheless, and despite progress, important challenges remain in terms of stabilization, so some risk of more volatile scenarios remains.

Regional and global financial conditions have firmed up, although the risk of more volatile scenarios remains.

Interest rates and the exchange rate

The baseline scenario assumes that the Monetary Policy Rate will remain stable at 1.75% for the next twenty-four months, and that financial asset prices will follow the path of the current structure of market rates. This is not a projection, but rather a methodological assumption that makes it possible to evaluate the consistency of current monetary policy with the medium-term inflation target that is its prime goal.

Monetary conditions have remained expansionary and even risen since last September, thanks to recent cuts to the MPR and the flattening of the whole structure of nominal rates and, to a lesser degree, indexed ones. Consumer credits again performed strongly, while the interest rates charged remained stable and at the margin have even shown some decline associated with banks' season offers. In general, the arrival of new players and a decline in household risk have encouraged the renewed strength of the personal loans market. Mortgages have also seen their growth rate rise significantly. In contrast, company loans have been flat, due apparently to demand factors, given the attractions of other sources of financing recently and the slow pace of investment growth. It should be noted that alternative sources of financing for small and medium-sized firms, such as leasing and factoring, as well as credits for smaller amounts, have posted high rates of growth most recently. This, combined with more willingness among banks to provide commercial credits suggests that this category of loans should pick up in the near future.

Peso appreciation in real terms, compared to expectations last September, has been surprisingly fast and considerably greater than expected. However, it is consistent with trends in the global economy, in particular the dollar's weakness in the world and better financial conditions in general, as well as the outlook for domestic growth, which is more settled. As on other occasions, movements in the real exchange rate are one way the economy has responded to changes in the global environment and future prospects.

The baseline scenario assumes, as a methodological method, that the Monetary Policy Rate will remain stable at 1.75% over the next twenty-four months, and that financial asset prices will perform similarly, as suggested by the current structure of market rates.

Undoubtedly it is hard to predict future short-term exchange rate movements in one direction or another within the floating scheme in effect in Chile since September 1999. As a working assumption, it is assumed that the peso will remain stable and similar to the weekly average prior to this *Report*'s closing, in real terms over the projection horizon. Of course, the changes in peso/dollar bilateral parity will depend especially on the dollar's behavior in international markets.

Fiscal policy

The short-term fiscal scenario has remained in line with last September's expectations. The structural surplus goal was met in 2003 thanks to a series of corrections on the spending side and the rise in VAT. Debate over the 2004 budget law also remained within the rule. Recent, higher than expected changes in the copper price and current inflation, which is lower than projected, will cause opposite-sign effects within the conventional fiscal balance sheet. In any case, the projections in this *Report* assume that the goal enshrined in the structural surplus rule will be respected.

Economic growth

During the second half of 2003, output again rose more following weakness in the manufacturing sector by mid-year, as the stronger performances of natural resource-related sectors waned, especially in the fourth quarter. Low growth reflected a poorer than expected performance especially from mining, due to technical problems that made it impossible to meet goals. For other sectors, their stronger performance was driven by the main leaders in the manufacturing, construction and wholesale and retail trade sectors. Manufacturing's stronger performance was the result of great activity from sectors supplying the domestic market, while other manufacturing groups, exporters and import substitutors performed weekly in the last months of 2003. The wholesale and retail trade sector performed increasingly well throughout the year, thanks to favorable trends in manufacturing sales and imports from September onward. In construction, meanwhile, activity during the second half of 2003 did better than the first, thanks to the engineering works component. Thus, the external sector's growing strength and the expansionary nature of monetary policy have favored the achievement of higher growth rates.

