José De Gregorio: Chile's latest Monetary Policy Report

Presentation by Mr José De Gregorio, Governor of the Central Bank of Chile, of the Monetary Policy Report before the Finance Commission of the Honorable Senate of the Republic, Santiago de Chile, 6 April 2010.

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Introduction

Ms President of the Finance Commission Senator Evelyn Matthei, senators.

I am grateful for this Commission's invitation to the Board of the Central Bank of Chile to present our vision of the recent macroeconomic developments, prospects and implications for monetary policy contained in detail in our *Monetary Policy Report* of March 2010.

In the past few years, the Chilean economy and macroeconomic policies have been subjected to unprecedented tension. First we suffered the consequences of a major inflationary shock caused by great increases in the price of foodstuffs and energy, with large and costly repercussions on the economy. In a country that had left the scourge of inflation behind, the population had to endure the rigors of price increases once again. The structural characteristics of our economy – small, open, and market oriented – with few distortions in its pricing mechanisms, contributed decisively to the international price shock being heavily transmitted to domestic prices. These same characteristics also contributed to the significant reductions in inflation that were observed beginning in late 2008.

At a time when our monetary policy was working hard to prevent the propagation of the inflationary shock to other prices, we suffered the onset of an international financial crash of a magnitude not seen since the Great Depression of the 1930s. The sharp fall in demand, caused largely by a crisis of confidence and an unprecedented rise in volatility and uncertainty, caused a severe downturn in the world economy and in Chile. The downturn was especially strong in the last quarter of 2008 and the first four months of 2009. The drop in output during that period was determinant in the recession we saw last year.

Macroeconomic policies reacted strongly. However, they could do little to counteract the immediate effects of this phenomenon, not only because of the lags with which they operate, but especially because of the sudden nature of the collapse in demand. Still, and as we have previously claimed, a monetary policy based on a flexible inflation targeting regime – that allows for the accommodation of shocks over a reasonable period of time –, a floating exchange rate, a solid financial system and a fiscal policy that saved during the good times, were key to ensuring a rapid and sustainable economic recovery. Our macroeconomic policy scheme allowed us implementing an unprecedented stimulus, which has had important positive effects on output, within a context of well contained inflationary pressures.

The national economy began recovering by the middle of the second quarter of 2009. In the second half of last year, it was already growing at an annualized rate of 6 percent. Indeed, we were forecasting that 2010 growth would be around 5 percent as early as last September. The figures up to February 27 – as shown in a box in the *Report* –, indicated that the midpoint of the growth range could be closer to 6 percent than to 5 percent. Compared with our trading partners or with the average growth forecast for Latin America, this figure is around two percentage points greater. Expansionary monetary policy has played a key role in our economy's strong performance.

Nonetheless, our country was then hit by another shock. On February 27 we suffered one of the worst natural disasters in history that took a tragic toll on our country, causing loss of life, numerous injuries, forced displacement of large numbers of people, and huge material damages. Although the prospects of our country's progress have not been compromised, this

new scenario poses important challenges in every aspect of national life, including the conduct of monetary policy.

The immediate reaction of an economy to a natural disaster is highly uncertain. Historical evidence tells us little because such events are, luckily, very rare. Therefore, the evaluation of data released since the disaster must be done with extreme caution. In fact, output data for March and April will reveal very poor performance.

The reaction of the economy to a natural catastrophe in the medium term is somewhat clearer. Conceptually, this can be understood as a supply shock, as it destroys part of the country's productive capacity and cuts down the level of potential output. All other things being equal, this fact causes output gaps to close and inflationary pressures to increase. These pressures must be contained to prevent inflation from surpassing the 3 percent target over a two-year horizon. The virtue of our monetary policy regime is that it is based on achieving the objective over a medium-term horizon, which gives room for adjusting the monetary stimulus while maintaining sustainable economic growth during the reconstruction. Properly conducting this process is the challenge we face and that provides the framework for the analysis contained in this *Monetary Policy Report*.

In what follows, I will describe the latest economic and financial events, our preliminary assessment of the effects of the earthquake and tsunami on the prospects and risks facing our economy, and the way in which annual inflation will converge to the 3 percent target over the two-year horizon.

Macroeconomic scenario

As I have said before, Chile's macroeconomic scenario has suffered major changes since December's *Monetary Policy Report*. Among a large number of developments, two elements stand out. There is no doubt that the most significant is the earthquake and tsunami of last February and both their immediate and medium-term implications for growth and inflation. Additionally, before this sad event, the first release of the National Accounts for 2009 and data at hand for the period preceding the catastrophe showed domestic output and demand growing faster than previously expected.

Let me discuss both in more detail. Incoming information since the statistical closure of our December *Report* suggested that the foreseen recovery of domestic output and demand was not only materializing but doing so faster than anticipated. GDP dropped 1.5 percent in 2009, less than the 1.9 percent drop that had been forecast in December. In the fourth quarter, GDP actually rose 2.1 percent annually. These figures showed a faster recovery for those industries more closely linked to domestic demand, particularly manufacturing and retail. In the second half of the year the economy grew at an annualized rate of around 6 percent, narrowing the output gap more than December's forecast (figure 1). Domestic demand also fell less than forecast in December. Data for the last quarter of 2009 stood out because of the performance of consumption and investment in machinery and equipment. In addition, inventories for the year as a whole had a milder depletion than previously expected.

