José De Gregorio: Chile and the global recession of 2009

Speech by Mr José De Gregorio, Governor of the Central Bank of Chile, at the seminar *Los temas del 2009 (Key Issues of 2009)*, organized by the *Instituto de Políticas Públicas Expansiva – UDP* and *Libertad y Desarrollo*, Santiago, 20 March 2009.

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The world is undergoing a major crisis and all economies, at different degrees, are being affected by the shrinking output in the developed world. What began as a crisis focused on the subprime mortgage market in the United States has swept over the rest of the financial systems of the developed countries and is significantly hurting global activity in a variety of ways. In fact, a surprising feature of this crisis is its high synchronicity throughout the world.

Consequently, we are now facing a very complex outlook. It was only last September, when the crisis was still believed to be a problem which would chiefly affect developed financial markets, that consensus projections anticipated that the world (measured at market prices) would grow by 2.5% during this year. In March, consensus estimates foresee a 1.6% drop in global GDP. That is to say that, in six months, global growth projections for 2009 have dropped more than four percentage points (Table 1).

So, after growing at an average of near 3% (at market prices) during this decade, global GDP will shrink, something that didn't happened even during the 1970s' oil shock or in the crisis of the early 1980s. Moreover, global growth as measured at purchasing power parity (which gives more weight to developing countries, such as China, which grows faster) will be negative this year. This had never happened in the postwar period.

As is obvious, and as we have insistently stressed since the beginning of this period, our economy does not stand aside in this global crisis. Although our financial system has proved to be healthy and sound, the crisis has let itself show on the real sector since the final quarter of last year. This is a major challenge for macroeconomic policies, since they are the ones meant to mitigate the impact of the crisis and, in turn, to open the way to an earlier recovery than the rest of the world. Our economy is healthy. It has a solid financial system and a strong fiscal and foreign reserve position, enabling our country to cope with much harsher financing scenarios than the current one and to generate a large scale countercyclical fiscal drive. We have a floating exchange rate system, which allows for an easy adjustment to reduced external demand, and we have no exchange rate straitjacket, so adjustments have no restrictions, thereby avoiding harmful consequences for output and employment. Finally, prospects for inflation have brought about a substantial increase in the monetary policy stimulus. In this way, although we will not be spared the effects of the global crisis, we can indeed mitigate their impact.

Now, I will start out by presenting a short discussion on the relationship between monetary easing and the origin of the current global crisis. Then, I will discuss the evolution of inflation and output. Next, I will address monetary policy decisions and I will close this presentation with some final remarks.

On the origins of the crisis: monetary policy or financial regulation?

A lot has been written on the causes of the crisis and, certainly, this is not the time to analyze the myriad of factors which led to it.[1] But I certainly do want to talk about the interrelationship

[1] Interesting analyses on the origins of the crisis may be found in the articles compiled in section I of Felton and Reinhart (2008). For more recent discussions see Brunnermeier (2009), and Diamond and Rajan (2009).

between the performance of the financial system and the abundant liquidity after the interest rate cut in the United States following the plunge of the high-tech bubble in 2000.

Many blame the US expansionary monetary policy as the main cause of the crisis. Such policy would have caused the housing bubble. However, monetary policy easing does not necessarily bring about bubbles in asset prices or even adjustments that may cause such striking effects as the ones we have witnessed in the United States. Undoubtedly, liquidity expansion was a necessary condition for accelerated credit growth, as it usually happens during expansionary periods. Current account surpluses of emerging countries and of commodities exporters came on top of this increase in liquidity. Besides, this process took place within a context of an aggressive search for yields and financial innovation.

One could even argue that the mortgage boom in the United States was partly caused by the monetary easing (Taylor, 2008). Moreover, there is evidence that, in developed countries, the larger the monetary policy excesses, the larger the mortgage booms (Ahrend et al., 2008). Notwithstanding the above, although liquidity is needed to generate credit expansion and bubbles in asset prices, by no means can it all by itself generate a crisis such as this one. In developing countries, we know very well that when a cyclical downturn is combined with a financial crisis, its effects are much deeper and longer.

Actually, during this same period, economies with the same degree of expansiveness in their monetary policy and credit accelerations, but with sound financial systems, have not increased their vulnerabilities. We ourselves are an example of this (Figure 1).