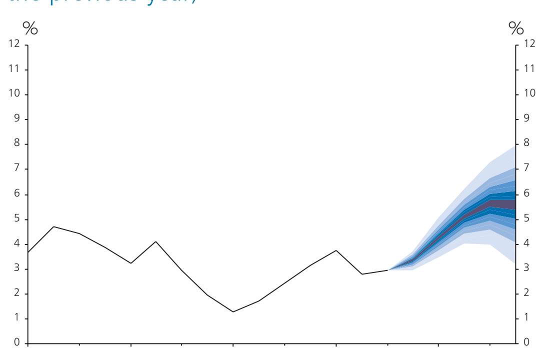
In terms of demand components, and in contrast to September, after a slight slowdown at the end of the first half, private consumption, particularly of durables, picked up again, thanks to more optimism among households, better conditions in the consumer loans market and, in general, the more favorable labor outlook. In contrast investment, except for that associated with residential construction, did not continue to rise in the third quarter as it had in the previous period. The accumulation of machinery and equipment capital in particular was surprisingly low, given domestic and external financial conditions and the stronger prospects for growth in activity. If these favorable conditions hold, this segment of domestic demand will recover more strongly during the first half of 2004. As for inventories, although on average they should accumulate in 2004 levels similar to those of 2003, this hides the effect of mining companies' accumulated inventories, which together account for almost 1% of GDP (in 1996 pesos) in 2002 and 2003. Thus, domestic spending minus this effect actually recovered less intensely than reported in 2003, although it should pick up in 2004.

Despite the impulse favoring job creation apparent since mid-2002, some components were temporary, with the latest information pointing to a more dynamic performance from the labor market. This is apparent in a rise in primary and formal employment, the recovery in vacancies and the sustained decline in the unemployment rate to levels only comparable to those of 1998. The risks, therefore, of a more persistent decline in average labor productivity have cleared, leading to forecasts that this will rise more this year and next than it did in 2002 and 2003.

Based on the set of available information, activity is calculated to have risen by 3.2% in 2003, in line with previous forecasts. For this year, reflecting the concrete improvement in the external scenario, in particular more growth of trading partners and a recovery in the terms of trade, along with continued monetary impulse, activity is expected grow somewhere between 4.5% and 5.5% in 2004, while toward 2005 output gaps should begin to close further, more than originally forecast. Domestic demand, meanwhile, after rising in 2003 at a rate similar to GDP, should increase between one and two percentage points above output growth in 2004 and 2005. This process should unfold in a relatively balanced fashion, although with stronger leadership from gross fixed capital formation and private consumption growth driven by improvements in national income. The better conditions abroad should also encourage a recovery in the growth of non-copper exports. Copper exports, in any case, could soar in 2004, essentially due to supply factors favoring the export of stocks accumulated in previous years by major companies and an increase in used capacity. Import volumes should be consistent with the outlook for domestic spending described here, posting two-digit growth rates because of the recovery expected from investment and the process of reaccumulating non-copper inventories. Thus, after posting a deficit of 0.5% of GDP in 2003, the current account should post a balance of over 1% of GDP annually on average, in the coming years, with a larger deficit in 2005. These figures are higher than those in the previous *Report*, because of the stronger performance expected from domestic demand due to the strong improvement in the terms of trade, and are consistent with more generous financial conditions abroad. It should be noted that the recent and forecast changes in the current account are significantly affected by the mining corporations' decisions to accumulate inventories in 2002 and 2003, which could reach a figure of almost 1% of GDP in 1996 pesos. Excluding this effect, in 2004 the current account could post more of a deficit than the previous year.

This growth scenario is greater than that presented in the last *Report*, which forecast a rise in activity of somewhere between 4% and 5% this year. Private sector projections have also changed since last September, forecasting an increase for 2004. According to the Central Bank's survey of economic expectations, growth projections for this year rose from an expected mean of 4.2% in September to 4.5% in January, and from 4.6% to 5.0% for the same months in 2005. Meanwhile, *Consensus Forecasts* calls for a rise from 4.3% to 4.6% for this year.

Figure V.1
Quarterly GDP growth scenarios (*)
(percentage change over the same quarter of the previous year)



(*) The figure shows the confidence interval for the baseline projection for the respective forecast horizon (colored area). Confidence intervals of 5%, 15%, 25%, 35%, 45%, 55%, 65%, 75%, 85% and 95% are used.
These confidence intervals summarize the Central Bank's risk assessment for future economic growth, assuming that the monetary policy rate will remain at a nominal 1.75% for the next two years.

Source: Central Bank of Chile.

Trend growth and the output gap

In principle, aside from unit labor costs, imported costs, persistent inflation and inflationary expectations, it is changes in the output gap, and not the actual pace of economic growth, what plays a decisive role in future inflationary pressures. In this sense, with the growth scenario described above, during 2004 and even more so in 2005, output gaps should start to close, by an annual equivalent of about 1% of GDP. Thus, although negative gaps continue to control price impulses, this will be weaker than assumed in previous projections.