Information available prior to the earthquake and tsunami pointed to a continuation of the strong evolution of output and domestic demand. Sales indicators showed an upward trend and indices of consumers' and firms' perceptions were at optimistic levels (figure 2). The labour market was also picking up, with increased employment and an evolving composition by occupation.

Domestically, financial conditions showed early signs of normalizations, with lending increasing from month to month, low interest rates and credit standards that were more expansionary during the fourth quarter of 2009 than during the preceding quarter (figure 3).

The value of the peso has fluctuated significantly since December, partly owing to global phenomena, but largely due to domestic factors. After continuing with the process of

appreciation that began in early October, the peso peaked at the beginning of January. It then depreciated sharply, driven by increased tensions in world financial markets and by changes in the hedging strategies used by pension funds. The depreciation trend reversed during the course of February due to a decline in external tensions and a change in pension funds' purchase flows. After the earthquake and tsunami, the peso experienced further fluctuations due to changes in private expectations about how the reconstruction would be financed and how insurance claims would be paid. The importance of idiosyncratic factors is apparent in multilateral indicators that measure the peso's movements with respect to the dollar and other currencies, which are showing smaller variations than those of the peso/dollar exchange rate (figure 1).

Annual CPI inflation returned to positive territory earlier than what had been foreseen in December (figure 2). Core measures, in particular the CPIX1, continued to display low month-on-month variations. The change in methodology used to measure the CPI, which changed from a basket for the Metropolitan Region to a nationwide survey, had its main effects in January, when CPI inflation exceeded the rise anticipated by the market.

Additionally, the international scenario relevant for Chile became more benign. Economic activity has continued to recover globally, with Chile's trading partners consolidating their forecasts for strong economic growth. Growth projections for 2010 and 2011 have been revised upward and commodity prices began to rise once again (figure 6). Perceived risk has continued decreasing in financial markets, fueling an increase in stock prices, although they remain below their pre-crisis peaks. In the past few months, the main source of stress in these markets has been concern over the fiscal situation of European economies. Eurozone authorities and the IMF have agreed on financial support mechanisms and have announced major adjustments, particularly in Greece, thus helping reduce financial tensions. However, this issue is still cause for concern in the external scenario.

Around the world, central banks have continued withdrawing gradually the unconventional monetary policy measures. Nonetheless, monetary authorities maintain the emphasis on the gradual nature of their interest rate normalization processes, within a context where core inflation figures remain well contained in the industrialized world (figure 7). Market expectations about future increases in policy rates have been postponed. Overall, some countries continue with or have begun a process of increases in their policy rates.

As discussed in a box in this *Report*, just adding up the above elements configured a medium-term scenario where inflationary pressures and inflation would exceed December expectations. A counterfactual forecast exercise that considers developments only up to February 26 yields that the foreseen growth range for this year would have been around one percentage point higher. Output gaps, besides starting at a smaller level than had been projected, would also close sooner, with corresponding effects on inflation. In the medium term, all these changes would have shaped a scenario where inflation would have risen to 3 percent or more over the course of this year, and would have approached the 3 percent target from above in a two year horizon.

The response of monetary policy in this hypothetical scenario is unambiguous. The pace of monetary policy normalization would have been faster than the one foreseen in December's *Report*. Indeed, it is likely that inflation convergence to the target would have been consistent with a higher level of the MPR beginning in midyear and throughout the policy horizon.

It was in this context that the earthquake and tsunami hit. Their effects on the macroeconomy are relevant for the conduct of monetary policy. First, they caused a loss in capital stock that affected the economy's productive capacity and therefore the evaluation of output gaps, inflationary pressures and the monetary policy reaction. Second, they are having an impact on output, demand and inflation in the very short term, mostly due to the disruption of retail and manufacturing activity. Finally, there will be an additional effect associated with the public and private reconstruction efforts. The ultimate impact on growth and inflation will

depend, among other factors, on the magnitude, composition and timing of those efforts, on the sources of funding that are used and on the focus of the related expenditures.

As for the size of the loss in productive capital stock, the Board's working assumption for this *Report's* baseline scenario is that the catastrophe destroyed 3 percent of the economy's net capital stock. Such an estimate, which is detailed in a box inside the *Report*, is based on the damage survey published by the government on March 23 and on the historical ratio between the gross value and the net value of the capital stock.

To clarify this calculation, it is important to explain how this capital stock is measured. First, the gross capital stock equals the value of assets used in the productive process, valued "as new". In other words, the nominal gross value of the capital stock can be proxied by the replacement cost. Second, the net value of the capital stock is the gross value of the capital stock minus the assets' depreciation. This distinction between gross and net value of capital is important, because the latter – the net value – is what matters when measuring the economy's productive capacity and, therefore, trend GDP, the output gap and inflationary pressures.

According to the survey of damages from the earthquake and tsunami delivered by the government on March 23, the cost to replace the destroyed capital stock amounts to 20.94 billion US dollars. Following the reasoning described above, this figure is the equivalent to the gross value of the lost capital stock. How then can we estimate the net value of the capital destroyed? Estimates in our national accounts indicate that between the years 2000 and 2008 the net value of the capital stock was around 63 percent of the gross stock. Applying this percentage directly, we estimate that the damage to the net capital stock, consistent with the figure disclosed by the government, is 13.2 billion US dollars. If we consider that the net capital stock amounted in 2009 to an estimated 435 billion US dollars, the aforementioned loss is equivalent to nearly 3 percent of the total.

