# Vittorio Corbo: Monetary policy and international financial markets

Presentation by Mr Vittorio Corbo, Governor of the Central Bank of Chile, in the Conference "Economic Projections – Chile: Economic Growth with Social Inclusion" organized by the Americas Society/Council of the Americas, Amcham Chile, and El Mercurio newspaper, Santiago, 28 August 2007.

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First and foremost, I want to thank the Council of the Americas, Amcham Chile, and El Mercurio newspaper for inviting me to participate in this event. I will begin my presentation by discussing the recent performance of the Chilean economy, to then address the developments of world financial markets over the last weeks and close with a review of the way the monetary policy framework operates in Chile and what can be expected from it at a time like this.

### Performance of the Chilean economy

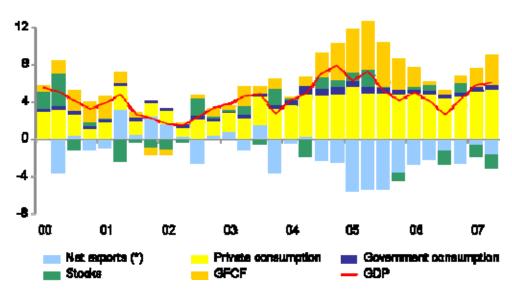
After unexpected slowdown of the third quarter of last year, the Chilean economy resumed strong expansion. Annual (year-on-year) GDP growth was 6.1% in the second quarter, outperforming the first quarter's 5.8% and above projections in the latest Monetary Policy Report. This expansion has relied on good external conditions, a stronger fiscal impulse – associated to the more permanent portion of the copper price increase – and favorable financial conditions that partly reflect an stimulating monetary policy.

Regarding domestic demand, it is worth highlighting investment's renewed dynamism, with annual growth rate of 13.9% in the second quarter of this year, in contrast with the meager 2.6% of the second half of 2006. Such a strong figure is based on strong corporate profits, favorable financing conditions, the progressive exhaustion of output gaps and good prospects for growth. Private consumption remains robust, with annual growth in a range of 6.5%-8% for several quarters already. Consumption rests on the sustained growth in salaried employment, a substantial drop in the unemployment rate and favorable financial conditions. This, despite higher energy prices and deteriorated consumer expectations.

Exports of goods and services have also continued to gain strength, going from an annual average growth rate of 4.3% in the second half of 2006, to 9.4% the first quarter of this year, to 11.8% the second quarter. Among these, agricultural-forestry and manufacturing products stand out, with volumes growing around 10% annually in the first half this year (Figure 1)

Figure 1: Contribution to GDP growth

(real annual change, percentage)



(\*) Goods and service exports minus goods and service imports.

Source: Central Bank of Chile.

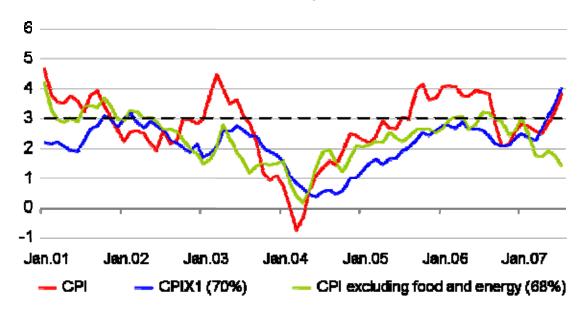
Renewed dynamism of output has come hand in hand with a remarkable improvement of the labor market, with significant job creation and an important reduction in the seasonally-adjusted unemployment rate.

The main news has come from the inflation side. In effect, in the past six months, the prices of non-perishable foods (e.g., grains, oils, powdered milk) have shown sharp rises. More recently, there was another unexpected and unusually large rise in perishable foods, which was weather related and should be temporary, together with increases in energy prices rates, including liquid fuels and electricity. These factors combined have resulted in a large increase in the different measures of inflation, bringing CPI and CPIX1 (a measure of core inflation that excludes perishable foods, energy and regulated tariffs) annual change close to 4%. By contrast, labor cost pressures and other inflation trend indicators are nearer to 3%. Similar problems (i.e., increased inflation due to sudden rises in food prices) have been recently suffered in such diverse countries as South Africa, Brazil, Colombia and China. It is interesting to note that a price measure that excludes foods and energy prices, similar to the CPI core inflation calculation applied by the US, shows annual change below 2% in July (Figure 2).

