

# Monetary Policy Report





BANCO CENTRAL DE CHILE

# Monetary Policy Report\*



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

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<sup>\*/</sup> The statistical closing date of the Monetary Policy Report was 15 June 2010.

### Preface

The main objective of the Central Bank of Chile's monetary policy is to keep inflation low, stable, and sustainable over time. Its explicit commitment is to keep annual CPI inflation at around 3% most of the time, with a tolerance range of plus or minus one percentage point. To meet this target, the Bank focuses its monetary policy on keeping projected inflation at 3% annually over a policy horizon of around two years. Controlling inflation is the means by which monetary policy contributes to the population's welfare. Low, stable inflation promotes economic activity and growth while preventing the erosion of personal income. Moreover, focusing monetary policy on achieving the inflation target helps to moderate fluctuations in national employment and output.

The main purposes of the *Monetary Policy Report* are: (i) to report and explain to the Senate, the Government, and the general public the Central Bank Board's views on recent and expected inflation and their consequences for the conduct of monetary policy; (ii) to make public the Board's medium-term analytical framework used to formulate monetary policy; and (iii) to provide information that can help guide economic agents' expectations on future inflation and output trends. In accordance with Section 80 of the Bank's Basic Constitutional Act, the Board is required to submit this *Report* to the Senate and the Minister of Finance.

The *Monetary Policy Report* is published four times a year, in March, June, September, and December. It analyzes the main factors that influence the inflation trajectory, which include the international environment, financial conditions, the outlook for aggregate demand, output, and employment, and recent price and cost developments. The last chapter summarizes the results of this analysis in terms of both prospects and risks affecting inflation and economic growth over the next eight quarters. Several boxes are included to provide more detail on issues that are relevant for evaluating inflation and monetary policy.

This *Report* was approved at the Board's session on 15 June 2010 for presentation to the Senate Finance Committee on 16 June 2010.

#### The Board

### Summary

After several quarters of gradual normalization, the international financial scenario again showed significant tension in the second quarter of 2010. The weakened fiscal accounts in some European countries affected other economies and banking systems, which, combined with uncertainty about how the mechanisms intended to resolve this crisis will operate, prompted a substantial increase in volatility. The main stock indices posted significant drops, credit spreads in interbank markets increased again, and commodities prices fell. Increased appetite for safer financial assets has triggered a worldwide reduction in long-term interest rates on risk-free securities, while the U.S. dollar has strengthened and the euro has depreciated significantly.

Developments in the international financial environment have led markets to believe that the withdrawal of the monetary stimulus in the main industrialized economies will be postponed. Nonetheless, consensus expectations about global economic activity seem not to reflect the effects of the significant adjustment plans necessary to consolidate public finances in Europe, and so far there is no evident change in world growth forecasts for 2010 and 2011. On one hand, the emerging world, especially in Asia and Latin America, is recovering at a markedly faster pace than the main developed economies. On the other hand, in the latter conjunctural figures for manufacturing production, sales, employment and expectations do not show any obvious effect of the observed increase in global financial volatility.

However, the Board estimates that such increased volatility has been sufficiently large and persistent to affect prospects for world growth to some extent. Accordingly, this *Report*, contrary to habit, assumes for the baseline scenario a world growth rate for 2011 that is around one half of one percentage point below the updated consensus vision. It is believed that this responds to the sum of the effects of recent turbulences, persisting still for some quarters, and the effects of fiscal adjustments being carried out at various economies (box I.1).

The evaluation of the future course of monetary policy considers both the implications of the international scenario and domestic developments. Among the latter, it is worth singling out the reaction of local financial markets to external turbulences, the response of the economy to the earthquake and tsunami of last 27 February (27-F), and the trends of output and demand in the coming quarters.

#### International baseline scenario assumptions

	2008	2009	2010 (f)	2011 (f)
	(ar	nual cha	nge, perce	ent)
Terms of trade	-16.1	4.1	14.3	-7.2
Trading partners' GDP (*)	3.0	-0.3	4.4	3.7
World GDP at PPP (*)	3.0	-0.6	4.3	4.0
World GDP at market exchange rate (*)	1.8	-2.0	3.2	3.0
External prices (in US\$)	12.2	-6.2	3.4	3.3
		(lev	/els)	
LME copper price (US¢/lb)	316	234	300	270
WTI oil price (US\$/barrel)	100	62	77	80
Gasoline parity price (US\$/m <sup>3</sup> ) (*)	739	471	587	603
US\$ Libor (nominal, 90 days)	2.9	0.7	0.5	1.0

(\*) For definition, see glossary. (f) Forecast.

Source: Central Bank of Chile.

FCODOMIC	arowth	and	curront	account
Economic	ULOVVLLL	anu	CUITEIL	accourt

	2007	2008	2009	2010 (f)
	(ar	nnual char	nge, perce	nt)
GDP 4.6	3.7	l -1.5	4.0 - 5.0	1
National income	7.4	4.1	-1.2	10.0
Domestic demand	7.6	7.6	-5.9	14.5
Domestic demand				
(w/o inventory change)	8.0	7.5	-2.8	11.3
Gross fixed capital formation	11.2	18.6	-15.3	23.0
Total consumption	7.0	4.0	1.8	7.8
Goods and services exports	7.6	3.1	-5.6	1.0
Goods and services imports	14.5	12.2	-14.3	25.8
Current account (% GDP)	4.5	-1.5	2.6	-1.2
		(US\$ I	millon)	
Current account	7,458	-2,513	4,217	-2,200
Trade balance	23,941	8,848	13,982	11,400
Exports	67,972	66,464	53,735	64,700
Imports	-44,031	-57,617	-39,754	-53,300
Services	-987	-871	-1,074	-1,600
Rent	-18,625	-13,423	-10,306	-15,500
Current transfers	3,129	2,934	1,616	3,500

(f) Forecast.

Source: Central Bank of Chile.

As underscored in the first half 2010 *Financial Stability Report* (IEF), the local financial market has been relatively resilient to the instability of external markets, as have those of several other emerging economies. The bulk of the adjustment has been apparent in the foreign exchange and stock markets. Unlike other episodes of financial volatility in recent years, local monetary markets in both domestic and foreign currencies have operated normally, and credit spreads have posted no material increases. The baseline scenario assumes that this relative resilience will continue throughout the projection horizon.

In the first quarter, domestic output and demand increased 1.0% and 11.1% y-o-y, respectively. In quarterly terms, output dropped 1.5% and domestic demand rose 4.2%. Discounting inventory change, domestic demand increased 7.2% y-o-y in the same period (2.1% q-o-q). The immediate effects of 27-F on output and demand are assumed to have been different from March estimates (box III.1). The initial contraction of aggregate output was deeper, owing largely to the manufacturing industry. In contrast, demand increased, with significant increases in the consumption of durable goods and imports of consumer and capital goods, which reflected in a stronger retail sector.

Incoming data for the second quarter show that immediate disruptions of productive processes due to 27-F have dissipated quickly. Thus, despite the stronger initial impact, in the second quarter y-o-y output growth will be in line with March projections, while domestic demand will continue to grow significantly. In the baseline scenario, the strong expansion of demand will begin to slow over the second quarter, mainly because some of its current dynamism corresponds to one-time phenomena associated to the consumption of durable goods, investment in machinery and equipments, and the replacement of inventories.

Thus, in the baseline scenario, the Board foresees that in 2010 GDP will grow between 4% and 5% y-o-y. This range is slightly lower than the one considered in March, due to lower actual growth in the first quarter. Domestic demand will grow at a rate of 14.5% in 2010, determined by the foreseen increase in gross fixed capital formation and private consumption. The scenario for domestic demand is also based on the significant impulse from macroeconomic policies of the last several quarters, which has been reinforced by the progressive normalization of internal financial conditions. Credit has begun posting month-on-month increases, reflecting also that 27-F had no big effect on credit demand or supply. Lending interest rates remain relatively low and the evaluation by both lenders and borrowers point at less restrictive credit conditions. Consumer and firm expectations remain close to or somewhat above neutral levels. In addition, the labor market continues to be positive in aggregate terms, not considerably hurt by 27-F.

Growth in investment relies both on favorable macroeconomic conditions and on the boost coming from the reconstruction works. As for fiscal policy, the baseline scenario assumes that the structural balance will be attained at the end of the current Administration and that there will be tax changes, budget reallocations and other sources of funding for the reconstruction, in accordance with government announcements.

#### Inflation

	2009	2010 (f)	2011 (f)	2012 (f)
	(anr	nual char	nge, perce	nt)
Average CPI Inflation	1.6	1.8	3.2	
December CPI inflation	-1.4	3.8	3.2 3.1	
CPI inflation in around 2 years (*)				3.0
Average CPIX Inflation	2.8	0.7	3.5	
December CPIX inflation	-1.8	3.3	3.5 3.5	
CPIX inflation in around 2 years (*)				3.2
Average CPIX1 Inflation	2.8	-0.1	3.2	
December CPIX1 inflation	-1.1	1.8	3.2 3.2	
CPIX1 inflation in around 2 years (*)				3.1

(\*) Inflation forecast at the second quarter of 2012.

Source: Central Bank of Chile.

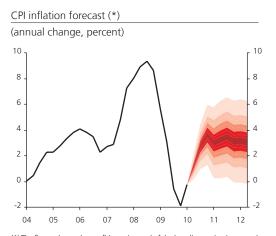
The performance of output and demand will determine a current account deficit of 1.2% of GDP this year. Measured at trend prices, this deficit is big by historic standards, but it is partly the result of temporary effects of reconstruction and replacement expenditure.

Year on year CPI inflation has continued on an upward trend in the past few months, consolidating in above-zero figures. Core indicators are still on negative y-o-y variation rates, but are gradually approaching the positive zone. Annual inflation levels are below those forecast in March because immediate 27-F effects on inflation, if any, were quite small and certainly below projections in the last *Report* and overall market expectations. Despite this difference, the assumption about changes in some specific prices such as public transport fares, the tobacco excise tax or the unaltered stamp tax will result in that, in the baseline scenario, at the end of 2010 inflation will also stand in the upper part of the tolerance range of the inflation target.

Toward 2011 and 2012, y-o-y headline inflation will hover around 3%, and will stand there at the end of the relevant projection horizon, this time the second quarter of 2012. Core inflation will post a slower convergence to 3%, arriving some time during 2011. These projections are consistent with the Economic Expectations Survey of June, which places y-o-y inflation for December of this year at 3.5% and for December of 2011 at 3.2%, while two years hence expectations remain at 3%. Aside from the assumptions described above on internal and external growth, the baseline scenario assumes that in the long run the real exchange rate (RER) will be fairly unchanged from its current level. This, considering that, with the nominal exchange rate and currency parities prevailing at the statistical closing of this *Report*, the RER is consistent with its long-term fundamentals. Inflationary pressures coming from the labor market and imported costs will generally not post significant variations from today's figures.

The internal growth scenario foreseen for the coming quarters points at a closing of output gaps, to be completed during 2011. Currently, however, the economy continues to operate below its full capacity, which limits inflationary pressures and is consistent with monetary policy remaining significantly expansionary. Still, to the extent that output gaps are closed, inflationary pressures will be incubated that must be reined in on time in order to assure that inflation stands at 3% over a two-year policy horizon. Therefore, the Board estimates that to achieve the inflation target in the policy horizon, a progressive normalization of the present monetary stimulus is needed, as has been comunicated in recent months. This normalization process has already begun with the gradual withdrawal of the Term liquidity facility (FLAP) and the increase in the monetary policy interest rate determined by the Board at its monetary policy meeting of 15 June 2010. As a working assumption, the baseline scenario assumes that in one year's time the MPR will be at a level similar to the one inferred from private expectations. In the long term, it will converge to its neutral level<sup>1</sup>/.

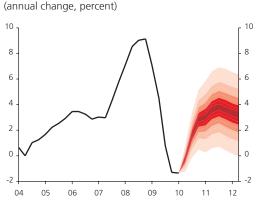
<sup>&</sup>lt;sup>1</sup>/ Various estimates for the neutral interest rate can be found in Fuentes and Gredig (2008).



(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that in one year's time the MPR will be at a level similar to the one inferred from private expectations. In the long term it will converge to its neutral level. With the purpose of incorporating and properly reflecting developments relative to inflation volatility and growth in the past few years, the Board decided to update the form of calculation of the fancharts (box V.1).

Source: Central Bank of Chile.

CPIX inflation forecast (\*)



(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that in one year's time the MPR will be at a level similar to the one inferred from private expectations. In the long term it will converge to its neutral level. With the purpose of incorporating and properly reflecting developments relative to inflation volatility and growth in the past few years, the Board decided to update the form of calculation of the fancharts (box V.1).

Source: Central Bank of Chile.