Therefore, given a loss of 3 percent in the net capital stock, the Board estimates that during this year the level of trend GDP will fall 1.0% to 1.5% because of the catastrophe.

The magnitude of the short-term impact of the natural disaster depends on the share in national GDP of the hardest hit regions, the sectoral composition of production by region and the duration of downtime in productive processes, among other factors. In 2008, Regions VI, VII and VIII produced nearly 16% of national GDP, mostly concentrated in the manufacturing sector. As for the labour market, the three regions generate almost one fifth of national employment. The Board estimates that the disaster had a negative effect of about 3 percentage points on first-quarter GDP growth. In the second quarter, assuming a gradual normalization of productive processes, the effect is reduced to around 2 percentage points. These assumptions are based on a scenario in which the reduction in output is concentrated in Regions VI, VII and VIII, and primarily affects the manufacturing sector. It is important to consider that the difficulties caused by the catastrophe in the making of spending decisions may hold down demand, and it is likely that some short-term effects will be seen in consumption and inventories. With respect to inflation, problems in production or distribution will probably increase the price level immediately, an effect that should be temporary for the most part.

The usual economic statistics for March could give a better approximation of the immediate effects of the earthquake and tsunami. Overall, the complexity of an accurate reading of the data must be taken into account, partly due to difficulties and delays in the collection of information used in the construction of official statistics. Actually, the task of gathering February's information – carried out in March – has already proven problematic.

In the medium term, the dynamics of demand, economic activity and output gaps will depend not only on usual concerns about the world economy, but also on the size and specific characteristics of reconstruction efforts. As a working assumption, the Board considers that the additional investment as a consequence of the catastrophe will be equivalent to nearly one percentage point of GDP in 2010. This effect will be concentrated in the second half of

this year and will increase towards 2011. This considers both new investment and reallocated resources from other projects. The materialization of these investments will be favoured by their high marginal productivity and because part of the loss in net capital stock was insured. In the case of the public sector, according to announcements from the Executive, the baseline scenario considers that the structural deficit of 2009 was 1.2% of GDP and that structural fiscal balance will be attained towards the end of the current Administration's term. Budgetary reallocations this year will amount to about US$700 million, while the rebuilding of destroyed public infrastructure will be spread out over four years. As a working assumption, the Board estimates that the burden of financing the public and private reconstruction efforts will be distributed equally among its various sources.

Considering the economic situation leading up to the disaster together with its short and medium term effects, the Board estimates that during this year GDP will grow between 4.25% and 5.25%. This range is somewhat lower than was forecast in December. The downward revision for this year is based on the fact that the immediate economic effects of the earthquake and tsunami will exceed the increases generated by the reconstruction efforts (table 1).

In the baseline scenario of this *Report*, the sum of the effects of the catastrophe, the changes in conjunctural data and other specific elements shapes a scenario where inflation will converge to 3% sooner than was forecast in December. The change in the medium-term inflation scenario is determined by the effects of the earthquake and tsunami on productive capacity and by the persistence and magnitude of a potential contraction in private consumption. In the baseline scenario, annual CPI variation will exceed 3% in the second half of this year, standing around 4% for a few months. It will later fluctuate around 3% through 2011 until the end of the relevant projection horizon, which is currently the first quarter of 2012. Annual CPIX1 will show a more gradual convergence to 3% (table 2). All this within a substantially more uncertain setting than before.

This scenario rests on other working assumptions. First, it is assumed that in the long term the real exchange rate (RER) will be similar to its current level. This assumption is made considering that, with the nominal exchange rate and parities prevailing at the statistical closure of this *Report*, the RER is consistent with its long-term fundamentals. Another working assumption is that inflationary pressures from the labour market will generally not experience any significant change with respect to current indicators. Finally, the external scenario will continue to add momentum to the economy and imported inflationary pressures will remain contained. World growth projections for the period 2010–2011 have been revised upward and commodity prices will remain near current levels (table 3).

The above projections include the assumption that monetary policy will remain very expansive in the following quarters. Towards the end of the projection horizon, the monetary policy rate will converge to a level similar to the one indicated by March's Economic Expectations Survey. However, its pace of normalization will be somewhat faster than what was considered in that survey. It is important to consider that, until the last week of February, market expectations for the MPR indicated that its upward phase would begin in the second quarter and that the rate would stand between 2.5 and 3.0 percent by the end of the year. After the earthquake and tsunami, the expectations of analysts and survey respondents about the level of the MPR and its velocity of increase fell. In particular, the expected level for the MPR for the end of 2010 stands in the 2.0–2.5 percent range (figure 8).

As usual, the scenario outlined here is subject to several risks. Compared with December forecasts, the recovery process and development prospects for the Chilean economy have not been hindered by the earthquake and tsunami; however, in the short run, the risk scenarios are dominated by the catastrophe. Particularly relevant is the medium term effect of the aggregate demand impulse originating in the reconstruction works that will be carried out. The magnitude, composition, speed, form of financing and focus of these reconstruction expenditures can have substantial effects on the baseline scenario in terms of output,

inflation and the performance of financial markets. There are also risks associated with the time that it will take for productive activities to return to normal and for agents to materialize their expenditures. This has a direct incidence on the assessment of the immediate effects of the catastrophe in the first and second quarters. In any case, this risk is partly mitigated when considering that before the earthquake and tsunami, domestic output and demand were already showing a higher velocity than had been forecast.