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Figure 2: CPI, CPIX1 and CPI inflation excluding food and energy

(annual change, percent)



Note: In brackets participation in total CPI basket.

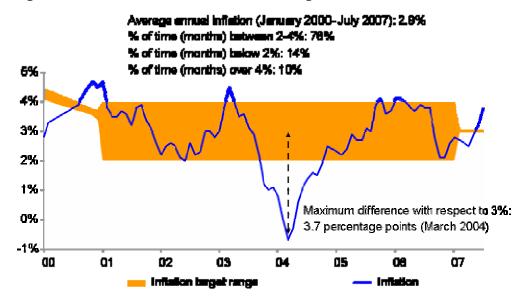
Sources: Central Bank of Chile and National Statistics Bureau.

This phenomenon is not new. Given the supply-side or specific price shocks, the 2000s have seen annual inflation drop below 2% and climb above 4% during temporary episodes.

In this picture of higher CPI inflation due to various supply shocks, short-term inflation expectations have increased substantially, but remain close to 3% for medium and long term.

Because monetary policy affects inflation with lags that are largely unknown, but long – usually more than a year – not much can be done to reverse a short-term inflation jump. Therefore, the Central Bank must be attentive to steer monetary policy to avoid second-round effects on other prices, wages, or private sector inflation expectations due to supply shocks, that could end up driving inflation persistently away from the 3% target. Of course it also has to foresee the consequences of the business cycle over inflation. It also The efficacy of this monetary policy over the 2000s is evident (Figure 3).

Figure 3: Deviation of inflation from its target



Source: Central Bank of Chile.

#### The international financial turmoil

Regarding recent developments in world financial markets, the first thing to do is recognize that the adjustment they are undergoing is part of an overdue normalization process in credit risk spreads for a large variety of securities, and volatility levels of the riskier assets prices (Figure 4). In fact, for some time our Financial Stability and Monetary Policy reports have stated that a correction in risk premiums and an increase in market volatility were to be expected, because the good conditions would not last indefinitely, in particular given the monetary policy normalization period in the main economies that was already prolonging for some years. It is very likely that today we are witnessing precisely that correction in risk valuation and volatility.

Figure 4: Sovereign risk premiums and volatility

(basis points)



(1) Risk premium on developed market corporate bonds with less than investment grade risk ratings (CCC to BB), according to Standard and Poor's. (2) Considers implicit volatility on option from US S&P 500 index. Sources: Bloomberg and JP Morgan Chase.

However, even if this is a normalization process, the dynamics, deepness and extension of market adjustment are difficult to foresee. As with earlier episodes of sharp increases in risk premiums and market volatility, some market segments and specific agents have found themselves unexpectedly in weaker financial positions, which generate tensions and doubts about particular entities' risk vis-à-vis their counterparties. In this sense, beyond the slow recovery of the past week, the risk remains being a worsening of the international financial scenario if this correction deepens, with more severe implications on the functioning of the principal markets and global financial intermediaries and, ultimately, on world economic activity.

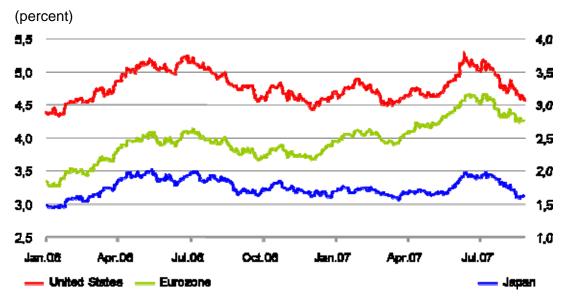
Although this correction was triggered by the deterioration of sub-prime mortgage debtors' payment capacity in the US, what is surprising is that the exposure to such deterioration has spread to financial entities elsewhere, causing tension in the trade securities market and even in the global interbank market. These mortgages were originated by companies specializing in mortgage loans; then they were sold to institutions that packed them as bonds collateralized by payment flows associated to these mortgages, to higher quality mortgages and to other credits. These bonds are known as ABS. With the increase in sub-prime mortgage delinquency rates, widespread uncertainty arose regarding the value of the ABSs because of lack of clear information on their content of sub-prime mortgage credits and the increase in payment delays. These ABSs are in the balance sheets of non-banking financial entities (NBFEs) throughout the world, such as hedge funds agencies, or financial vehicles tied to banks, the latter particularly in Europe.