There seems to be no reason to modify the economy's potential growth in terms of the expected figures of between 3.5% and 4.0% for this year and next.[1/] Labor productivity has resumed stronger growth rates, while weak investment is expected to turn around this year. Recent trade agreements and opportunities to innovate associated with the information and communications technology revolution will continue to generate spaces for future rises in total factor productivity and potential output. Similarly, the rise in the labor participation rate shows that there is some possibility of sustaining employment growth rates without seriously affecting current idle capacity in the labor market, which is apparent in the modest pace of nominal wage growth and lower inflationary pressures in recent months.

With this, and despite the slowdown in gross capital investment in machinery in recent quarters, the growth in aggregate supply is not an immediate restriction on demand growth and inflation control. In contrast, surprises on the price side and, in fact, costs have shown that future pressure to decompress margins should be considerably less.

Short-term prices

Annual CPI inflation continued to decline, but surprisingly more than expected, from figures of around 3% in September 2003 to below the floor of the target range, 1.1% in December, that is two percentage points less than forecast in the last *Report*. This performance has been significantly affected by strong, surprising peso appreciation, which has helped to reduce inflation by about one point, through its impact on domestic fuel prices and utility and other rates. Similarly, the prices of some food groups have also plunged, apparently reflecting greater competition in the retail market.

This second aspect helped to reduce 12-month inflation through December by somewhere between half and one percentage point, from September's forecast. Unlike on previous occasions, in these conditions the international oil price has not played a major role, performing as projected. Annual core inflation, with and without regulated tariffs (CPIX and CPIX1) also fell surprisingly, below forecasts and somewhat lower than 2%, the result of the greater effect of the price of nonperishable foods on these inflation measures.

[1/] Beyond the projection horizon, as investment performs more strongly, potential growth may also increase.

The fact that the oil price remained at about US$28-30 per barrel prevented deeper dips in inflation. For its part, the information available on the VAT increase suggests it has passed through as forecast. In the short term, 12-month CPI inflation is expected to fall to negative figures toward the end of the first and beginning of the second quarter, again due to the developments described above, combined with the notorious decline in the basis for comparison from the first quarter of last year. Measures for 12-month core inflation should see a further drop, but less than that of the CPI, without falling into negative figures. Given the nature of surprises on the inflation side, the fact that annual inflation may fall into negative registers during some months is essentially a temporary phenomenon, which although it suggests lower inflation will last longer in the medium term, is not a sign of weakness in domestic demand or growth prospects.

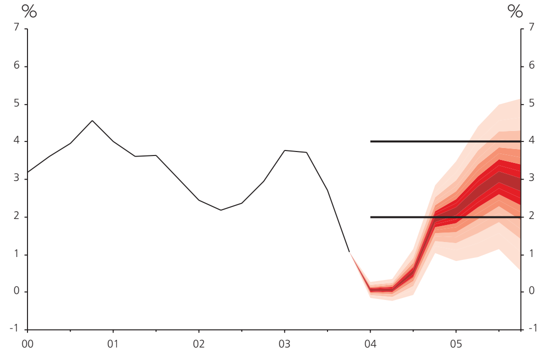
Inflation in the baseline scenario

The monetary policy stance determines inflation's behavior in the medium and long term, but the relationship is less certain and more variable in the short term, because it reflects the influence of a wide range of factors. On the cost pressure side, nominal wages measured by the INE have continued to grow at about 3.5% annually. This, combined with the rise in labor productivity has revealed some slowdown in unit labor costs. Although the decline in the unemployment rate and the general outlook for idle capacity in the future indicates that deflationary pressures from that side have come under control, in 2004 this will be offset by the impact that the turnaround already apparent in labor productivity, which is expected to continue, will have on nominal wages and the effect of the limited nominal wage increase in the public sector.

Regarding pressure from imported inflation, the most surprising and influential development has been peso appreciation, which has come with a very small increase in external inflation in dollars and an oil price in line with expectations. Although most of the direct effects of the drop in the dollar's value are already apparent in the fuel price in pesos, bus fares and public utility rates, as time passes their effect on the economy's general cost structure is expected to appear. In coming quarters, the real exchange rate is expected to remain stable at somewhere around the weekly average prior to the closing date for this *Report*. In any case, given the floating exchange rate, a different behavior by the nominal or the real exchange rate would not be surprising.