The external scenario shows a better outlook, although some risks persist. The fiscal situation of developed economies – especially in some European countries – is cause for concern because of its effects on the perception of risks and on the financial system, and its possible implications on the path of recovery of global growth. There are also risks associated with the administration of monetary stimulus packages, either if they are withdrawn sooner than necessary – considering that some countries' financial systems remain weak – or later than advisable. As usual, the persistence of global imbalances entails risks because of both strong capital inflows to emerging economies and significant changes in the evolution of currency parities.

The realization of some of these risk scenarios will have direct consequences on the country's growth and inflation forecasts. Considering the issues described above, the Board believes that the balance of risks for inflation and growth is unbiased. However, on this occasion, the earthquake and tsunami introduce unusual uncertainty, particularly regarding economic activity data for March and April. Thus, the Board considers that the balance of risks for growth is biased downwards in the very short term. Accordingly, the Board will continue to use its policies with flexibility so that projected inflation stands at 3% over the policy horizon.

Conclusions

I would like to wrap up this presentation with some brief reflections. Fifty years ago, in May 1960, our country was also hurt by a big catastrophe. The earthquake in Valdivia caused the destruction of a large area in central-southern Chile, comparable only to the recent disaster. Human and material losses were aggravated by a severe macroeconomic maladjustment following the disaster. Weak fiscal accounts and monetary management led to neglect control of inflation, which soared in the following years.

Our current situation is certainly different. Fiscal accounts are in order, and our monetary policy scheme, as I have already mentioned, has the virtue of allowing us to accommodate shocks without compromising the inflation objective. Although so far we have no statistics and preliminary data will be known in the coming days, it is possible that the immediate reaction to this tragedy will include a temporary increase in inflation and a sharp deceleration of economic activity, both as consequences of the major disruptions in productive processes and commercialization channels.

Even before knowing these figures, what our monetary policy strategy suggests and allows us to do, is to avoid overreacting to short-term fluctuations. The conduct of monetary policy, especially in moments of uncertainty like the one we are currently experiencing, must anticipate longer-term tendencies. Thus, while in the first and second quarter output will not be as dynamic as it was through January, in the medium term the reconstruction efforts and the normalization of output and demand will provide a strong impulse to the economy. The marginal productivity of the capital stock that must be recovered is high, and all the activities associated with the production of non-tradable goods, such as construction, will face a large increase in demand. The main contribution that monetary policy can make is to ensure a stable environment for reconstruction works to proceed without straining our economy.

Evidence found in the international literature indicates that natural disasters have permanent negative effects only in low-income economies. It also shows that, although these are essentially exogenous phenomena, the magnitude of their effects is endogenous to the

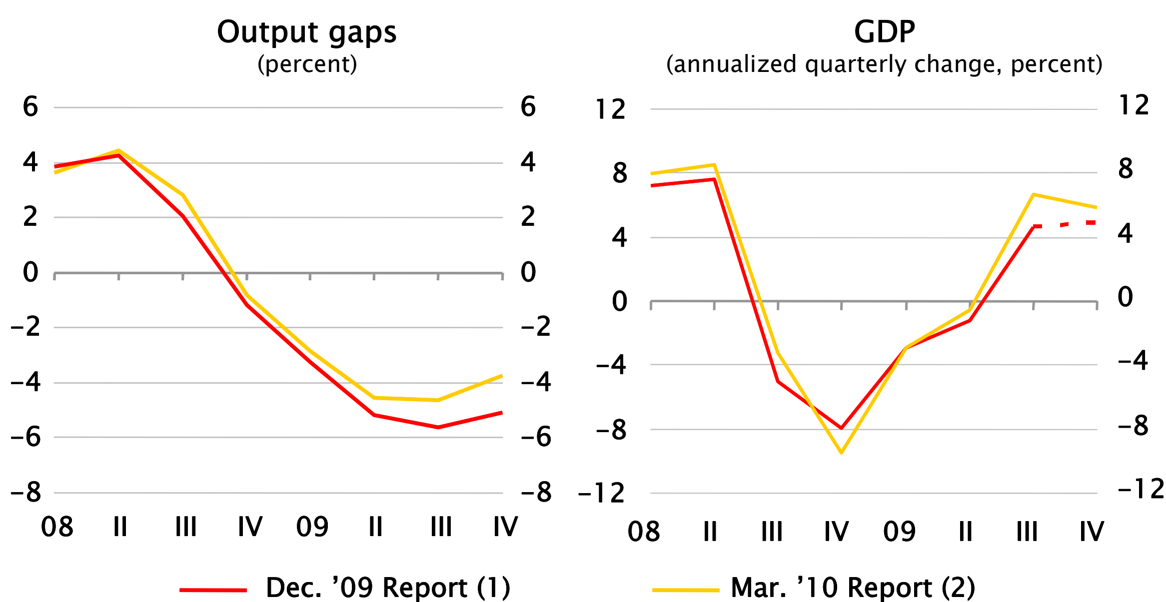
scenario, with factors such as the quality of policies and institutions tending to mitigate the damages. Chile has solid institutions and an economic policy framework that allows for the implementation of any measures necessary for reconstruction. As a result, the catastrophe of last February 27 does not compromise our country's prospects for progress and development.

The projections presented in this *Report* foresee that this year the economy will grow again, and that output gaps will narrow further until closed in 2011. Monetary policy will remain very expansive in the coming quarters, which will decisively support the reconstruction process. At the same time, however, it will adjust in order to ensure that the process will take place within a context of stability and consistency with the inflation target.