As is customary, the scenario outlined herein is subject to several risks. Domestically, the greater risks are related with domestic spending. The baseline scenario assumes that an important portion of its significant conjunctural growth pace is transitory. However, there is the risk that said strength is mainly the response to the stimulative macroeconomic conditions, so the slowdown foreseen for the second half may not happen, speeding up the closure of output gaps. The medium-term impact on aggregate demand of the reconstruction works and their funding need continuous evaluation. As for the immediate term, April data and the response of economic sectors to 27-F reduce the probability of a widespread delay in the economy's recovery.

Internationally, as stated, the baseline scenario assumes that the world economy' recovery will be more gradual than consensus average estimates. However, present tensions are an important source of risk. Should some scenarios materialize, like the ones discussed in the IEF, where the weakness of the fiscal and/or banking situation in Europe intensifies or spreads to other regions, the magnitude and reach of their effects are highly uncertain, but potentially significant. Institutions such as the IMF and the European Commission have pledged their support to the most affected countries. The main central banks of the world have reinstated the mechanisms to ensure dollar liquidity provision to the markets. All of this has managed to reduce the tensions seen in the first weeks of May, but doubts persist in the market whether the fiscal goals adopted in Europe will be attained. A relevant deceleration of economic activity in the United States or China cannot be ruled out either. As usual, the persistence of global imbalances is still a latent risk. Notwithstanding, the Board will-as it has in the past-adopt every measure necessary to deal with events modifying the macroeconomic scenario and changing inflationary forecasts.

The materialization of some of these risks will have direct effects on the foreseen scenarios for national growth and inflation. Considering the elements described above, the Board believes that the risk balances for output and inflation are unbiased.

The increase in the monetary policy rate determined by the Board at its monetary policy meeting of 15 June is part of the process of normalizing the significant monetary stimulus currently in place. This process must walk hand in hand with the closing of output gaps, in order to avoid inflationary pressures in the future. Delaying this process would end up calling for faster and larger adjustments, with repercussions on output and financial asset prices. In any case, the pace and magnitude of the normalization will depend on both domestic macroeconomic conditions and the developments of the uncertain external scenario. The Board reiterates that it will continue to apply its policies with flexibility so that projected inflation stands at 3% over the policy horizon.

### Monetary policy decisions in the last three months

#### Background: March meeting and Monetary Policy Report

At the March meeting, the most important issue was the impact of the earthquake and tsunami that occurred on 27 February 2010 (henceforth, 27-F). This event was likely to affect the macroeconomic scenario in multiple directions. If the dominating effect was the lower productive capacity stemming from the destruction of capital, then the new scenario would be more inflationary and would require a faster normalization of monetary policy. If, on the other hand, the disruption in demand decisions and the drop in consumption to accommodate higher savings were significant, then the gaps could widen further. Moreover, it was impossible to get a precise statistical reading of these phenomena, given the institutional difficulty of collecting information in the disaster area. Another important factor had to do with the magnitude, composition, timing, method of financing, and focus of the public and private reconstruction effort, which was critical for delineating the medium-term macroeconomic scenario. Given the degree of uncertainty, the most plausible option for this meeting was to keep the monetary policy rate (MPR) at its lower limit, at least until the second quarter of 2010. The available data confirmed that the Chilean economy had recovered even more than projected since late 2009 and early 2010. The relevant external scenario revealed that the improved outlook for growth was solidifying and uncertainty was waning. The risks remained high, however, because the markets were still sensitive to crisis-related news, such as the information coming out of Greece and other European economies. This could lead to adjustments in global financial conditions, to the extent that fiscal problems were revealed in the industrial economies. Given this scenario, featuring higher levels of uncertainty than normal and the need for a more precise assessment of the medium- and long-term effects of the earthquake before adjusting the projected path of the MPR, the Board decided to hold the MPR at 0.5% in annual terms.

The baseline forecast scenario considered in the March *Monetary Policy Report* was significantly different than the scenario considered in December. Clearly, 27-F had implications for growth and inflation, both immediately and

in the medium term. The first annual closing of the 2009 National Accounts and the data for the period prior to the disaster revealed a higher-than-forecast growth rate of output and domestic demand. The preliminary assessment of these records pointed to a macroeconomic scenario in which excess capacity had narrowed and inflation was converging to the target faster than projected. At the same time, the level of uncertainty had risen.

Thus, in the March Monetary Policy Report, the baseline scenario estimated that the economy would grow between 4.25 and 5.25% in 2010, which is somewhat lower than forecast in December. The downward revision is based on the assumption that this year the immediate effects of 27-F on output will outweigh the increase generated by the reconstruction efforts. The baseline scenario also considers that inflation will converge to the 3% target more quickly than projected in December. The annual CPI change should exceed 3% in the second half of this year, reaching around 4% for several months. It is then expected to fluctuate around 3% throughout 2011 and through the end of the forecast horizon. Annual CPIX1 inflation will converge to 3% more gradually. In this scenario, monetary policy will continue to be very stimulative in the coming quarters. Toward the end of the forecast horizon, the MPR will converge to around the level captured in the March Economic Expectations Survey, although the rate of normalization will be somewhat faster than considered in the survey.

#### **April and May meetings**

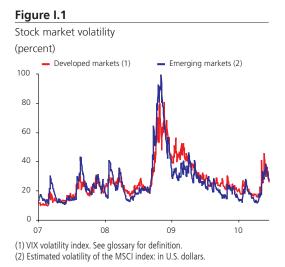
At the April meeting, the primary considerations were the monetary policy strategy contained in the March *Report*, the possible effects of current events on that strategy, and private expectations. The monetary policy strategy considered that a monetary normalization process should begin soon. Thus, the Board could not discard a priori the option of initiating that process at this meeting, with an MPR hike of 25 basis points. However, the political environment contained in the March *Report* was also consistent with the option of keeping the MPR at its lower limit for the time being and beginning the normalization process in the coming months. There was a natural trade-off between an earlier start date with more gradual increases versus a later start date with potentially

sharper hikes. Domestically, the market and analysts had adjusted their expectations to incorporate a medium-term scenario that was consistent with the last Report in terms of inflation, output, and monetary policy. Since the publication of that Report, the main news was that the March inflation records were significantly lower than market forecasts, possibly as a result of transitory factors. The results of the Bank Lending Survey for the first quarter revealed a slight weakening in the demand for credit, in a context in which the various indicators had exhibited a gradual normalization of bank activity after the crisis, although the credit aggregates were still very weak. The normalization of financial activity could temporarily falter as a result of factors such as credit risk and client demand. The external scenario had not changed substantially and looked promising. Although the world economy was slowly but steadily recovering, there were still underlying risks to the international scenario, and the situation in Greece and the fiscal weakness of other European economies represented a more significant risk. The macroeconomic scenario was thus characterized by a high degree of uncertainty in the short term. The medium-term inflation trend had not changed since the last Report, however, so it was still reasonable for monetary policy to start normalizing. Nevertheless, the conditions were not yet right for initiating the normalization process at that meeting. Consequently, the Board decided to hold the MPR at 0.5% annually.

At the May meeting, the primary considerations continued to center on the monetary policy strategy in the March *Report*, the possible effects of current events, and issues associated with tactics and communications. Thus, the most plausible options were to hold the MPR at its lower limit or to raise it 25 basis points, to 0.75%. The monetary policy strategy contained in the *Report* pointed, more strongly than in April, to the possibility of raising the MPR at this meeting, but this also depended on the Board's assessment of the accuracy of the baseline scenario used in the *Report*. There was still a trade-off between an earlier start date with more gradual increases versus a later start date with potentially sharper hikes. It also remained clear that monetary policy was very expansive and that meeting the inflation target would require increasing the

MPR in the short term. The flow of information provided the basis for better gauging the magnitude of the MPR hike, but it did not necessarily shed more light on the optimal timing for launching the normalization process. The news of the month was focused on the problems in Greece and their implications for Europe and other world regions. Although the international scenario continued to be unclear, the uncertainty revolved around the rate of the global cyclical recovery and not whether there would be a recovery at all. The necessary fiscal adjustments would be greater than had been implemented in the past, which could affect growth prospects in the medium term, especially in the developed world. In addition, several economies (mainly emerging) had already begun normalizing monetary policy or would do so soon, while the more advanced countries continued to keep their rates extremely low and were likely to postpone the withdrawal of the monetary stimulus in light of recent events. At the local level, the effects of these external developments had been limited and were reflected in the reaction of the exchange rate and the stock market. In the domestic scenario, both inflation and output were lower than estimated in the baseline scenario of the March Report, but these figures had to be analyzed cautiously since they were strongly influenced by the short-term effects of 27-F. The lower output did not necessarily imply greater excess capacity and would not necessarily be very persistent. In terms of inflation, the expected path had not changed significantly from forecasts made before the disaster, and it showed convergence toward the target in the coming months. Domestic demand was more vigorous than projected. The local financial system continued to show signs of normalizing, and the risk of additional credit tightening following the earthquake did not appear to have been realized, as deduced from the evolution of both interest rates and lending volume. Sovereign risk rose slightly, which reflected the market's perception of the strength of the national economy. Expectations for the MPR had incorporated adjustments that suggested that the process of normalizing monetary policy would soon begin. Under that scenario, the initiation of the process was near, and the central question at the meeting was when to start. The difference between the two options in terms of basis points was not excessive. In this context, the Board decided to keep the monetary policy interest rate at 0.5% annually.

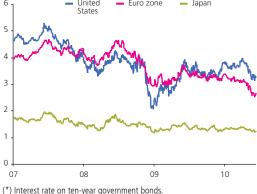
### I. International scenario



Sources: Bloomberg and Morgan Stanley Capital International.

#### Figure I.2





Source: Bloomberg.

This chapter analyzes the recent evolution of the world economy and the outlook for the next two years. It also describes the most likely external scenario relevant to the Chilean economy, as well as the main risks.

#### **Financial markets**

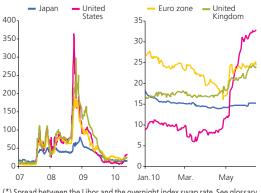
In the second quarter of the year, the financial markets were marked by tension stemming from the fiscal situation of some European economies. The perception of risk has increased, as evidenced in both sovereign and corporate instruments, but the main tensions continue to be focused on a certain group of countries. Most emerging economies recorded limited increases in both risk indicators and the cost of external financing. This effect was even lower in Chile.

The growing uncertainty about the sustainability of debt in several European economies, doubts about the capacity for carrying out the necessary fiscal adjustments, and their potential effects on the banking sector caused continuous fluctuations in the financial markets. The risk indicators for Greece, Portugal, Spain and other countries increased significantly, and their risk ratings were downgraded. The volatility of the stock markets increased sharply, as in other episodes of strong turbulence, but it was still far below the peaks of late 2008 (figure I.1). The VIX fell to 16% in April of this year, then exceeded 45% in May, and was just over 25% at the close of this *Report*.

The impact of these tensions varied around the world. In developed economies, asset prices were affected. Medium- and long-term interest rates fell substantially in the main economies as a result of flight to quality (figure I.2). The greater uncertainty was also reflected in signs of a resurgence of liquidity problems (figure I.3). In contrast, in emerging economies, while the stock markets fell and currencies lost value, the effect on sovereign and corporate premiums was limited (figures I.4, 1.5 and I.6). There was also a generalized appreciation of the U.S. dollar and a new peak in the price of gold. Relative to the statistical closing date of the last Report, the U.S. dollar appreciated around 3% against a basket of its main trading partners. Bilaterally, the yen was relatively stable, but the euro was one of the currencies that lost the most value against the U.S. dollar in the past few months, depreciating close to 12%. Relative to March, the Hungarian florint and the Polish zloty depreciated almost 20% against the U.S. dollar. Other currencies, like the Mexican peso, the Brazilian real, and the Chilean peso depreciated 2%. Capital inflows to emerging economies slowed and to some extent reversed, especially those related to variable-income instruments (figure I.7).

#### Figure I.3

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

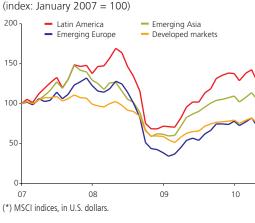


 $(\ensuremath{^*})$  Spread between the Libor and the overnight index swap rate. See glossary for definition.

Source: Bloomberg

#### Figure I.4

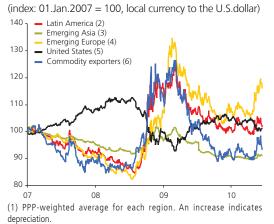
World stock markets (\*)



Source: Bloomberg.

#### Figure I.5

Currency parities (1)



Includes Argentina, Brazil, Chile and Mexico.