The outlook for margin decompression forecast in previous *Reports* has changed with the news of recent months. The plunge in the price of nonperishable foods, probably due to efficiency gains driven by greater competition in the retail trade, is a sign that margins are not as compressed as initially estimated. Actually, information on the balance sheets of Chile's main supermarket chains indicates that their operating margins are only slightly smaller than world averages. This has meant that the price pressures that were expected to bring margin decompression are today estimated to be more limited. Nonetheless, part of the decline in food prices is considered temporary and should turn around in a relatively short period.

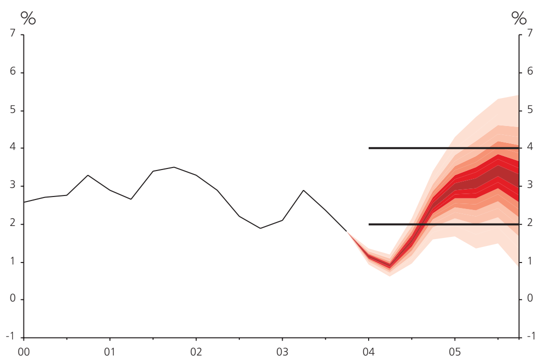
Figure V.2
CPI inflation projection (*)
(percentage change over the same quarter of the previous year)



(*) The figure shows the confidence interval for the baseline projection for the respective forecast horizon (colored area). Confidence intervals of 5%, 15%, 25%, 35%, 45%, 55%, 65%, 75%, 85% and 95% are used.
These confidence intervals summarize the Central Bank's risk assessment for future inflation, assuming that the monetary policy rate remains constant at 1.75% for the next two years.

Source: Central Bank of Chile.

Figure V.3
Core inflation (CPIX) projection (*)
(percentage change over the same quarter of the previous year)



(*) The figure shows the confidence interval for the baseline projection for the respective forecast horizon (colored area). Confidence intervals of 5%, 15%, 25%, 35%, 45%, 55%, 65%, 75%, 85% and 95% are used.
These confidence intervals summarize the Central Bank's risk assessment for future inflation, assuming that the monetary policy rate remains constant at 1.75% for the next two years.

Source: Central Bank of Chile.

Toward 2005, reduced idle capacity, recovering unit labor costs when the effects of current, low inflation on nominal wages have begun to fade, along with the Central Bank's commitment to using its policies to meet the inflation target, centering on 3%, are the main factors that will tend to push inflation toward the center of the target range. All these factors combine to build a CPI and CPIX inflation projection for the next twenty-four months. Projections are presented as the probability distribution for changes in annual inflation over the projection period, that is, from the first quarter of 2004 to the fourth quarter of 2005. These refer to the projected changes in the average price index for each quarter compared to the same period of the previous year (figures V.2 and V.3).

For the scenario in which activity rises within the forecast range, by the end of this year, CPIX inflation should reach 2.7%, and about 3.2% at the end of 2005. Average core inflation should reach 1.5% this year and 3.2% in the next 12 months. If in 2004 the international price for crude oil reaches about US$27 per barrel on average and then falls to US$24 in 2005, annual CPI inflation should average between 0.7% in 2004 and 2.7% in 2005, with December on December figures reaching 2.0% and 3.0%, respectively. Thus, the strongest effect of peso appreciation should occur this year, then gradually fade next year and thereafter. Aside from the one-off effect of the strengthened peso on prices, the decline in nonperishable food prices is expected to gradually reverse to some degree, while the main impulse for inflation returning to the target range currently stems from the closing of gaps.

Private expectations also point to substantial changes in expected inflation. Surveys of foreign exchange desks for one to two years hence have suggested expected inflation has declined in recent months from September's averages of around 3% in September to today's, which currently stand at between 1.5% and 2.5%. At the same time, the Central Bank's expectations survey indicates that expected inflation one year hence has fallen from 3.2% in September to 2.0% in January. For two years hence, expectations indicated by the survey stand at 2.8%, for the first time below the center of the target range, while implicit inflation, for a three-to-five-year horizon, inferred from the difference in rates on nominal and indexed notes, has fallen below 2%.

Balance of risks

The main tendencies contained in this *Report* make up the scenario considered most likely. As usual, however, significant risks exist that could generate alternative scenarios for both inflation and growth, which together constitute the balance of risks for both variables.