We should bear in mind that history, especially the last couple of years, has taught us the importance of price stability and how painful inflation is for the less privileged segments of our society. In addition, history has taught us that with volatile inflation comes a more volatile business cycle, which is very costly in terms of employment and output. Because of this, it is essential that the monetary stimulus complies with its role of backing the reconstruction efforts within a context of stable prices. Nothing will be gained by fostering a reconstruction that at the end will only translate into higher inflation with no benefits on the productive side and with negative implications for key relative prices such as the real exchange rate and real interest rates. That could become the prelude to costlier adjustments in the future. Our monetary policy has already given proof of its high capacity to adapt to drastic changes in macroeconomic conditions and this latest shock will not be the exception.

Thank you very much.

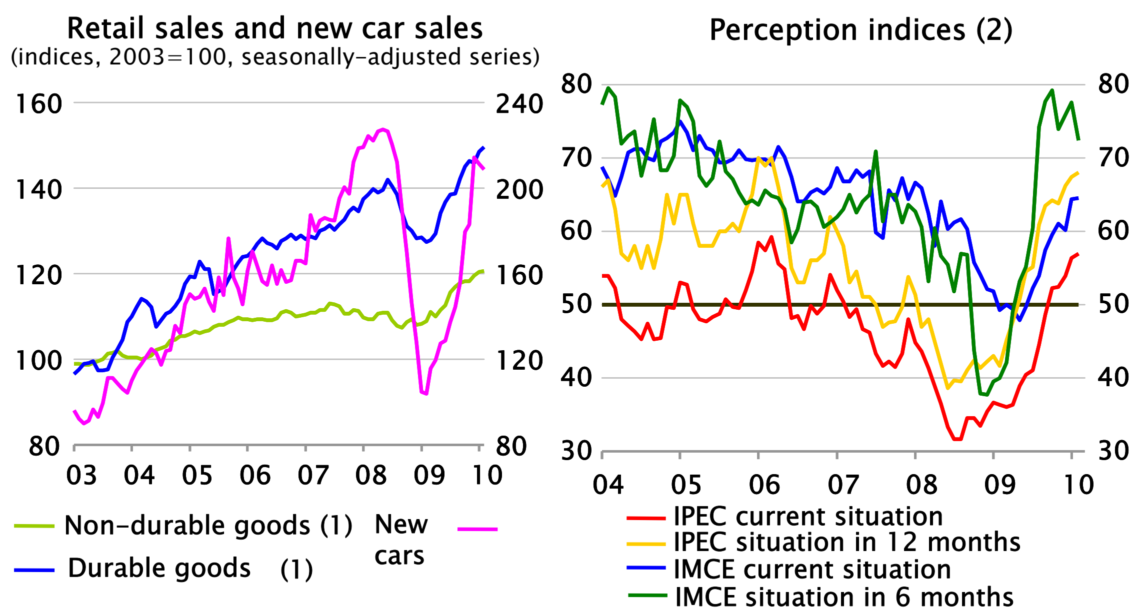
Figure 1



(1) Fourth quarter of 2009 indicators correspond to forecasts in the baseline scenario.
(2) Closing of National Accounts as published in March.

Source: Central Bank of Chile.

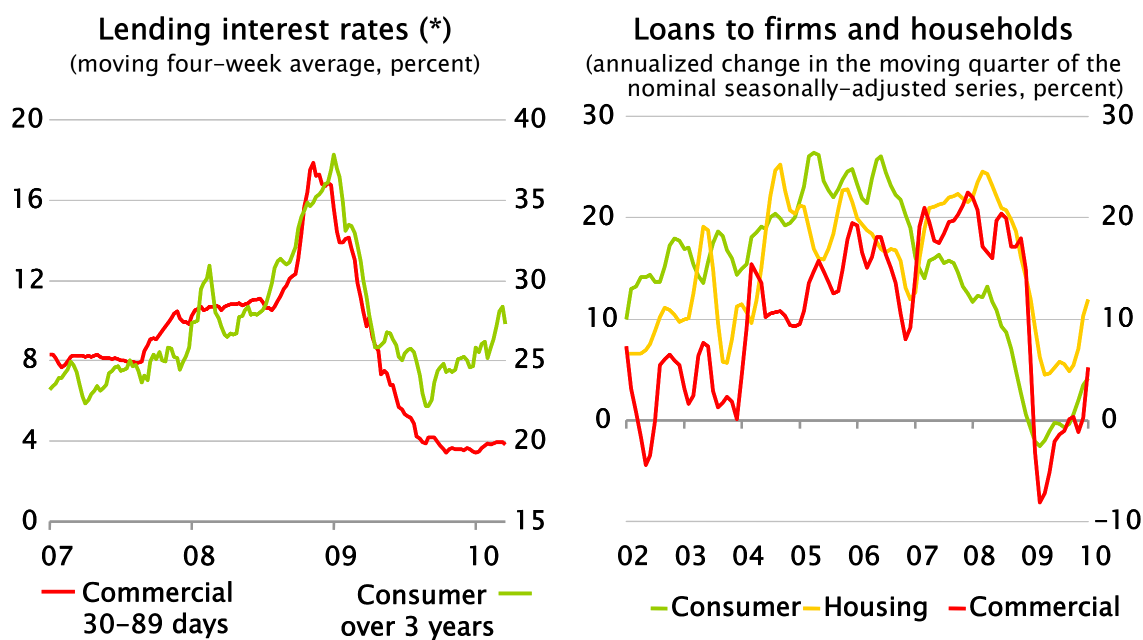
Figure 2



(1) Sold during moving quarter. (2) Figure above (below) 50 points indicates optimism (pessimism).