(3) Includes China, Hong Kong, Indonesia, Malaysia, South Korea, and Thailand.

(4) Includes Czech Republic, Hungary, Poland, and Russia.(5) The U.S. dollar measured against a basket of currencies of the main U.S. trading partners. An increase indicates depreciation.

(6) Includes Australia, Canada, and New Zealand.

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However, financial conditions for emerging economies did not deteriorate significantly and the impact on financing costs was relatively limited.

The efforts of the European Commission, the IMF, and the European Central Bank temporarily calmed the markets, with the announcement in May of a €110 billion relief package for Greece, intended to cover financing needs through 2012. These entities also announced a €750 billion support fund available for other economies with fiscal difficulties; the European Central Bank announced additional liquidity measures; and England, Germany, Greece, Portugal, and Spain all announced fiscal adjustment plans. However, these efforts have not alleviated the uncertainty about how this situation will be resolved, because market agents still have doubts about their viability and sufficiency. As described in the Financial Stability Report for the first half of 2010, there are risk scenarios associated with the intensification of financial problems in external markets, especially in the European banking sector. Going forward, the normalization of the financial markets will be largely determined by the evolution of the fiscal adjustment programs to be implemented by the main countries involved and their possible effects on the recovery of the world economy.

#### World growth

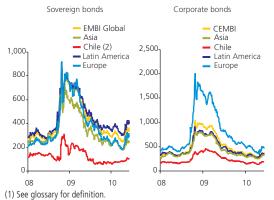
Thus far, world output does not show clear effects from the tensions described above. Production and foreign trade indicators continue to point to a recovery process in most economies (figure I.8). World growth continues to be led by emerging Asia, together with some Latin American economies, especially Brazil. The recovery process is ongoing in the United States, although in the most probable scenario the rate will be moderate. U.S. manufacturing production continues to put out positive signals, but personal consumption does not yet indicate a sustained recovery. The labor market and consumer confidence have improved since March, though at a lower rate than forecast. Nevertheless, in the last three months, effective and projected growth rates have varied substantially among economies. Strong growth is forecast for parts of Asia and some commodity-exporting economies, whereas a much slower recovery is projected for the developed world.

With regard to consensus forecasts, the baseline scenario in this *Report* considers a downward revision for world growth in 2011 on the order of half a percentage point. This adjustment reflects the Board's assessment of the effects of lower European demand, owing to both greater volatility and the fiscal adjustments (box I.1). Thus, the world growth forecast for 2010 remains the same as in the last *Report*, while the 2011 forecast is reduced. Trade partners were adjusted upward slightly for 2010 and downward for 2011. Growth estimates for China are 10.0% in 2010 and 8.7% in 2011. Estimates for Europe project 0.8% for the two-year period 2010–2011.

This scenario is subject to a number of risks. The biggest is that the problems in Europe could worsen or spread, affecting the recovery of the world economy. The bimodality evident in consensus growth forecasts for economies like Japan in 2010 and the United States in 2011 could have to do with these doubts (figure I.9). Further risks include the as-yet-unresolved deleveraging process in the United States and Europe, as well as fears of a

#### Figure I.6

Risk premiums in emerging markets (1) (basis points)

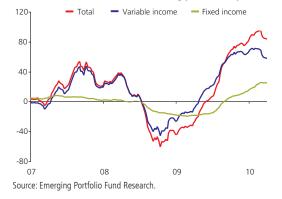


(2) As of 8 September 2009, the five-year CDS spread. Before that date, the sovereign spread excluding Codelco bonds.

Source: Central Bank of Chile, based on Bloomberg and JP Morgan Chase.

#### Figure I.7

Net investment fund inflows to emerging economies (US\$ billion, accumulated in a moving year, weekly data)



#### Figure I.8

GDP growth in selected countries and regions (annualized quarterly change, percent)



(\*) A sample of countries that are the destination of 50% of Chile's total exports. Includes the regions of Latin America, Asia, emerging Europe, and Oceania, as well as developed countries such as Canada and the United Kingdom. Regions are weighted by their share in the destination of Chilean exports.

Source: Central Bank of Chile, based on data from the statistical offices in each country.

significant slowdown in growth in these economies and China, which could lead to a world scenario of lower output and commodity prices. Finally, the global imbalances are an ongoing source of concern.

#### Table I.1

World growth (\*)

(annual change, percent)

	Average 1990-1999	Average 2000-2007	2008	2009 (e)	2010 (f)	2011 (f)
World at PPP	2.9	4.2	3.0	-0.6	4.3	4.0
World at market exchange rate	2.4	3.2	1.8	-2.0	3.2	3.0
United States	3.2	2.6	0.4	-2.4	3.0	2.6
Euro Zone	2.2	2.1	0.6	-4.1	0.8	0.8
Japan	1.5	1.7	-1.2	-5.2	3.0	1.2
China	10.0	10.1	9.6	8.7	10.0	8.7
Rest of Asia	5.6	5.1	3.0	0.1	5.2	4.3
Latin America (w/o Chile)	2.7	3.6	4.3	-2.4	4.5	3.7
Commodity exporters Trading partners	2.7 3.1	3.1 3.6	1.1 3.0	-1.1	3.1 4.4	3.0 3.7
( ) <b>–</b> .						

(e) Estimate. (f) Forecast.

(\*) See glossary for definitions.

Sources: Central Bank of Chile, based on a sample of investment banks, Consensus Forecasts, International Monetary Fund, and the statistical offices for each country.

#### **Commodity prices**

Although international commodity prices fluctuated in response to the tension in the financial markets, vigorous Asian demand kept them high from a historical perspective.

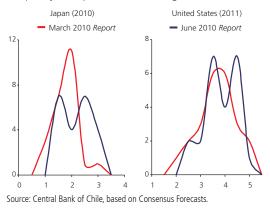
At the close of this *Report*, copper was quoted at around US\$3.0 a pound and WTI oil at around US\$75 a barrel, a decrease of 14% and 9%, respectively, compared with the average of the ten business days prior to the close of the March *Report*. The baseline scenario revises the 2010–2011 projections slightly downward. For copper, the price is forecast at US\$3.0 a pound in 2010 and US\$2.7 a pound in 2011 (versus US\$3.1 and US\$2.9, respectively, in March). This scenario implies that the price will be under US\$3.0 a pound throughout the second half of this year. The WTI oil price is expected to average US\$77 a barrel in 2010 and US\$80 a barrel in 2011 (versus US\$82 and US\$85, respectively, in March), based on the average of the last ten business days of the futures contract curve. Since the last report, the price of fishmeal, molybdenum, and several agricultural products fell between 5% and 13%, while wood pulp increased around 9%.

#### World inflation and monetary policy

The disparity in growth among economies is also evident in indicators of inflation expectations (table I.2). In general, real inflation records are low. The outlook for the developed economies is for inflation to remain at that level, while the forecast for the emerging economies points to an upturn, especially in emerging Asia and parts of Latin America, where output and demand are recovering strongly. The direction of these inflation trends has not changed since the March *Report*. Core measures still show downward

#### Figure I.9

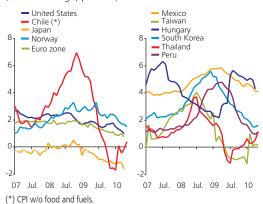
Distribution of market consensus growth forecasts (frequency of response; annual change)



#### Figure I.10

Core CPI inflation

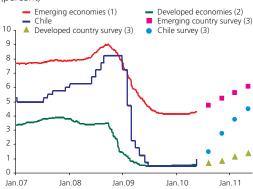
(annual change, percent)



Sources: Central Bank of Chile and Bloomberg.

#### Figure I.11

Monetary policy rates around the world (percent)



<sup>(1)</sup> A simple average of the reference rates of Brazil, Chile, China, India, Israel, Mexico, Peru, Poland, South Korea and Turkey.

 (2) A simple average of the reference rates of Canada, the euro zone, Japan, Norway, Sweden, Switzerland, the United Kingdom, and the United States.
(3) Average response by analysts surveyed by Bloomberg in May 2010. Indicates expectations for September and December 2010 and March and June 2011.

Sources: Central Bank of Chile and Bloomberg.

trends in the Euro area, Japan, and the United States, where excess capacity is substantial, private demand has not returned to pre-crisis levels, and consumer confidence continues to be weak (figure I.10).

#### Table I.2

World inflation (\*)

(average annual change in local currency, percent)

	Average 1990-1999	Average 2000-2007	2008	2009 (e)	2010 (f)	2011 (f)
United States	3.0	2.8	3.8	-0.3	2.0	2.0
Euro zone	2.3	2.2	3.3	0.3	1.2	1.4
Japan	1.2	-0.3	1.4	-1.3	-1.0	-0.2
China	7.8	1.7	5.9	-0.7	3.2	3.4
Australia	2.5	3.2	4.4	1.8	2.5	2.7
New Zealand	2.1	2.6	4.0	2.1	2.0	2.6
Argentina	253.7	8.9	8.6	6.2	10.1	9.7
Brazil	854.8	7.3	5.7	4.9	5.2	4.7
Mexico	20.4	5.2	5.1	5.3	5.0	4.0
EPI (*) EPI (*)	1.8	4.6 5.2	12.2 8.4	-6.2 -1.5	3.4 4.1	3.3 4.2

(\*) See glossary for definition. (f) Forecast.

Sources: Central Bank of Chile, based on a sample of investment banks, Bloomberg, Consensus Forecasts, and International Monetary Fund.

These differences in effective and expected output and inflation trends among countries are also reflected in market expectations and in the authorities' decisions on the monetary stimulus. In the developed economies, futures contracts continue to push back the start of policy rate increases. In the United States, the first hike is expected in the second quarter of 2011. In England, the central bank has announced that its interest rate will remain low (very stimulative) through the fourth quarter of this year.

In contrast, other central banks have begun or continued with the process of normalizing their reference rates, after applying the strongest monetary stimulus in decades in 2009 (figure I.11). Prominent examples include Australia, Brazil, Canada, India, Israel, Malaysia, New Zealand, Norway, and Peru. According to announcements by the different entities, the main argument behind their decisions is focused on an inflation outlook that reflects the combined influences of a robust domestic demand, but with a global excess capacity. Moreover, some of these authorities are operating within a scenario in which the monetary stimulus is very high and needs to be reduced to meet inflation objectives. Anyway, the majority emphasize that the fiscal adjustment process in Europe is an important risk that must be taken into account.

## Box 1.1: The situation in Europe and its effects on world growth

Concerns about the fiscal situation in Greece and other countries in the European periphery, together with doubts about the sufficiency and viability of the measures adopted to face the situation, caused a resurgence of tension in the external financial markets. The possibility that this tension will worsen or spread is one of the main risks in the baseline scenario of this *Report*. This box outlines the most important elements of the situation and describes how this *Report* captures the effects on world growth and other international variables that are relevant for the Chilean economy.

As indicated, the recent turbulence started after the revelation of the real fiscal situation in several European peripheral countries (EPC). The first was Greece, followed by Spain, Portugal, Italy, and Ireland. Although the high level of public debt in the European economies has been known for years, the 2009 world recession sharply expanded the deficit and raised doubts about the sustainability of the debt<sup>1</sup>/. In the majority of the EPC, the level of the general government's debt exceeds 65% of GDP and in some cases is even over 100% of GDP. Most of this debt is external, which makes refinancing even more difficult in the current situation, characterized by higher risk premiums. The situation in the EPC contrasts with the German position, where the private sector is a significant net creditor. This is analogous to the global imbalances, but in the intra-European context (table I.3 and figure I.12).

The escalation of tension in the financial markets has been substantial, but it is still a long way from the peaks of late 2008. The preference for safer assets has increased, generating a significant drop in bond interest rates in developed countries. In addition, sovereign and corporate risk premiums have increased sharply in the economies involved, stock market indicators have fallen, and the U.S. dollar has appreciated in international markets.

Another focal point is the banking system, especially in Spain. Doubts intensified in late May, after the Central Bank of Spain took control of a Spanish banking institution. The uncertainty about the banking system's exposure to the institutions and countries involved reappeared, and resulted in a less smooth operation of the interbank markets (figure I.3). In response to this spiral of concern, the international community has announced a number of support measures. In May, after two months of negotiations, the European Commission (EC), the International Monetary Fund (IMF), and the European Central Bank (ECB) agreed on a financial aid package for Greece totaling  $\in$ 110 billion over the next three years<sup>2</sup>/. The program fully covers Greece's financing needs from now to 2012, which will give the country time to reorganize its fiscal accounts and reduce its deficit.