Although the main global banks do not seem to be directly and significantly exposed to this component of mortgage loan risk in the US, they do have indirect exposures through credit lines or guarantees to NBFEs and in Europe they also have direct exposure to financial vehicles or conduits that they own. As these ABSs are illiquid, no direct information exists on their market value, which restricts the access to the market for NBFE trade securities that have – or are suspected to have – ABSs backed by sub-prime mortgage loans among their assets. This uncertainty has eroded insurance companies and pension funds' appetite for buying NBFEs' trade securities, which has substantially raised costs and reduced access to financing, hindering the renewal of their liabilities. Thus, the central point of this adjustment is located in the ABS-backed trade securities' market and in NBFEs that have – or are suspected to have – large investments in ABSs backed by sub-prime mortgages.

In addition, in face of the difficulties to renewing their traditional funding sources and investors' redemption claims, occasionally these agencies or funds have been forced to make aggressive changes in their investing and financing strategies by selling off assets, using their commercial banking credit lines, raising capital contributions or resorting to sponsor banks' guarantees. In parallel, commercial banks have encountered difficulties in transferring to other investors the credit risk assumed when financing private equity funds engaged in leveraged corporate purchases.

In sum, in this scenario of increased uncertainty regarding the value of some assets, demand for safer financial instruments has risen sharply, with increases in risk premiums and large downward corrections in the interest rates of government bonds (Figure 5).

Figure 5: Long-term interest rates



Source: Bloomberg.

The measures adopted in the past few days by central banks in industrial economies to pour liquidity into banking systems have been directed at both preventing financial swings to affect monetary policy conduction in the main economic zones and to facilities the operation of credit markets. Rather than sustaining the valuations of asset prices, the main central banks focus on ensuring that the process of credit risk revaluation can proceed without jeopardizing access to funding and liquidity of solvent entities which, if occur at a generalized scale, could have negative effects on payments' stability, economic activity and the financial system at large. So, as time goes by, information on the quality of ABSs held by agencies and hedge funds should become clear, together with the materialization of equity contributions and/or liquidation of funds that have lost a big portion of their capital. This process is currently under way.

Although this process of financial market normalization is part of a necessary correction, it is neither easy nor prudent to express what this correction will finally be like. What can be said with some certainty, however, is that volatility will be here for a while and will be associated to lost or reduced access to financing from non-banking financial institutions or even particular banks.

The longer and deeper this adjustment, the larger the effects on financial markets and the world economy overall. The most likely final effects will be increased risk premiums (an inevitable or even healthy correction), a deeper and more prolonged adjustment in the US housing market, and some less economic growth in the US and in the world. Evidently, a deepening of these problems could be more hurtful for global growth and the commodity prices.

This adjustment comes on after a long period of very expansionary monetary policies in industrial economies that had begun a normalization process. But still, one should not overlook the fact that this correction finds the world economy close to completing the best five-year growth period since the early seventies, with large commercial banks in a very solid position, enterprises with good profits and the main industrial economies with flexible exchange rate regimes, controlled inflation and central banks that have gained great credibility for their commitment to price stability. In addition, a significant number of important emerging economies are in a very favorable situation of liquidity and external solvency, with more flexible foreign exchange rate systems and low inflation rates.

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## The Chilean economy in this new financial setting

It is premature and bold to try to quantify the possible effects on the economy of this adjustment that is under way. Pass-through channels will be rises in risk premiums, changes in the future path of monetary policy interest rates in industrial economies, adjustments in government bonds' interest rates of industrial economies, a slowdown in the US and the world economy and a drop in commodity prices. What we do know is that Chile has built through the years a framework of policies and institutions that has not only favored price stability and reduced output volatility, but also increased the economy's resilience to shocks generated by adjustments occurring in international financial markets as have been observed recently.

Such a framework includes an autonomous Central Bank that conducts an inflation-targeting monetary policy under floating exchange rate, a fiscal policy whereby public spending is tied to the government's permanent income, accumulating foreign exchange assets abroad during times of copper-price bonanza, thus contributing to enhance fiscal solvency, stabilize the real exchange rate and smooth the business cycle.

Finally, Chile's banking regulation and supervision system has helped develop a strong and safe banking system.

This framework of macro/financial policies and institutions have allowed the country to take big steps in achieving economic stability, with inflation around the target, surpluses in fiscal balances and in the current account of the balance of payments in times of bonanza, the real exchange rate aligned with its fundamentals and output growing around trend. In addition, this framework of policies and institutions imprints a countercyclical character of fiscal policy and favors the use of countercyclical monetary policy.