Sources: Adimark, car association *Asociación Nacional Automotriz de Chile*, Central Bank of Chile, chamber of commerce *Cámara Nacional de Comercio* and *ICARE/Universidad Adolfo Ibáñez*.

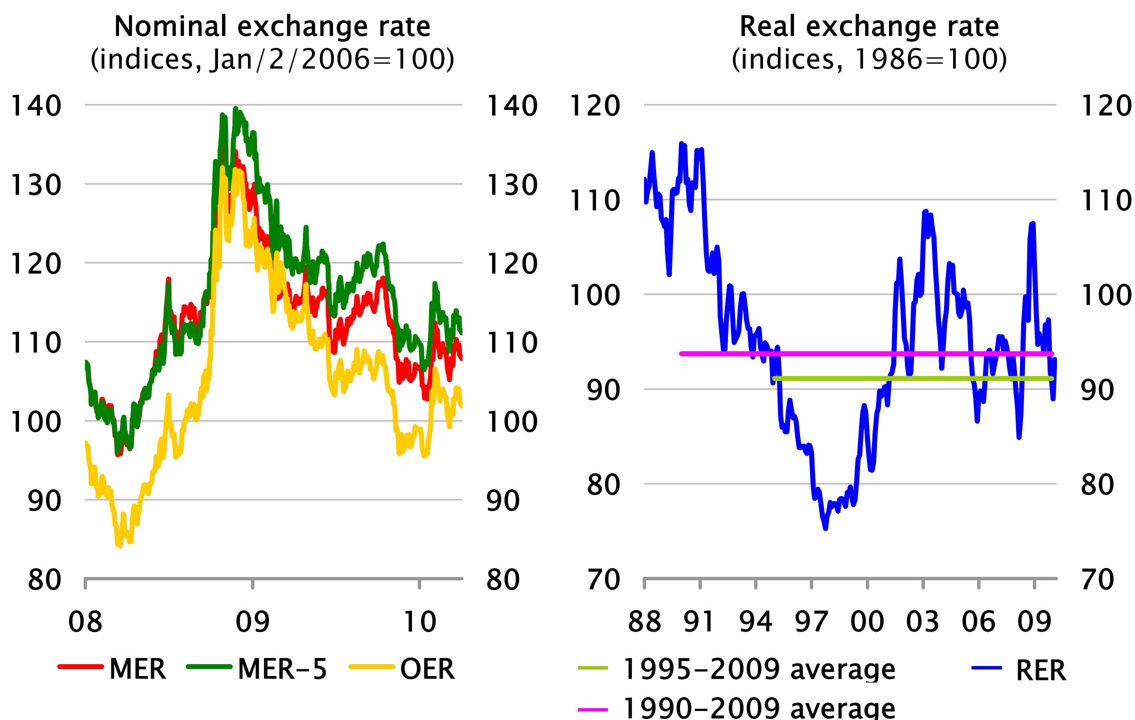
Figure 3



(*) Weighted average rates.

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

Figure 4

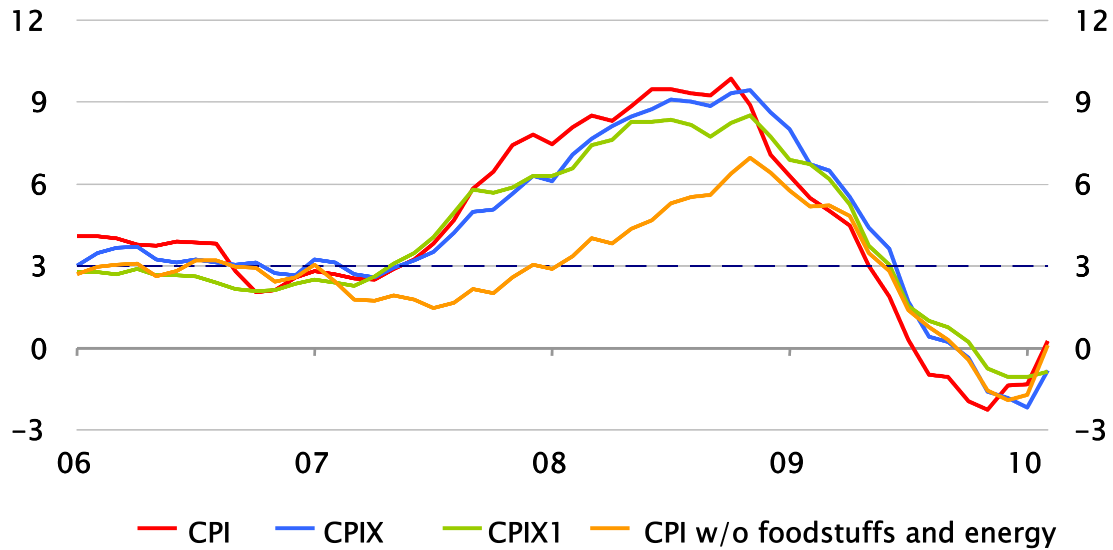


Source: Central Bank of Chile.