#### Table I.3

Public debt and external liabilities in European economies (percent of GDP)

		Net External L	iabilities		
	General government gross debt	Public external debt	Other agents' external debt (1)	Other liabilities	Total (2)
Portugal	76.8	57.8	30.8	23.1	111.7
Ireland	64.0	45.5	29.6	-2.0	73.1
Greece	115.1	89.5	-7.0	-0.3	82.2
Spain	53.2	26.1	54.5	12.9	93.5
Italy	115.8	49.4	-12.1	-18.3	19.0
Germany	73.2	35.2	-56.9	-15.6	-37.3

(1) A proxy of nongovernmental net external debt. Includes the monetary authority's net external position.

(2) The net debit position. A negative sign indicates that the country has a net credit position. Source: Grünwald et al. (2010).

#### Figure I.12

General government primary balance (\*) (percent of GDP)



<sup>2</sup>/ Of the total, €80 billion will come from the members of the euro area and the rest from the IMF. Greece received €20 billion immediately.

 $<sup>^{1\!/}</sup>$  Grünwald et al. (2010) provides a more detailed analysis of the fiscal situation in Europe.

This international support program was conditional on the adoption of fiscal consolidation measures. Thus, Greece had to announce a fiscal adjustment package for a total of 11 percentage points of GDP between 2010 and 2014, which will allow the country to stabilize its public debt as a share of GDP in the medium term. This adjustment is very high both from a historical perspective and compared with programs applied in other countries. Given that wages and pensions make up 75% of total primary public expenditure, the package implies not only freezing public wages and pensions, but also raising taxes and cutting other expenses. The market has questioned the political and social viability of implementing the promised cuts. Other economies that are under the microscope of the international community have recognized the importance of adjusting their fiscal expenditure and have announced plans in the same line. In Spain, the announced fiscal adjustment will total 8.2% of GDP between 2010 and 2013.

The aid package and the announced adjustment measures provided only temporary relief in the financial markets. Doubts remained about the viability of the necessary adjustment measures, and the package did not address the restructuring of medium- and long-term liabilities. In addition, concerns about the fiscal situations of other peripheral economies persisted.

The EC, the IMF, and the ECB responded with a new package of measures involving a total of  $\in$ 750 billion over the next three years. This package, which was announced in early May, provides for the delivery of resources to accelerate structural reforms, reinforce fiscal discipline, and establish a permanent solution to the crisis. Thanks to the plan, Italy, Ireland, Portugal, and Spain will not have to issue new debt on the markets until late 2011, given their financing needs.

The fiscal adjustments will affect growth in a number of ways. On one hand, a tighter fiscal policy will reduce growth in the short run. On the other, reducing the high public debt increases potential output growth. Based on the relationship between the fiscal debt level and growth in the economies, the IMF estimates that bringing the public debt to precrisis levels would increase potential output growth by around half a percentage point a year in the advanced economies. This is significant when considering the accumulated impact over several years<sup>4</sup>/.

At the same time, the greater uncertainty in the international financial markets will have an impact on personal and business expenditures, especially in Europe.

The consensus forecasts for world growth available at the close of this *Report* have not yet clearly captured these effects. Consequently, in contrast to the usual methodology, the baseline scenario of the *Report* adjusts the consensus growth forecasts to take these effects into account<sup>5</sup>/. The resulting lower growth in developed economies affects output in emerging economies through the trade channel. Thus, the baseline scenario of this *Report* revises the market consensus on world growth for 2011 downward by about half of a percentage point (figure 1.8).

Lower world growth also has an effect on other important variables in the international scenario considered in this *Report*. With regard to inflation, it will lead to slightly lower records for each country than the consensus forecasts. However, the U.S. dollar is projected to depreciate more than in the current consensus scenario, which partly offsets the downward adjustment to external inflation relevant to Chile (the EPI, measured in U.S. dollars). For 2011, this effect will translate into an annual EPI change of about 0.2 percentage point less than the consensus scenario, on average. Commodity prices are also affected. In the case of copper, the average price per pound in 2011 is between 10 and 15 cents lower than considered in the current consensus forecast.

As in several other emerging economies, the local financial market has proven to be relatively resilient to the instability of the external markets. The bulk of the adjustment has occurred in the stock exchange and the foreign currency market. The baseline scenario assumes that this relative resilience to international financial phenomena will continue over the projection horizon. Should a different scenario materialize, the Board will adopt the necessary measures to maintain the normal operation of the monetary markets and meet the inflation target.

 $<sup>^{3}</sup>$ /The members of the euro area will provide  $\in$ 500 billion, of which  $\in$ 60 billion will be made available through an extension of the balance-of-payments line and the rest through bilateral loans and guarantees. The IMF will provide the remaining  $\in$ 250 billion.

<sup>&</sup>lt;sup>4</sup>/ See IMF (2010a).

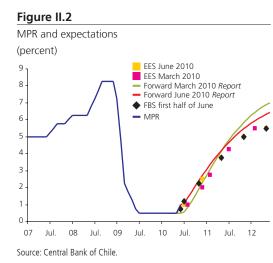
<sup>&</sup>lt;sup>5</sup>/ This is done assuming a demand shock in the developed economies due to these effects. The size of the shock is determined based on a fiscal adjustment consistent with the fiscal consolidation scenario described in Oecd (2010), which assumes a reduction in the debt-to-GDP ratio in the long term. The impact of lower growth in Europe on the international scenario relevant for Chile is calculated on the basis of the general equilibrium model in Medina and García (2009).

### **II. Financial markets**

#### Figure II.1

Real interest rate gap: real MPR less indicated neutral interest rate





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

#### Monetary policy

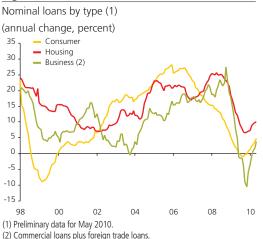
The monetary policy rate (MPR) is currently at a level that is strongly stimulative compared with different measures of its neutral level (figure II.1). The Board estimates that to achieve the inflation target in the policy horizon, a progressive normalization of the present monetary stimulus is needed, as has been communicated in recent months. In line with this assessment, market agents expect the MPR to rise in the coming quarters. The increase in the MPR decided by the Board at the monetary policy meeting on 15 June 2010 is part of this normalization process, which began in late 2009 with the withdrawal of the short-term liquidity facility (*Facilidad de Liquidez a Plazo*, or FLAP). The speed with which the strong monetary stimulus is withdrawn and the magnitude of the hike will depend on domestic macroeconomic conditions and the evolution of the uncertain external scenario.

Following the publication of the March *Monetary Policy Report*, expectations for the MPR—regardless of the measure used—were revised significantly upward, especially in the shortest terms. The biggest revision was seen in expectations implicit in financial asset prices, which incorporated estimated MPR hikes of between 30 and 70 basis points for the first five months. There is a sizable difference between expectations captured by surveys of analysts and financial brokers and the expectations implicit in financial asset prices, in terms of the level that the MPR is expected to reach in the forecast horizon. The surveys imply a more gradual normalization path, with the MPR at 5.5% toward the end of the forecast horizon. In contrast, expectations implicit in the forward curve put the MPR between 6.25% and 6.50% in the second quarter of 2012. These differences practically disappear in the most immediate term, however (figure II.2 and table II.1).

As a working assumption, the baseline scenario assumes that in one year's time the MPR will be at a level similar to the one inferred from private expectations. In the long term, it will converge to its neutral level<sup>1</sup>/. Projections are for the MPR to continue to be expansive throughout the forecast horizon, not only in the baseline scenario of this Report but also in different measures of private sector expectations.

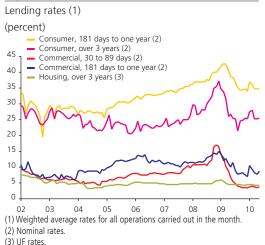
<sup>&</sup>lt;sup>1</sup>/ Various estimates for the neutral interest rate can be found in Fuentes and Gredig (2008).

#### Figure II.3



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

#### Figure II.4





Source: Central Bank of Chile.

#### Figure II.5



(\*) Representative corporate and bank bonds with a duration of over 9 years (maturity of over 11 years). The horizontal lines show the historical averages for the period 2001–2007.

Sources: Central Bank of Chile and LVA Indices.

#### Table II.1

Expectations for the MPR

(percent)

	In December 2010		In one year		In two years		
	March Report	June Report	March Report	June Report	March Report	June Report	
EES	2.00	2.50	2.75	3.75	5.50	5.50	
FBS (*)			2.25	3.75	5.00	5.50	
Forward curve	2.31	2.75	3.08	4.19	6.43	6.31	

(\*) Survey for the second half of March and the first half of June 2010.

Source: Central Bank of Chile.

#### **Financial conditions**

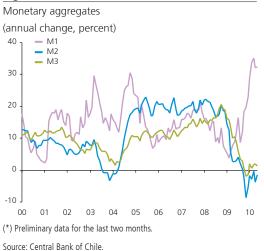
The strong monetary stimulus established in the past several quarters has passed through to financial conditions, which have continued a steady normalization since the close of the March *Report*. This process can be seen in the evolution of lending volume and interest rates, as well as the assessment of both suppliers and users of credit.

The results of the Bank Lending Survey reveal that credit conditions were stable in the first quarter of this year, after loosening in the previous quarter. In the case of personal loans, the looser conditions mainly reflect a reduction in the credit risk of the portfolios and more aggressive competition among the financial institutions. The survey indicates that the demand for credit has weakened slightly. Among businesses, the weaker demand is explained by lower working capital requirements and lower investment in fixed assets; individuals, in turn, are facing worse income and employment conditions. The fact that the survey was taken in the weeks immediately following the disaster in late February (27-F) could be influencing this assessment. Regardless, credit has continued to grow.

Lending has expanded steadily since January of this year. This recovery is, to a large degree, driven by loans to businesses. According to preliminary data available in May, the growth rate of housing loans reached double digits again, while consumer loans grew at around 4% annually (figure II.3).

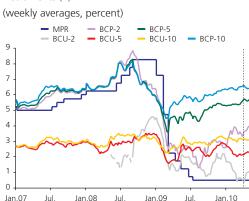
In general, interest rates on loans have fallen since the last *Report*, to relatively low levels compared with 2002 records (figure II.4). Nonperforming loans deteriorated slightly, but a breakdown by components reveals an uneven pattern: commercial loans worsened, while consumer loans improved. The temporary payment facilities extended to borrowers in good standing who were affected by 27-F could cause this indicator to improve further. The performance of the housing loan portfolio worsened. Loan loss provisions continued to grow, especially in the commercial portfolio. This increase, however, is associated with the fact that since January of this year, the banks have had to make provisions for contingent credit that previously was not included in the calculation, such as the unused portion of open credit lines. However, part of the increased provisions may reflect precautionary strategies in the face of a possible deterioration in the payment capacity of some firms after the earthquake, as described in the *Financial Stability Report* for the first half of 2010.

#### Figure II.6



#### Figure II.7

MPR and interest rates on Central Bank of Chile instruments (\*)



(\*) The vertical dotted line represents the publication date of the March 2010 *Monetary Policy Report.* 

Source: Central Bank of Chile.

#### Figure II.8

Peso and dollar interest rates in the local market (percent)



Sources: Central Bank of Chile and Bloomberg

The corporate bond market recorded a downward trend in spreads over risk-free bonds, to levels below the historical average. The biggest reductions were in bonds with an A or AA rating, which narrowed the gap with AAA bonds (figure II.5).

With regard to the monetary aggregates, M1 continued to grow strongly, with annual growth rates exceeding 30% in the last four months, in line with the expansive monetary policy and the evolution of output. M2 has posted negative annual growth rates for eight months in a row, which reflects the lower volume of time deposits in the economy. M3 increased between 1% and 2% in annual terms (figure II.6). This variation in the annual growth rates of the aggregates is similar to their performance in 2004, when the monetary stimulus was also expansive. In that case, they adjusted rapidly once the economy regained dynamism.

The turbulence in the international financial markets has had limited repercussions in the local financial market. Chile's sovereign risk premium, measured through the five-year credit default swap in U.S. dollars, rose around 30 basis points from the low of mid-April. The risk premiums of Brazil, Mexico, and Peru followed a similar pattern. Emerging Europe and emerging Asia posted sharper increases in the period.

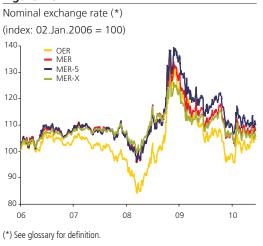
The Chilean banking system maintained its access to external financing, with no changes in maturities or amounts. Most recently, however, the cost has increased somewhat, since the rise in the Libor has been augmented by the higher global spread.