Internationally, previously identified risks still persist, in particular the possibility of the dollar depreciating even further in international markets, to adjust to the US's still hefty current account deficit. Moreover, long-term interest rates in dollars could react to a fiscal scenario that deteriorates more than forecast to date. On the positive side, the world economy could recover more quickly, thus strengthening commodity prices even more, although this would also influence changes in interest rates. Scenarios such as these, which push external interest rates higher, could also affect the region's recovery.

Domestically, the possibility of activity not picking up as expected remains, and there is still uncertainty about the actual trajectory that the different cost indicators will follow. Confirmation of rising activity and spending rates over time, which will help to reduce current idle capacity, remains linked to the strengthening of the external scenario and monetary impulse. The most recent data, along with the implementation of the different free trade agreements and ongoing favorable financial conditions, suggest that the outlook should improve in the medium term. However, domestic activity may respond better than expected to improvements in the international scenario or the latter could consolidate more positively in terms of growth.

Finally, although the slow pace of investment growth in recent quarters is considered temporary, because of favorable trends affecting its fundamentals, the possibility that it may persist over time, pushing down actual growth rates, cannot be ruled out, affecting the speed at which gaps close and inflation's behavior.

In the inflation scenario, if nominal wages do not adjust to the lower inflation that will prevail in the short term, the slowdown of unit labor costs could decline or even reverse, placing even more pressure on core inflation. Similarly, the decline in nonperishable food prices may last longer and/or margins may decompress less, thus reducing price pressures in the medium term, although the opposite situation could also occur.

Regarding inflation's imported components, the magnitude of nominal peso appreciation has brought with it persistent changes in inflation, but based on the Central Bank's commitment to the inflation target, this should not last. On one hand, in a scenario in which expectations about inflation move further away from the center of the target range, inflation may take longer than forecast to return to 3%, but a scenario with a different exchange rate than forecast may also occur. Similarly, there is no evidence of shifts in the exchange rate passing through to inflation differently from patterns of recent years. Finally, although crude oil price scenarios other than those considered in this *Report*'s baseline scenario seem likely, their impact on the behavior of medium-term inflation in Chile will be temporary.

Altogether, it is estimated that the balance of risks to both activity and inflation is even.

Table V.1
Probable inflation scenarios
(percent)

		Inflation ranges			
		2% or less	2% to 3%	3% to 4%	4% or more
CPI inflation					
	2004.IV	53	43	3	1
	2005.IV	27	27	25	21
CPIX inflation					
	2004.IV	19	63	17	1
	2005.IV	21	25	27	27

Source: Central Bank of Chile.

To correctly interpret the inflation and growth projections included in this *Report* and the surrounding risks, it is important to keep in mind that they are constructed on different assumptions (oil price, copper price, world growth, international interest rates, rises in total factor productivity, among others). In fact, if surprises occur, such as those considered in the risk scenarios discussed in this chapter, inflation projections presented in this *Report* could change, requiring corrections to monetary policy, which are hard to predict today, to keep inflation within the target range. In this sense, the probabilities do not reflect inflation's actual behavior but an evaluation of the risks relevant to future monetary policy (table V.1).

Altogether, the balance of risks to both activity and inflation is considered even.

Conclusion

The Board believes that the current expansionary monetary policy stance is compatible with holding inflation within the target range. Thus, in the baseline scenario, annual CPI inflation is projected to average almost 3% by the end of 2005, but to average under 2% this year, reflecting the impact of peso appreciation and other surprises. Meanwhile, the economy will grow, reaching figures that go beyond potential GDP growth.

In the coming months, the Central Bank will pay special attention to the behavior of different core inflation measures, trends in labor costs, external inflation, and private inflation expectations, as well as the pace at which output gaps begin to close, which in turn is associated with the pace of growth in activity and spending. One factor particularly relevant to this evaluation is investment growth.

The presence of nominal rigidities in different markets within the economy make it unsuitable for below-target inflation to last for too long, as well as making it harder to correct relative prices. The Board therefore reaffirms that the Central Bank's objective is to keep inflation centered around 3% over the usual 24-month policy horizon, and it will continue to use its policies flexibly to deal with persistent movements in projected inflation, if it threatens to move away in either direction from the 3% target. In this sense, scenarios other than the baseline one are associated with different courses of action for monetary policy.

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