Figure 5

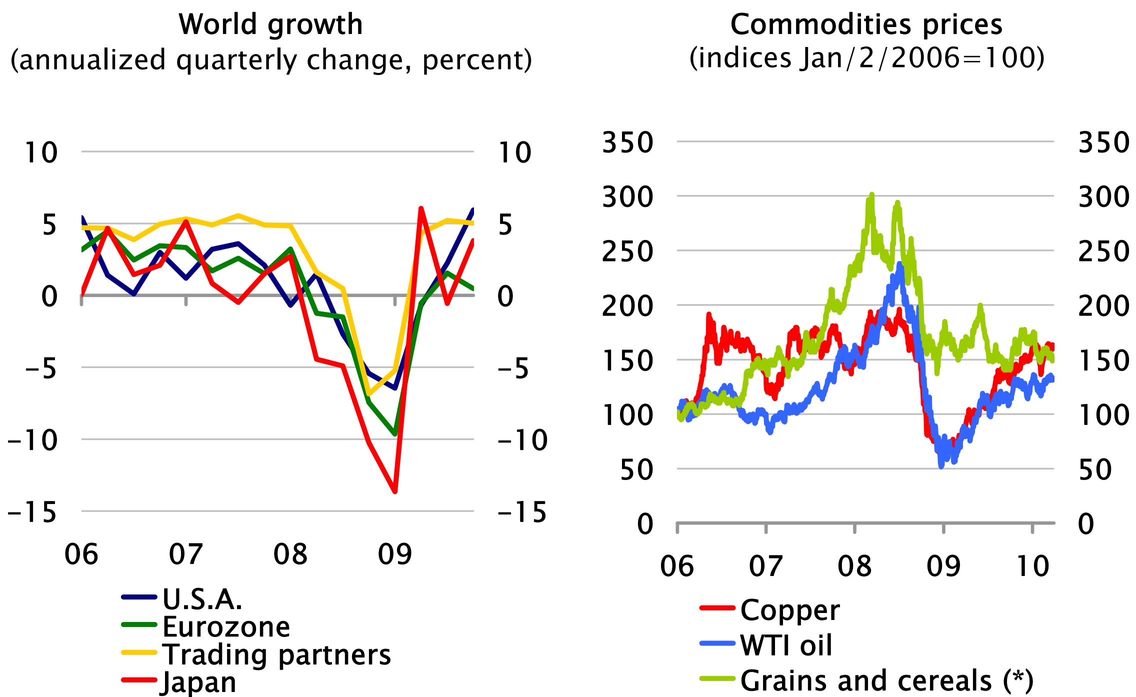
Inflation indicators

(annual change, percent)



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

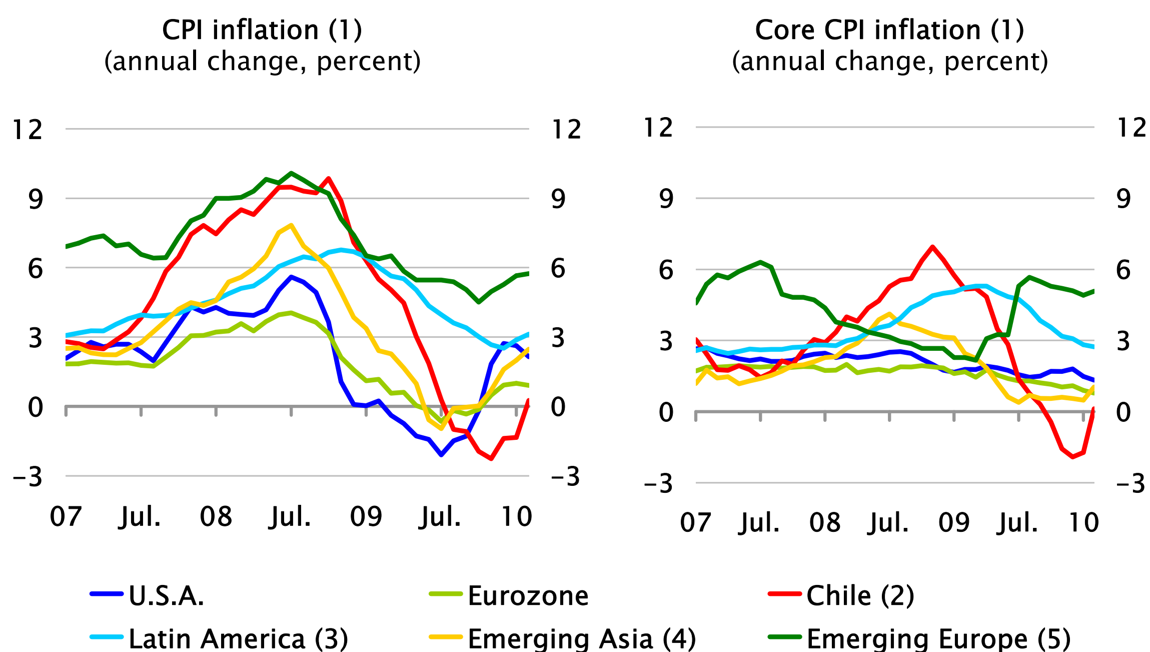
Figure 6



(*) S&P GSCI index for grains and cereals.

Sources: Central Bank of Chile based on the statistics institutes of each country, Bloomberg, Consensus Forecasts, and International Monetary Fund.