The variable- and fixed-rate markets have fluctuated substantially less than in developed economies. The rates on local instruments have fallen in recent weeks; this is in line with the degree of risk aversion overseas, which has been reflected in larger sovereign spreads and lower interest rates on longterm bonds in some safe haven economies. The drop on local instruments is of a lower magnitude and has occurred with a short lag relative to similar economies. The changes in these rates have been mixed since the publication of the last *Report*, mainly as a result of local factors (figure II.7). Two- and fiveyear bonds are at higher levels than at the statistical closing date of the March *Report*. The largest increase was in two-year peso-denominated bonds. In contrast, ten- and twenty year securities fell 15 to 30 basis points in the same period, with most of the change concentrated in the last few days of May.

In contrast to the events of late 2008 and the recent performance of some developed economies, the money market has not registered rate increases that could be associated with a tight liquidity situation (figure II.8). The end of the FLAP has not caused disruptions in the money market. The facility's last maturity date was 14 June, and the use of this mechanism appears to have been replaced by repos, though for a lesser amount. Over and above these liquidity supply mechanisms, the last few months have seen an inflow of capital from the pension funds, which have liquidated positions abroad.

The local stock market performed better than other economies, based on the IPSA stock index. Thus far in the second quarter, the IPSA has yielded just over 7% in pesos, or 5% in U.S. dollars, while the region and the world have fallen around 7% in U.S. dollars. The higher profitability of the IPSA, which was particularly notable in the retail and banking sectors, might reflect the greater participation of the pension funds in the stock market. In the year,

#### Figure II.9



Source: Central Bank of Chile.

#### Figure II.10



the Chilean stock exchange has maintained positive earnings, whereas other countries in the region, such as Brazil, recorded drops of over 11% measured in U.S. dollars. The Dow Jones was almost unchanged in the period.

#### **Exchange** rate

The peso-dollar parity has been highly volatile, especially in May, fluctuating as much as Ch\$10 from one day to the next. In the ten business days prior to the close of this Report, the U.S. dollar traded below Ch\$540. The peso has thus depreciated against the U.S. dollar since the last Report, but it has appreciated in multilateral terms, because other currencies have lost value against the U.S. dollar, especially starting in May. In particular, the euro lost 12%, the Canadian dollar 3%, the pound sterling 3%, and the Polish zloty and the Hungarian florint 19%. The peso appreciated the most in terms of the MER-5, where the weight of the euro, the Canadian dollar, and the pound sterling is greater (figure II.9 and table II.2). In real terms, the exchange rate is near 93 (where 1986 = 100), based on the nominal exchange rate level and current parities in the ten business days prior to the close of this Report (figure II.10). This figure is within the range of the average for the last 15 and 20 years, and it is practically unchanged since the close of the March Report. As a working assumption it is considered that in the long run the RER will not be substantially different from the levels observed in the two weeks prior to the statistical closing date of this Report.

#### Table II.2

Observed, multilateral, and real exchange rate (1)

(OER: pesos to the U.S. dollar, monthly average; MER, MER-5, and MER-X: 02.Jan.1998 = 100; RER: 1986 = 100)

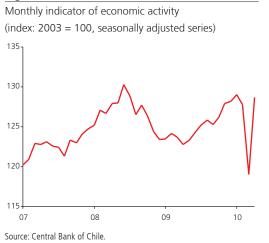
	OER	MER	MER-5	MER-X	RER
Jan.10	500.66	101.34	133.14	97.92	88.97
Feb.10	532.56	106.20	139.52	102.23	93.12
Mar.10	523.16	104.72	136.65	99.72	91.99
Apr.10	520.62	104.21	135.18	99.23	92.32
May 10	533.21	104.71	135.22	99.22	92.70
Jun.10 (2)	538.27	104.60	134.79	98.85	-

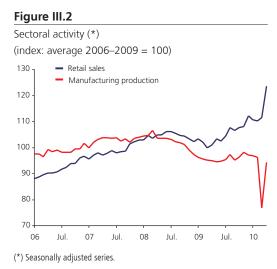
See glossary for definition.
Average as of 15 June.

Source: Central Bank of Chile.

### III. Demand and output

#### Figure III.1





Sources: Central Bank of Chile and National Statistics Bureau.

This chapter reviews the recent evolution of demand and output and their short-term prospects, in order to examine possible inflationary pressures.

#### Aggregate demand

The data since the March *Report* indicate that the immediate impact on output of the February earthquake and tsunami (27-F) was larger than projected, but with a fast recovery starting in April (figure III.1). By branch of economic activity, the largest effects were in manufacturing, especially in production lines located in the Biobío Region. In contrast, trade grew strongly (figure III.2). The available data to date suggest that the disaster's effect on first quarter GDP was to reduce growth by around 4 percentage points; the forecast in the March baseline scenario was for a reduction of 3 percentage points. Estimates for second quarter GDP are in line with the March forecast, so estimates of the impact of 27-F for that period remain at 2 percentage points (box III.1). The baseline scenario considers that the immediate effects of 27-F on economic activity will start to dissipate mid-year, including in the manufacturing sector. Nevertheless, because of the lower first quarter GDP, the growth forecast for this year has been revised slightly downward. Thus, the Board estimates the annual GDP growth rate will be between 4.0 and 5.0% in 2010.

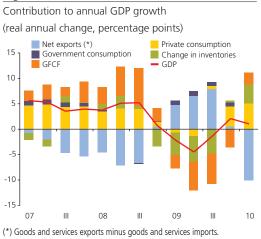
Despite the strong impact of 27-F on output, domestic demand was more dynamic than projected in March. While quarter-on-quarter GDP fell 1.5% in the first quarter of the year, quarter-on-quarter domestic demand grew 4.2%.

Key factors in the growth of domestic demand include gross fixed capital formation and private consumption (figure III.3). Their performance is reflected in trade activity and other services, which grew at annual rates of 5% to 9% in the first quarter of the year. In terms of consumption, data for the first quarter and partial indicators for April point to very dynamic sales of durable goods (figure III.4). After falling in March, new car sales grew in April, even exceeding their historical peak of mid-2008. Consumer imports also grew significantly, due in part to the replacement of domestic goods for which production was interrupted by 27-F.

Estimates indicate that part of the recent dynamic consumption reflects transitory effects. Therefore, the growth rate of consumption is expected to fall in the second half of the year.

Nevertheless, the determinants of consumption have performed favorably, so there is the risk that this dynamism could persist or intensify over the coming quarters. In particular, credit conditions show a progressive normalization,

#### Figure III.3



Source: Central Bank of Chile.

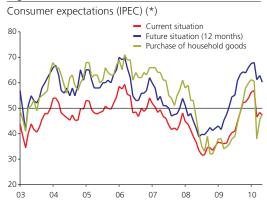


Retail sales and new car sales (index: 2003 = 100, seasonally adjusted series) Nondurable goods (\*) New cars 180 - Durable goods (\*) 250 160 210 140 170 130 120 100 90 10 07 08 09

(\*) Sold in the moving quarter.

Sources: National Association of Car Dealers, Central Bank of Chile, and National Chamber of Commerce.

#### Figure III.5



(\*) A value over (under) 50 points indicates optimism (pessimism) Source: Adimark. with an expansion of bank lending, relatively low lending rates, and generally more flexible lending conditions in the banking system. Consumer confidence was negatively affected by the disaster, but consumers are still optimistic about what the situation will be like in a year, and their perception of whether it is a good time to buy household items has recovered and is close to its neutral value (figure III.5). The labor market continues to develop favorably. Data from the new national employment survey indicate that in the moving quarter from February to April, employment grew 6.4% in annual terms<sup>1</sup>/ (versus 4.9% in the moving quarter from January to March 2010). Self-employment, in particular, grew strongly, with an annual rate of 15.8%. The national unemployment rate was 8.6% (versus 9.0% in January to March 2010). Data from other sources, such as the Chilean Association for Occupational Safety and Health (AChS), also point to a positive employment scenario (figure III.6). In the Monthly Business Confidence Index (Indicador Mensual de Confianza Empresarial, or *Imce*), the outlook for employment is optimistic in all sectors, even more so than in the March Report.

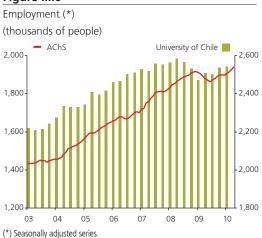
Gross fixed capital formation grew 9.3% in annual terms in the first quarter of 2010, with a quarterly change of 7.4%. The machinery and equipment component was the main source of this growth, increasing 20.3% annually in the period (figure III.7). As projected in March, one of the strong immediate effects of 27-F involved the need to replace the stock of machinery and equipment destroyed or damaged by the disaster. This was reflected in an increase in capital goods imports, especially in April and May.

The construction and other investment works component grew 0.7% in annual terms in the first quarter. Construction activity increased 0.8% in annual terms in the same period. The main factors behind this result were increases in engineering projects, repair costs, and demolitions. The outlook for this sector, measured by the Imce, continues to be pessimistic, but the sector should become more dynamic as the reconstruction process moves forward. Housing sales fell sharply in March but recovered somewhat in April.

The outlook for investment continues to be favorable. According to the March survey carried out by the Capital Goods and Technological Development Corporation (*Corporación de Desarrollo Tecnológico y de Bienes de Capital, CBC*), investment in infrastructure projects scheduled for 2010 and 2011 grew relative to the December survey. The trend was led by mining projects. Planned investment in the energy and public works sector fell as projects were pushed back. Business expectations, captured in the Imce, are optimistic on aggregate, even above the levels observed before 27-F. The outlook for investment is also optimistic in the Imce, although less so than before the disaster. Financial conditions for businesses continue to be favorable, in terms of both credit growth and the interest rates applied by banks.

<sup>&</sup>lt;sup>1</sup>/In April, the National Statistics Bureau (INE) published the new national employment survey. Relative to the previous survey, there have been conceptual changes in the classification of employment status, which results in higher rates of employment, labor participation, and unemployment. The survey only has comparable data starting in 2009, which makes it difficult to make comparisons prior to that date and complicates the use of seasonally adjusted data.





Sources: Chilean Association for Occupational Safety and Health (AChS), Central Bank of Chile, and University of Chile.

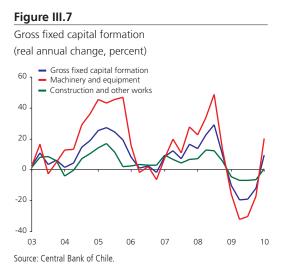
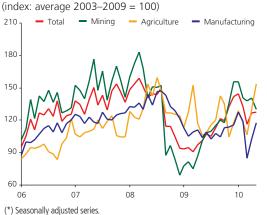


Figure III.8

Exports (\*)



Source: Central Bank of Chile

In the first quarter of 2010, the change in inventories over the last four quarters equaled -1.4% of GDP (versus -2.4% at year-end 2009). This represents a sharp slowdown in the inventory drawdown process observed since late 2008. According to the Imce, May inventories were somewhat lower than desired, after falling significantly in the wake of 27-F.

According to data from the Budget Division, the first quarter of the year closed with an 18.9% real annual increase in total income and 5.0% in total expenditure. Thus, the deficit for the year ending in the first quarter of 2010 was 3.7% of GDP. The baseline scenario in this *Report* considers that the structural balance will be attained at the end of the current administration. It also take into account changes in taxation, budgetary reallocations, and the use of other sources of financing for the reconstruction, in line with related announcements by the Executive.

In the first quarter of the year, the volume of total exports fell 2.2% in annual terms (but rose 41.4% in value), which has more to do with supply factors—due to 27-F—than demand factors. The export level fell most sharply in manufacturing, particularly in products like wood pulp and fishmeal. Agricultural exports were also affected, although the data for the last few months show that the sector is recovering rapidly, exceeding the levels recorded before 27–F. Mining exports recovered in levels, in line with the increased output in the sector. Available data for the second quarter already indicate a recovery in the value of exports relative to March (figure III.8).

As mentioned above, imports have shown a relevant increase in the last few months. The volume of imports grew 18.5% annually in the first quarter (28.6% in value), with rates of 39.1% in consumer goods and 21.1% in capital goods that stand out. Data for the second quarter indicate that capital goods imports remain high, while consumer goods have started to retreat.

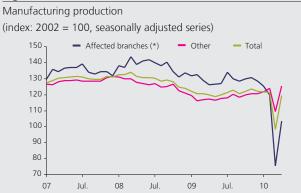
In the first quarter of 2010, the current account of the balance of payments recorded a surplus of US\$1.523 billion, or 2.8% of GDP in the last moving year. For the year as a whole, estimates indicate that the current account of the balance of payments will post a deficit of 1.2% of GDP. Measured at trend prices, the deficit is high from a historical perspective, but it at least partially reflects the transitory effects of reconstruction and recovery spending.

### Box III.1: Short-term impact of 27-F

The Board estimated that the earthquake and tsunami on 27 February (27-F) could generate short-term effects in several areas, including output, demand, employment, and the price level. This box reviews the magnitude of these effects in light of the data available thus far.