In particular, in this setting monetary policy reacts to deflationary effects of a weakened economy and vice-versa, so it naturally helps to stabilize the effects of demand-side shocks.

In the present conjuncture, this macro/financial policy framework should favor the way the Chilean economy absorbs swings in the international scenario. Two factors contribute. First, with inflation expectations well anchored around the target, the disinflationary effect of idle capacity (i.e., a negative gap between output and trend output) originating in less favorable external conditions, would naturally lead to a countercyclical monetary policy. At the same time, the floating regime permits the real exchange rate to adjust to changes in the international scenario. Overall, depending on the size and on the inflationary effect of said adjustment, it could restrict monetary policy reaction. Therefore, the composition and transmission of the external shock is very relevant in the most adequate policy reaction.

Second, fiscal policy, whereby spending is tied to permanent income of the government, largely eliminates the traditional pro-cyclicality that Chile has shown in face of shocks in the terms of trade.

In fact, the market itself has this evaluation. Comparing with the effects in other countries, the last three episodes of increased volatility and tension in world financial markets have had very limited effects on the Chilean economy (Figure 6).

## Figure 6: Exchange rates

(local currency units per US dollar, percent change)

	May 2006(1)	February 2007 (2)	August 2007 (3)	
Argentina	1,5	0,0	1,7	Argentina
Australia	5,8	3,0	10,3	Australia
Brazil	8,0	2,6	8,8	Brazil
Chile	7,3	1,0	1,9	Chile
Eurozone	1,6	0,7	2,4	Eurozone
Hungary	7,0	0,7	5,1	Hungary
Indonesia	6,6	2,0	3,3	Indonesia
Japan	5,2	-4,2	-6,3	Japan
Malaysia	2,9	0,7	2,3	Malaysia
Mexico	5,4	1,0	3,1	Mexico
New Zealand	3,3	5,2	13,6	New Zealand
Philippines	4,0	1,0	4,1	Philippines
Poland	6,1	0,6	1,8	Poland
Russia	0,1	0,4	1,4	Russia
South Africa	20,3	5,9	6,8	South Africa
South Korea	3,2	1,2	2,9	South Korea
Turkey	20,3	5,1	7,0	Turkey
United Kingdom	2,3	2,2	3,4	United Kingdom

<sup>(1)</sup> Shows variation between 10 May and 27 June.

Source: Bloomberg.

## Long-term interest rates

(variation in basis points)

	May 2006(1)	February 2007 (2)	August 2007 (3)	
Argentina			382	Argentina
Australia	4	-18	-36	Australia
Brazil	15	35	90	Brazil
Chile	25	-7	-8	Chile
Eurozone	11	-8	-26	Eurozone
Hungary	108	6	53	Hungary
Indonesia	118	7	112	Indonesia
Japan	-9	-4	-33	Japan
Malaysia	30	-3	23	Malaysia
Mexico	50	-6	27	Mexico
New Zealand	9	-12	-60	New Zealand
Philippines				Philippines
Poland	72	-5	12	Poland
Russia	-11	0	26	Russia
South Africa	122	20	3	South Africa
South Korea				South Korea
Turkey	679	75	161	Turkey
United Kingdom	4	-9	-34	United Kingdom
USA	8	-13		USA

<sup>(1)</sup> Shows variation between 10 May and 27 June.

Source: Bloomberg.

Something very simple reflects the proper functioning of our economy: in a moment where the world has seen a major retraction of credit operations, in Chile companies have continued to place long-term bonds in the private market.

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<sup>(2)</sup> Shows variation between 26 February and 5 March.

<sup>(3)</sup> Shows variation between 19 July and 17 August.

<sup>(2)</sup> Shows variation between 26 February and 5 March.

<sup>(3)</sup> Shows variation between 19 July and 17 August.

#### Conclusions

It follows, then, that the Chilean economy has resumed a strong growth after the unexpected slowdown in the third quarter of last year. In parallel, due mainly to a different supply-side shocks, inflation has risen considerably. In this setting, monetary policy must, aside from anticipating the inflationary consequences of the business cycle, prevent second-round effects related to these shocks.

Adjustments and increased volatility recently observed in international financial markets are other factors to consider in this conjuncture, and their implications will depend critically on how they will ultimately affect the future inflation trajectory. We have the luxury of having a well-established macro/financial framework that permits us to be well prepared to face turbulences as they occur.