Figure 7



1) Geometric average of headline inflation and core inflation of a sample of countries from each region. (2) Chile's core CPI inflation is CPI without foodstuffs and energy. (3) CPI includes Brazil, Colombia, Mexico and Peru. Core CPI includes Mexico and Peru. (4) CPI includes China, Indonesia, Korean Rep., Malaysia, Singapore, Thailand and Taiwan. Core CPI includes Korean Rep., Thailand and Taiwan. (5) CPI includes Czech Rep., Hungary, Russia and Turkey. Core CPI includes only Hungary.

Sources: Central Bank of Chile, Bloomberg, CEIC Data and National Statistics Bureau (INE).

Table 1

Economic growth

(annual change, percent)

	2008	2009	2010 (f)
GDP	3.7	-1.5	4.25-5.25
Domestic demand	7.6	-5.9	12.4
Domestic demand (w/o change in inventories)	7.5	-2.8	7.8
Gross fixed capital formation	18.6	-15.3	14.8
Total consumption	4.0	1.8	5.7
Goods and services exports	3.1	-5.6	3.6
Goods and services imports	12.2	-14.3	22.1
Current account (% of GDP)	-1.5	2.6	-1.1

(f) Forecast.

Source: Central Bank of Chile.

Table 2

Inflation

(annual change, percent)

	2008	2009	2010 (f)	2011 (f)	2012 (f)
Average CPI inflation	8.7	1.6	2.4	3.0	
December CPI inflation	7.1	-1.4	3.7	2.9	
CPI inflation in around 2 years (*)					3.0
Average CPIX inflation	8.4	2.8	1.2	3.0	
December CPIX inflation	8.6	-1.8	3.0	3.2	
CPIX inflation in around 2 years (*)					3.2
Average CPIX1 inflation	7.8	2.8	0.8	2.9	
December CPIX1 inflation	7.7	-1.1	2.5	3.1	
CPIX1 inflation in around 2 years (*)					3.1

(f) Forecast.
(*) Inflation forecast to the first quarter of 2012.

Source: Central Bank of Chile.

Table 3

Main international baseline scenario assumptions

(annual averages)

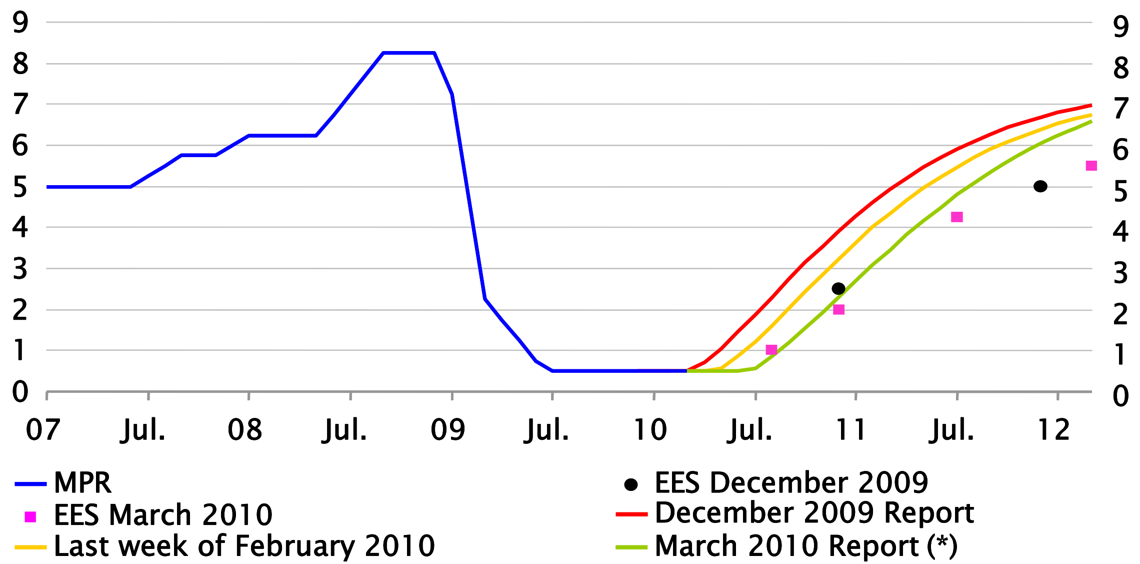
	2008	2009 (e)		2010 (f)		2011 (f)	
		Dec.09	Mar.10	Dec.09	Mar.10	Dec.09	Mar.10
World GDP at PPP (annual change, %)	3.0	-0.8	-0.6	3.8	4.3	4.2	4.4
World GDP at mkt exchange rate (annual change, %)	1.9	-1.8	-1.7	3.1	3.5	3.4	3.5
Trading partners' GDP (annual change, %)	3.0	-0.8	-0.8	3.6	4.0	3.8	3.8
WTI oil price (US$/barrel)	100	62	62	80	82	86	85
LME copper price (US$cent/lb)	316	230	234	270	310	270	290
Terms of trade (annual change, %)	-16.1	0.3	4.1	4.7	12.5	-2.3	-5.6
External prices, in US$ (annual change, %)	12.2	-6.0	-6.1	9.6	3.7	1.0	3.0

(e) Estimate.
(f) Forecast.
Source: Central Bank of Chile.

Figure 8

Expected Monetary Policy Rate

(percent)



(*) Estimated using average financial asset prices over the last 2 weeks up to 29 March 2010.

Source: Central Bank of Chile.