In March, the Board estimated that the immediate impact of 27-F would involve lower output growth on the order of 3 percentage points in the first quarter. In the second quarter, the effect would be 2 percentage points. The first quarter National Accounts indicate that the estimated effect in that period was larger, at 4 percentage points, and was mostly concentrated in manufacturing. Based on the data for April, the forecast for the second quarter is the same as in March. Although output fell more than projected in March, there was a substantial recovery in April (figure III.1). Nevertheless, performance was very heterogeneous among economic sectors. For example, manufacturing recorded a very strong negative impact, even stronger than projected, whereas trade and other services experienced unusually high growth in their levels (figure II.2). In manufacturing, which largely explains the drop in aggregate output, the largest impact was felt in lines of production with operations that are largely or entirely based in the Biobío Region, such as wood pulp, oil refining, fishing, and steel products. The production levels of these activities remain below the levels recorded before 27-F, whereas the rest of manufacturing activities have already recovered (figure III. 9).

#### Figure III.9



(\*) Paper and wood pulp, oil refining, fishing, and iron and steel products, which account for 29.8% of manufacturing production according to the INE.

Source: National Statistics Bureau (INE).

With regard to demand, in March the Board considered the possibility that the growth rate of consumption would be lower as a result of the saving that would be necessary to replace the damaged capital stock and the uncertainty about future income due to problems in the labor market. Much to the contrary, the data for March and April reveal a very strong recovery in consumption, especially in the last month. Durable goods played an important role in this trend. Investment in machinery and equipment also increased substantially in the first quarter, and consumer and capital goods imports grew strongly in April and the first weeks of May.

The analysis of the employment effects of 27-F are complicated by methodological changes in the national employment survey, implemented by the National Statistics Bureau (INE). Nevertheless, the available data indicate that the higher unemployment of March and its reduction in April were accompanied by greater inactivity and a smaller labor force, especially in the most affected regions. According to the INE, self-employment felt the strongest impact, while wage employment did not change significantly. The hardest-hit sectors were those with a strong presence in the Libertador, Maule, and Biobío regions: namely, manufacturing, services, and natural resources. Data from the *Mutual de Seguridad* (the occupational safety arm of the Chilean chamber of construction) similarly show no significant change in wage employment, whereas the AChS reports a drop<sup>2</sup>/.

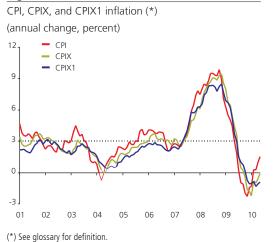
Inflation was initially expected to encompass an increase in certain prices—especially foods—due to disruptions in production processes and/or distribution chains. However, the monthly records for March and April were substantially lower than projected in the March *Report* and also lower than the majority of market expectations (figure IV.4). According to the INE, in March there were problems in data collection in the Maule and Biobío regions. The situation had normalized by April, and data on the country's fifteen regional capitals were incorporated in the calculation of the CPI. Different sources on the most affected regions indicate that price increases were fleeting and mainly confined to the days immediately following 27-F. It is thus possible to estimate that any short-term effects of the disaster on inflation were fairly limited, if they occurred.

The analysis presented here is based on partial information, and it may or may not be confirmed as time passes and more data are accumulated. In the medium term, the stimulus from the reconstruction effort and its financing still represents a risk for aggregate demand.

<sup>&</sup>lt;sup>2</sup>/ Jones and Ricaurte (2010) review the evidence from different sources on the employment effects of 27-F.

### **IV. Prices and costs**

#### Figure IV.1



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

#### **Recent trends in inflation**

In the last three months, CPI inflation was lower than projected in the March *Report*. The immediate effects of the earthquake and tsunami (27-F) on inflation, if any, were quite small and certainly below projections in the last *Report* and overall market expectations. Nevertheless, annual CPI inflation continued to rise in the last few months, consolidating in above-zero figures, while core indicators (CPIX and CPIX1) continued to post negative y-o-y variation rates, but are gradually approaching above zero levels (figure IV.1 and table IV.1). The baseline scenario in this *Report* assumes that inflation will continue to increase in the coming months, exceeding 3% in the second half of this year and hover around this value in 2011 and 2012.

#### Table IV.1

Inflation indicators (\*)

(annual change, percent)

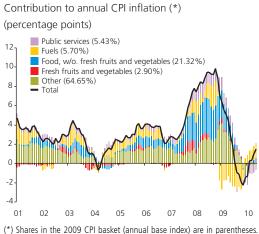
		CPI	CPIX	CPIX1	CPIX1 w/o foods	CPI w/o foods and fuels	CPIT	CPINT	CPIG	CPIS
2009	Jan.	6.3	8.0	6.9	4.4	5.8	1.7	11.0	4.2	9.6
2005	Feb.	5.5	6.7	6.7	4.7	5.2	2.4	8.6	4.6	7.4
	Mar.	5.0	6.5	6.2	4.7	5.2	2.1	8.0	3.8	7.3
	Apr.	4.5	5.5	5.3	4.4	4.8	1.6	8.6	2.8	7.2
	May	3.0	4.4	3.7	3.0	3.5	-0.8	8.0	0.5	6.7
	Jun.	1.9	3.6	3.0	2.4	2.8	-2.4	7.6	-1.2	6.1
	Jul.	0.3	1.7	1.5	0.9	1.4	-4.0	7.0	-2.8	4.6
	Aug.	-1.0	0.4	1.0	0.5	0.8	-5.1	6.4	-3.7	2.7
	Sept.	-1.1	0.2	0.8	0.3	0.3	-5.3	4.9	-3.9	2.8
	Oct.	-1.9	-0.4	0.2	-0.4	-0.4	-5.9	3.1	-5.0	2.2
	Nov.	-2.3	-1.6	-0.7	-1.2	-1.6	-4.7	0.3	-4.4	0.8
	Dec.	-1.4	-1.8	-1.1	-1.5	-1.6	-3.4	0.5	-2.7	0.2
2010	Jan.	-1.3	-2.2	-1.1	-1.3	-1.7	-2.5	0.3	-1.8	-0.8
	Feb.	0.3	-0.8	-0.9	-1.2	0.1	-2.5	4.2	-1.5	2.6
	Mar.	0.3	-1.0	-1.3	-1.9	-0.4	-2.2	3.8	-1.3	2.3
	Apr.	0.9	-0.6	-1.1	-1.8	-0.1	-1.2	3.8	-0.2	2.3
	May	1.5	-0.1	-0.9	-1.6	0.4	-0.6	4.4	0.2	3.2

(\*) See glossary for definition.

Sources: Central Bank of Chile and National Statistics Bureau.

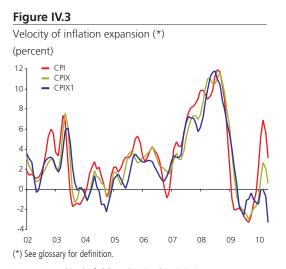
#### Figure IV.2

Source: National Statistics Bureau



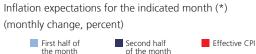
The 2001–2008 period uses the weights in the December 1998 basket. For 2009, the December 2008 basket is used.

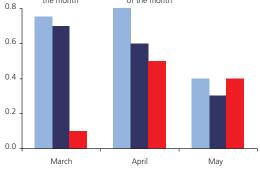
Sources: Central Bank of Chile and National Statistics Bureau.





#### Figure IV.4





(\*) Based on the financial brokers survey carried out in the first and second half of each month.

Sources: Central Bank of Chile and National Statistics Bureau.

Between March and May, the annual CPI inflation rate increased from 0.3% to 1.5%, while the annual CPIX rose from -1.0% to -0.1% and the annual CPIX1 from -1.3 to -0.9%. In contrast to previous periods, the monthly change in the CPI, CPIX, and CPIX1 was most of the time greater than zero in these months. Only the CPIX1 posted a negative monthly rate; this occurred in May and was attributed to falling prices in clothing and communications. The month-on-month CPI increases were determined by fuel prices (not only because of higher external prices, but also due to the reestablishment of the specific tax), nonperishable food prices, and the cost of basic services. Thus, the CPI, in last three records, accumulated a total increase of 0.9%, the CPIX rose 0.5% and the CPIX1 did not change.

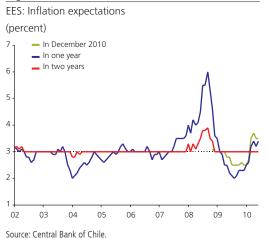
In annual terms, beyond the rise in fuels and foods, there was a generalized increase in the contribution of the remaining components to inflation (figure IV.2). In addition, the CPI for goods and services and for tradables and nontradables also posted higher annual growth rates and were positive or close to positive values in May. The goods CPI rose from -1.3% in March to 0.2% in May, and for services the increase was from 2.3% to 3.2%. The tradables CPI went from -2.2% to -0.6% and the nontradables from 3.8% to 4.4% in the same period.

Although the expansion rate of the CPI and CPIX has eased in the last few months, it continues at positive rates, a trend recorded since late 2009 (figure IV.3). The upward path of prices is also reflected in the number of items in the CPI basket that increase monthly. Thus, out of a total of 368 items, 190 posted a price increase in May (versus 122 in December), while 177 featured a price reduction (versus 198 in December).

The 27-F disaster had no perceptible effects on inflation in the last three months, and, if there were any, they were lower than projected in the last *Report* and overall market expectations. In March, the CPI growth rate was unexpectedly low, at 0.1% in monthly terms. Market expectations had projected a monthly rate of 0.7%. The same thing happened in April, when the effective CPI monthly rate was 0.5% and private expectations that started near 0.8% were revised downward to 0.6% over the course of the month. For May, market expectations were much more in line with the effective monthly inflation data (figure IV.4). According to the INE, March data reflect problems with data collection in the Maule and Biobío regions, but in April the situation normalized and therefore the information for the country's fifteen regional capitals was incorporated in the CPI calculation. Different sources of information in the most affected regions indicate that price increases were transitory and mainly confined to the days immediately following 27-F.

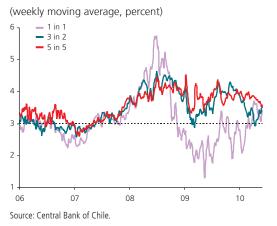
Despite of the significant surprises in March and April inflation data, medium-term inflation expectations practically remained unchanged. The market, concordant with the baseline scenario of this and the previous *Reports*, continues to expect that annual inflation will increase in the second half of 2010 and remain at 3% in the inflation target horizon (figure IV.5). According to the June Economic Expectations Survey (EES), the inflation forecast for December 2010 is 3.5% and for one year ahead, 3.4% (versus 3.5% and 3.2%, respectively, in March). The projection for December 2011 is 3.2% (3.0% in March). Expectations captured in the business survey (Imce) remain at 3.5% for the next twelve months since March, while the consumer

#### Figure IV.5



#### Figure IV.6

Average forward inflation compensation based on swap rates



survey (IPEC) continues to show that 49% of those surveyed believe that inflation will rise a lot in the same period. Break even inflation at different maturities, as deduced from financial asset prices, is within the tolerance range for the inflation target despite high volatility in the short and medium terms in the last few months (figure IV.6).

In the baseline scenario, the convergence of inflation to the target in the medium term is determined by output and domestic expenditure and their implications for the closing of the actual output gaps. In the short term, despite the low effective inflation of the past several months, the assumption of changes in some specific prices means that inflation will also stand in the upper part of the tolerance range of the inflation target in the second half. In particular, the public transport fares are expected to increase and the stamp tax will be maintained, consistent with announcements by the government in this area. In addition, the increase in the tobacco tax will add 0.4 percentage points to inflation this year. The full pass-through to consumer prices is expected to take six months, period which is consistent with the time lag shown in past tax changes.

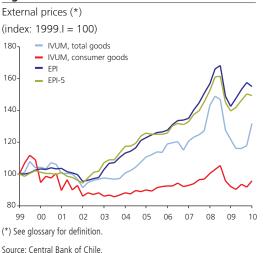
#### Cost pressures

Movements in international prices and the exchange rate generated significant fluctuations in imported costs in the past few months. Prices of imported goods in pesos rose through April, as a result of the increase in commodity prices in international markets and the nominal depreciation of the Chilean peso. These hikes eased in May, mainly because of lower commodity prices in external markets. Nevertheless, imported costs are not having a substantial effect on the inflationary pressures facing the Chilean economy.

In the ten days prior to the statistical close of this *Report*, the WTI oil price averaged around US\$75 a barrel. This value is 9% lower compared to the same period considered in the March *Report*. In the baseline scenario, average oil prices are lower than in the last *Report*: US\$77 in 2010 and US\$80 in 2011. The gasoline price in the external reference market fluctuated similarly to the WTI oil. Domestically, fuel prices in pesos rose 11% in the same period. Of this increase, 10 percentage points are attributable to changes in the specific fuel tax. Food prices in international markets generally also fell, though to a lesser degree than oil and other commodities. The price of milk continued to rise.

At the close of this *Report*, the peso-dollar parity had depreciated 2% relative to the March *Report*, based on the average of the ten business days prior to the statistical closing date of each publication. In multilateral terms, however, the peso appreciated relative to the close of the last *Report*: 1.0% for the MER and 2.1% for the MER-5. The reason for this divergence between the bilateral and multilateral parities is the loss in value of other currencies against the U.S. dollar, particularly intense since May. At the close of this *Report*, the real exchange rate (RER) was 93 (where 1986 = 100), considering the level of the nominal exchange rate and currency parities prevailing in the ten days prior to the closing date. This value is within the range of its average level of the last 15 and 20 years and virtually has remained unchanged since the close of the March *Report*. As a working assumption, the baseline scenario



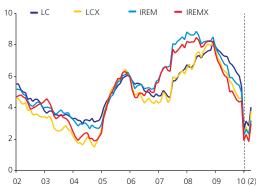


Source. Central Bank of Chik

Figure IV.8

Nominal wages (1)





(1) See glossary for definition.

(2) Starting in January, corresponds to the new indices with base year 2009 = 100.

Sources: Central Bank of Chile and National Statistics Bureau.

considers that in the long run, the RER will not be substantially different from the levels observed in the two weeks prior to the statistical closing date of this *Report*.

The annual growth rate of the producer price index (PPI), which only considers domestic goods and services prices, and the wholesale price index (WPI), which includes imported and domestic goods prices, continued to increase, driven by intermediate goods, especially fuels. The PPI rose from 8.6% in annual terms in March to 13.1% in May. The annual growth rate of the WPI became less negative, achieving –1.4% in May (versus –6.3% in March). The three-month outlook for costs, captured in the Imce, decreased to 71.8 points in May (76.5 points in March).

The unit price of imports (IVUM) for total and consumer goods continued to increase in the first quarter of the year and posted positive annual growth rates: 8.1 and 3.7%, respectively. The higher oil price relative to one year earlier largely explains the increase. The external inflation relevant for the Chilean economy continued to increase in annual terms, given the higher annual inflation in other economies, which was partly offset by the appreciation of the U S. dollar, achieving around 10% in April (figure IV.7).

#### Wages

Cost pressures from the labor market have not changed much in the past few months. Considering the new methodology for measuring wages, implemented by the INE in January 2010, the annual growth rate of nominal wages increased to between 3% and 4% in April, depending on the measure. The change was smaller in real terms, however remained within the range of 2% to 3% (figure IV.8). The outlook for wages, as captured in the Imce, has remained fairly stable in the past few months: 67.1 points in May, versus 66.7 points in March. The baseline scenario assumes that pressures from labor costs will not post significant variations from today's figures.

### V. Inflation scenarios

#### Table V.1

International baseline scenario assumptions

	2008	2009	2010 (f)	2011 (f)					
(annual change, percent)									
Terms of trade	-16.1	4.1	14.3	-7.2					
Trading partners' GDP (*)	3.0	-0.3	4.4	3.7					
World GDP at PPP (*)	3.0	-0.6	4.3	4.0					
World GDP at market exchange rate (*)	1.8	-2.0	3.2	3.0					
External prices (in US\$)	12.2	-6.2	3.4	3.3					
		(lev	/els)						
LME copper price (US¢/lb)	316	234	300	270					
WTI oil price (US\$/barrel)	100	62	77	80					
Gasoline parity price (US\$/m <sup>3</sup> ) (*)	739	471	587	603					
US\$ Libor (nominal, 90 days)	2.9	0.7	0.5	1.0					

(\*) For definition, see glossary.(f) Forecast.

Source: Central Bank of Chile.

#### Table V.2

Economic growth and current account

	2007	2008	2009	2010 (f)		
	(annual change, percent)					
GDP 4,6	3.7	-1.5	4.0 - 5.0	I I		
National income	7.4	4.1	-1.2	10.0		
Domestic demand	7.6	7.6	-5.9	14.5		
Domestic demand						
(w/o inventory change)	8.0	7.5	-2.8	11.3		
Gross fixed capital formation	11.2	18.6	-15.3	23.0		
Total consumption	7.0	4.0	1.8	7.8		
Goods and services exports	7.6	3.1	-5.6	1.0		
Goods and services imports	14.5	12.2	-14.3	25.8		
Current account (% GDP)	4.5	-1.5	2.6	-1.2		
		(US\$ million)				
Current account	7,458	-2,513	4,217	-2,200		
Trade balance	23,941	8,848	13,982	11,400		
Exports	67,972	66,464	53,735	64,700		
Imports	-44,031	-57,617	-39,754	-53,300		
Services	-987	-871	-1,074	-1,600		
Rent	-18,625	-13,423	-10,306	-15,500		
Current transfers	3,129	2,934	1,616	3,500		

#### (f) Forecast.

Source: Central Bank of Chile.

This chapter presents the Board's assessment on the Chilean economic outlook over the next two years, including the analysis and decision of the Monetary Policy Meeting held on 15 June 2010. Projections are presented of the most likely inflation and growth trajectories, conditional to the assumptions that make up the baseline scenario, so the Board's assessment of the risk balance for output and inflation is also provided.

#### **Baseline projection scenario**

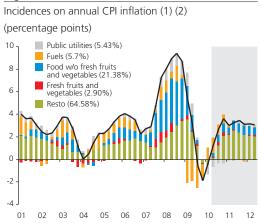
Year-on-year CPI inflation has continued to increase in recent months, consolidating in above-zero figures. Output has continued posting a sustained recovery trend since mid-2009. The earthquake and tsunami of 27 February (27-F) had significant negative effects, but they were limited to short term, as revealed by the latest indicators. Domestic expenditure is very strong, which is believed to be partly caused by the immediate effects of 27-F, but also within the context of very expansionary monetary conditions. Financial stress in Europe has resulted in some uncertainty about the pace of the global recovery and the smoothness of world financial markets.

In the baseline scenario, inflation will go above 3% in the second half of this year and will hover around that as from 2011. The world economy and the Chilean economy will continue to grow in the coming quarters. The increase in the monetary policy rate determined by the Board at its monetary policy meeting of 15 June is part of the process of normalizing the significant monetary stimulus currently in place. This process must go hand in hand with the closing of output gaps, in order to prevent inflationary pressures in the future. The pace and magnitude of the normalization will depend on both domestic macroeconomic conditions and the developments of the uncertain external scenario. The Board reiterates that it will continue to apply its policies with flexibility so that projected inflation stands at 3% over the policy horizon.

#### **External scenario**

In the baseline scenario, the world economy will continue to recover after the global recession of 2009, although at a slower pace than forecast a few months ago (table V.1). It will be faster in the emerging economies than in developed economies. Contrary to habit, these projections are not taken from the average market consensus at the statistical closing of this *Report*, because this consensus so far has not considered financial stress in external markets affecting prospects for economic activity. The Board, by contrast, estimates that volatility in international financial markets has been sufficiently large and persistent to have some effect on world growth forecasts. This combines with the effects of fiscal adjustments in Europe (box I.1). Accordingly, the usual methodology has been modified to revise

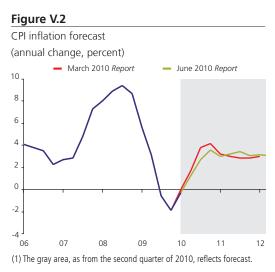
#### Figure V.1



(1) The gray area, as from the second quarter of 2010, depicts the breakdown of forecast inflation in the baseline scenario.

(2) In parentheses, shares in the CPI basket with annual base 2009. For the period 2001-2008, weights in the basket of December 1998. For 2009, weights in the basket of December 2008.

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



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

#### Table V.3

Inflation

	2009	2010 (f)	2011 (f)	2012 (f)
	(annual change, percent)			
Average CPI Inflation	1.6	1.8	3.2	
December CPI inflation	-1.4	3.8	3.2 3.1	
CPI inflation in around 2 years (*)				3.0
Average CPIX Inflation	2.8	0.7	3.5	
December CPIX inflation	-1.8	3.3	3.5 3.5	
CPIX inflation in around 2 years (*)				3.2
Average CPIX1 Inflation	2.8	-0.1	3.2	
December CPIX1 inflation	-1.1	1.8	3.2	
CPIX1 inflation in around 2 years (*)				3.1

(f) Forecast.

(\*) Inflation forecast at the second quarter of 2012.

Source: Central Bank of Chile.

downward the global output scenario by around one half of one percentage point with respect to consensus for 2011.

Despite revised growth, commodities prices will stay close to their current levels over the next two years (table V.1). Financial stress has produced volatility in these prices, but their levels are still high by historic standards. Projected growth for emerging economies, especially in Asia, helps current levels to remain unchanged. The terms of trade relevant to Chile will increase 14.3% this year, and will drop 7.2% in 2011. The baseline scenario continues to assume long-term prices for copper and oil in today's U.S. dollars, at US\$2 per pound and US\$75 per barrel.

The baseline scenario foresees that the difference in the pace of GDP growth across different economies will also apply to inflation. Thus, although inflation is now low in most countries, it will increase faster in the emerging world than in the developed world. The current size of output gaps in various economies and the projected pace of their closing support this prediction. Consensus expectations show a similar scenario. However, EPI growth in 2010 and 2011 will exceed somewhat March forecasts (table V.1).

Finally, the baseline scenario considers that present financial tensions will continue to focus mostly in Europe and that emerging economies, particularly Chile, will be, as they have been so far, relatively resilient to theese tensions. The monetary policy interest rates in the main economies will begin to adjust during 2011, as anticipated by current market expectations. In contrast, in several emerging economies and some industrialized countries the withdrawal of monetary stimulus has already begun. The U.S. dollar, which has appreciated substantially because of flight-to-quality in financial markets, will tend to depreciate multilaterally over the next two years.

#### Output, domestic demand and external accounts

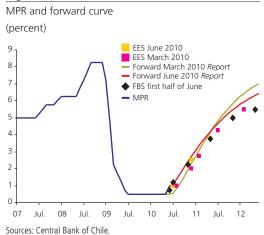
The Board foresees that in 2010 GDP will grow at a y-o-y rate between 4.0% and 5.0% (table V.2). This range is slightly lower than projected in March, due to lower effective first quarter growth (box III.1). Domestic demand will increase 14.5% this year (11.3% excluding inventories), with strong momentum from private consumption and investment.

The baseline scenario estimates that the short-term effects of 27-F on output will be normalized by midyear. Nevertheless, the same as in March, the negative impact of the catastrophe on second-quarter growth is estimated to have been around 2 percentage points.

Domestic demand has grown significantly in recent months. The baseline scenario assumes that its growth rate will begin to attenuate over the course of the second half. This, mainly because part of its current dynamism corresponds to one-time phenomena, associated to the consumption of durable goods, investment in machinery and equipment and inventory replacement. Part of this demand has been met with imports, due to shortage of supply of some domestically produced goods or to the very nature of the needed goods.

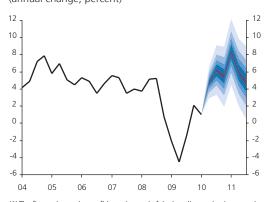
The 27-F will affect domestic expenditure via the impact of public-private reconstruction works, which should be visible mainly in infrastructure investments. The baseline scenario continues to forecast that such effect will be present mostly as from the second half of 2010 and will extend into 2011. This considers both

#### Figure V.3





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



(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on growth as assessed by the Board. The baseline scenario uses as a working assumption that in one year's time the MPR will be at a level similar to the one inferred from private expectations. In the long term it will converge to its neutral level. With the purpose of incorporating and properly reflecting developments relative to inflation volatility and growth in the past few years, the Board decided to update the form of calculation of the fancharts (box V.1).

Source: Central Bank of Chile.

new investment and reallocation of resources from projects planned beforehand. In the case of the public sector, the baseline scenario assumes that the structural balance will be attained at the end of the current Administration and that there will be tax changes, budget reallocations and other sources of funding for the reconstruction in accordance with government announcements.

The current account of the balance of payments is foreseen to post a deficit of 1.2% of GDP this year. Measured at trend prices—calculation that considers corrections in prices and not volumes—, the current account deficit would stand around 7.0% of GDP. This figure is high by historic standards, but is based on public and private savings and investment being affected by 27-F. As has been said, long-term prices of copper and oil have not changed since last March.

Beyond the effects of 27-F, growth projected for output and expenditure is determined by the current favorable macroeconomic conditions. In particular, the significant boost of macroeconomic policies in the past few quarters has been reinforced with the progressive normalization of domestic financial conditions.

The Board continues to estimate that the loss of capital stock produced by 27-F implies that during this year the level of trend output will be between 1.0% and 1.5% less than was forecast before the catastrophe<sup>1</sup>/. In the long term, it is still considered that annual potential output growth is close to 5%. With this assumption, and projected GDP growth, in the baseline scenario output gaps will close over the course of 2011. As this closing occurs, inflationary pressures will be incubated that must be reined in on time in order to assure that inflation stands at 3% over a two-year horizon. Accordingly, the Board estimates that to achieve the inflation target, a progressive normalization of the significant monetary stimulus currently in place is needed, as has been communicated in recent months. This normalization has already begun with the withdrawal of the Term Liquidity Facility (FLAP) and the increase in the monetary policy rate determined by the Board at its monetary policy meeting of 15 June 2010.

#### Inflation

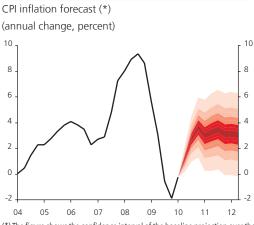
The Board foresees that y-o-y CPI inflation will continue to increase in the coming months, to stand between 3% and 4% in the second half of this year. It will then hover around 3% through the end of the relevant horizon, the second quarter of 2012. Core inflation measures will post a slower convergence to 3%, arriving some time during 2011 (figures V. 1 and V. 2, and table V. 3).

In the short term, changes in some specific prices are also involved. Assumptions include an increase in public transport fares in Santiago, and an unchanged stamp tax as announced by the government. An increase in tobacco excise tax is also forecast that will contribute nearly 0.4 percentage points of higher inflation in the year. Its full transmission to consumer prices is expected to take six months, in line with similar episodes in the past.

Another assumption is that in the long run the RER will be similar to its current level, considering that, at the statistical closing of this *Report*, it is consistent with its long-term fundamentals. Inflationary pressures coming from the labor market and from import costs will generally post no significant variation from today's

<sup>&</sup>lt;sup>1</sup>/ Prior to 27-F the Board estimated that annual trend growth for 2010-2011 would be between 4.0% and 4.5%. More details about the loss of capital stock in the March 2010 *Report*, box V.1, page 38.

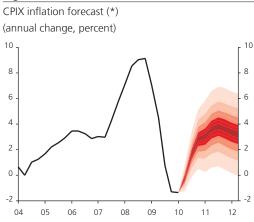
Figure V.5



(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that in one year's time the MPR will be at a level similar to the one inferred from private expectations. In the long term it will converge to its neutral level. With the purpose of incorporating and properly reflecting developments relative to inflation volatility and growth in the past few years, the Board decided to update the form of calculation of the fancharts (box V.1).

Source: Central Bank of Chile.

#### Figure V.6



(\*) The figure shows the confidence interval of the baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 30%, 50%, 70%, and 90% around the baseline scenario are included. These intervals summarize the risks on inflation as assessed by the Board. The baseline scenario uses as a working assumption that in one year's time the MPR will be at a level similar to the one inferred from private expectations. In the long term it will converge to its neutral level. With the purpose of incorporating and properly reflecting developments relative to inflation volatility and growth in the past few years, the Board decided to update the form of calculation of the fancharts (box V.1).

Source: Central Bank of Chile.

figures. In addition, the baseline scenario uses as a working assumption that in one year's time the MPR will be at a level similar to the one that can be inferred from private expectations. In the long term, it will converge to its neutral level<sup>2</sup>/ (figure V. 3).

#### **Risk scenarios**

The baseline scenario reflects the developments estimated to be most likely with the information available at the time the projections are made. Different situations will shape an also different macroeconomic scenario and associated monetary policy path. With this evaluation, the Board estimates that the risk balances for output and inflation are unbiased (figures V.4, V.5, and V.6).

Domestically, the biggest risk comes from domestic expenditure. In the baseline scenario, a substantial portion of its significant expansion rate is temporary. There is the risk that, due to the fact that such dynamism is caused mainly by the stimulative macroeconomic conditions, it can be either maintained or intensified, speeding the closing of output gaps. The medium-term impact of reconstruction works and funding thereof on aggregate demand will have to be assessed continually. In the immediate scenario, April data and the reactions from economic sectors to 27-F reduce the possibility of a generalized delay in economic recovery.

Internationally, current tensions are an important source of risk. If, as discussed in the first half 2010 *Financial Stability Report*, the weak fiscal and/or banking situation in Europe is intensified or spread to other regions, the magnitude and reach of its effects are highly uncertain, but potentially significant. Institutions such as the IMF and the European Commission have pledged their support to the most affected countries. The main central banks of the world have reinstated mechanisms to ensure the provision of U.S. dollar liquidity in the markets. Even though this has managed to reduce the stress levels of the first weeks of May, the market still reflects doubts about whether Europe's fiscal goals will be achieved. A relevant deceleration in economic activity in the U.S. or China cannot be ruled out, either. As usual, the persistence of global imbalances still poses a latent risk.

In any case, and as it has done in the past, the Board will adopt every measure necessary to address any events modifying the macroeconomic scenario and the inflationary outlook.

<sup>&</sup>lt;sup>2</sup>/ Various estimates for the neutral interest rate can be found in Fuentes and Gredig (2008).

### Box V.1: Calibration of the fan charts

The *Monetary Policy Report* presents the Board's view on the determinants of inflation in the forecast horizon, including the most probable path for monetary policy. To communicate this assessment, the *Report* outlines the domestic and external baseline scenario that will make it possible for inflation to be at 3% at the end of the two-year policy horizon.

Because events could occur that disrupt the most probable (or baseline) scenario, the *Monetary Policy Report* also takes into account the main risks of this baseline scenario and assesses the bias of the implication of these risks for inflation, domestic growth, and hence monetary policy.

To complement the description of the risks, the *Report* contains fan charts that illustrate possible deviations from the baseline forecast of CPI and CPIX inflation and GDP growth if realized events diverge from what is considered the most probable scenario (figures V.4, V.5, and V.6). The longer the forecast, the broader the fan, because uncertainty is greater for these time frames.

Methodologically, the fan charts are constructed using the historical variance of the forecast series and the balance of risks estimated by the Board, which is reflected in the bias of the distribution<sup>3</sup>/.

Up until the March 2010 *Report*, these figures were constructed by calculating the historical variances of the probability distribution based on a structural forecast model, which was fed with data through 2001.

To fully capture and incorporate developments in the volatility of inflation and growth in recent years, the Board decided to update the way the fan charts are calculated and to introduce a new estimation model<sup>4</sup>/. Additionally, starting with the current *Report*, the variances of the probability distribution will be updated in each publication.

In comparison with the previous methodology, the results show that the fan of risks is somewhat broader. This reflects the fact that inflation and growth have been more volatile in recent years than in earlier periods.

However, it is important to note that the new model for calibrating the fan charts is used for that purpose only. The forecasts in the baseline scenario are constructed using the Bank's usual models.

<sup>&</sup>lt;sup>3</sup>/ For more details, see box: Forecasts and monetary policy, *Monetary Policy Report*, January 2001, pages 12–14.

<sup>&</sup>lt;sup>4</sup>/ Alonso et al. (2010) describe the methodological changes.

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### Glossary

Commodity exporters: Australia, Canada, and New Zealand.

- Corporate Emerging Market Bond Index (CEMBI): Indicator of corporate risk, calculated by JPMorgan as the difference between the interest rate on dollar-denominated bonds issued by banks and firms in emerging economies, and U.S. Treasury bonds, which are considered risk free.
- **CPIX:** Core consumer price index. CPI w/o fuels and fresh fruit and vegetables, leaving 91% of the total CPI basket (91% in the December 2008 basket).
- **CPIX1:** CPIX w/o fresh meat and fish, regulated tariffs, indexed prices, and financial services, leaving 73% of the total CPI basket (73% in the December 2008 basket).
- **Credit Default Swap (CDS):** A derivative instrument that provides insurance against the credit risk of sovereign or corporate debt. The premiums implicit in the cost of this hedge (the CDS spread) are commonly used as an indicator of sovereign or corporate risk.
- Emerging Market Bond Index (EMBI): The main indicator of country risk, calculated by JPMorgan as the difference between the interest rate on dollar-denominated bonds issued by the government and public companies in emerging economies, and U.S. Treasury bonds, which are considered risk free.
- **EPI:** External price index, calculated using the wholesale price index (WPI) or the CPI if the WPI is not available—expressed in U.S. dollars, of the countries relevant to Chile (that is, the countries used for the calculation of the multilateral exchange rate, MER), weighted according to their share of Chilean trade, excluding oil and copper.
- **EPI-5**: EPI using the price indices of Canada, the euro zone, Japan, the United Kingdom, and the United States.
- **Expansion velocity:** For monthly data, the annualized change in the moving quarter in a seasonally adjusted series.
- Flight to quality: Phenomenon in which investors seek out safer assets, such as government bonds from developed countries, in response to a rise in the perception of risk.
- **Growth of trading partners:** The growth of Chile's main trading partners, weighted by their share in total exports over two moving years. The countries included are the destination for 93% of total exports.
- **IREM**: Wage index. The average wage paid per hour, weighted by the number of regular hours worked.
- **IREMX:** IREM w/o community, social, and personal services, EGW, and mining.
- Latin America: Argentina, Bolivia, Brazil, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay, and Venezuela.
- LCX: Labor costs (LC) w/o community, social, and personal services, EGW, and mining.
- LPI: Local price index of the economies relevant to Chile, implied in the EPI. Calculated using the WPI (or the CPI if the WPI is not available) expressed in the local currencies of the countries considered in the EPI, weighted according to their share of Chilean trade, excluding oil and copper.
- M1: Currency plus checking account deposits net of float held by the private non-financial sector plus demand deposits other than demand checking and saving accounts.
- M2: M1 plus time deposits, time savings deposits, mutual funds, mutual investment instruments maturing in up to one year and deposits in savings and credit cooperatives, less term deposits belonging to the mentioned mutual funds and savings and credit unions.

- M3: M2 plus foreign currency deposits, Central Bank of Chile notes, Treasury bonds, mortgage bonds, commercial papers, corporate bonds, other mutual fund shares, pension fund shares in voluntary savings, less mutual fund and pension fund investments in the assets that make up M3.
- MER: Multilateral exchange rate. A measure of the nominal value of the peso against a broad basket of currencies, weighted as for the RER. For 2010, the following countries are included: Argentina, Belgium, Brazil, Canada, China, Colombia, Ecuador, France, Germany, Italy, Japan, Mexico, Netherlands, Peru, South Korea, Spain, Switzerland, United Kingdom, United States, and Venezuela.
- MER-5: MER using only the currencies of Canada, the euro zone, Japan, the United Kingdom, and the United States.

MER-X: MER w/o the U.S. dollar.

- **Overnight index swap (OIS):** Contract establishing the net payment between a fixed interest rate and the daily compound interest rate of a floating reference rate, to be carried out at a specified future date.
- Parity price of gasoline: Reference cost of gasoline imports, calculated on the basis of quotes for similar conditions to Chile, in relevant markets (America, Europe, and Asia). Includes maritime shipping, the insurance rate, duties, and other costs.
- **RER:** Real exchange rate. A measure of the real value of the peso against a basket of currencies, which includes the same countries used to calculate the MER.
- Rest of Asia: Hong Kong, Indonesia, Malaysia, Philippines, South Korea, Singapore, Thailand, and Taiwan.
- VIX: Stock volatility index, based on S&P 500 options contracts.
- World growth at market exchange rate: Each country is weighted according to its GDP in U.S. dollars, published in the IMF's *World Economic Outlook* (April 2010). The sample of countries used in the calculation represents around 88% of world GDP. For the remaining 12%, average growth is estimated at 0.1% for the three-year period 2009–2011.
- World growth: Regional growth weighted by its share in world GDP at PPP, published in the IMF's *World Economic Outlook* (WEO, April 2010). World growth projections for 2009–2011 are calculated from a sample of countries that represents about 85% of world GDP. For the remaining 15%, average growth is estimated at 2.8% in the three-year period 2009–2011.

#### Abbreviations

- BCP: Central Bank bonds in pesos
- CPIG: Consumer goods price index
- CPINT: Nontradables consumer price index
- CPIS: Consumer services price index
- **CPIT:** Tradables consumer price index
- EES: Economic Expectations Survey
- FBS: Financial Brokers Survey
- FLAP: Short-term liquidity facility (Facilidad de Liquidez a Plazo)
- MPR: Monetary policy rate

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#### BANCO CENTRAL DE CHILE

Institutional Affairs Division Publications Department JUNE 2010

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