Between 2001 and 2004, a strong reduction of the Monetary Policy Rate (MPR) took place in Chile, and it did not cause a bubble in housing prices nor did it weaken the financial system.[2] The reason why there was no housing price bubble in Chile needs further analysis. Probably, a greater elasticity of housing supply contributed to limit the increase in prices (Glaeser et al., 2008). Maybe, the creation of a bubble was avoided thanks to the way in which mortgage loans and related collateral securities are granted. I consider that a highly probable hypothesis is that, in view of the income levels prevailing in Chile, which are far below those of the developed countries, expansion of consumer loans is more oriented towards financing consumption of durable goods than houses. This issue remains open, but differences are evident. Anyway, this is an area which will have to be particularly addressed in the future (Figure 2). Besides, there were countries which had a housing boom, with housing prices soaring far above their fundamentals, such as Spain and Australia, but whose banking systems have shown much more resilience.[3]

Consequently, what happened in the United States was rather a growing fragility of its financial system, which passed unnoticed to the market and regulators. There was a deficient assessment of risks. They mistakenly felt that they were adequately covered and diversified by the new "originate and distribute" banking model. Prudential regulation, as well as internal policies on risk assessment of financial agents, resulted in a spectacular failure.

This leads me to another important issue in the recent debate on monetary policy: whether monetary policy should take into account asset prices when making decisions on interest rates. Although we cannot ignore the option of tightening monetary policy when faced with significant increases in asset prices, it is not so certain that these will give way with an increase in interest rates. This is particularly important in emerging economies, where a higher interest rate may raise incentives for carry trade and aggravate increases in asset prices. In order to avoid financial imbalances resulting from excessive and unjustified

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2 We could state that, while the United States had an interest rate lower to that suggested by a Taylor rule (as suggested by Taylor, 2008), this was probably not the case in Chile, although I do not know of any evidence for or against this hypothesis.

3 According to Ahrend et al. (2008), between 2000 and 2003, Australia probably also had a rate below the one suggested by the Taylor rule.

increases of these prices, the first line of defense should always be macro-prudential financial regulation and a thorough assessment of systemic risks, rather than changing the monetary policy stance.[4] As I have already mentioned, a fast expansion of credit does not necessarily mean jeopardizing financial stability. What is indeed harmful, and may certainly foster the creation of bubbles, is an either implicit or explicit commitment to substantially ease monetary policy when asset prices fall, unless the financial system is actually believed to be under serious risk.

In short, this abundant liquidity, induced by an expansionary monetary policy and an increase in savings among emerging economies, particularly in Asia, has boosted a housing bubble. However, although it was a component of the imbalances which had built up before the outbreak of the crisis, it certainly was not the main cause; rather, such main cause is more related to the functioning of the financial system. That is, with the same path of monetary policy and global balances of savings and investment, an adequate risk assessment system could have averted the crisis or, at least, reduced its very large current scope.

Evolution of inflation

During most of 2008, concerns about the global economic scenario were split between how to tackle the first effects of the housing bubble burst, mainly affecting the developed world, and, how to deal with the significant increase in inflation. Since the beginning of this process, in the first half of 2007, we argued that its origin was related to factors which had nothing to do with the domestic business cycle, such as prices of food and fuels at international markets and adverse climatic conditions which favored major rises in the cost of electric power. During said year, prices of non perishable foods rose by 15% and prices of fruits and vegetables rose by over 30%, as compared to annual 2% average increases and 2% average decreases for both categories in the 2000-2006 period, respectively. Fuel prices rose by 15% in 2007. An essential characteristic of the Chilean economy is that it has very few distortions in its price-setting mechanism. This results in increases in international prices of goods being transmitted quickly to local prices, while in many other countries this is avoided by explicit price controls or massive fiscal subsidies[5] (Figure 3).

The most critical phase in this process began in May 2008. After a period with stable monthly inflation figures in the first quarter of last year, large and unexpected inflation rises began taking place. As we then noted, propagation effects were being generated on a higher scale than expected and they could prevent inflation from reaching its target of 3% within the policy horizon of two years. Inflation expectations also started to rise. Both unwanted second-round effects and increased expectations demanded a fast and determined response by the monetary policy aiming at mainstreaming the inflation path to reach its target. This was essential to prevent inflationary persistence from generating a wage/price spiral which would have been harder to revert, if no early measures were adopted. In fact, output costs would have been even harsher, if inflation had been allowed to persist.

But the world has changed, and it has done so in a radical way. What was expected to be a mere global economic slowdown, gradually turned into a severe drop in output. Consequently, commodities' prices began to plunge with unusual strength. After having reached almost 150 dollars halfway through 2008, the oil barrel tumbled down to 40 dollars in December. Something similar happened with copper, other minerals, grain, etc. The response of inflation did not take long to arrive on the scene. Since the inflation peak of last year, Chile is one of the countries where inflation has dropped most sharply.[6] Inflation

[4] For more discussion on this issue see De Gregorio (2008a).

[5] For more information on the inflation rise of 2007 and its external origin see De Gregorio (2008b).

[6] This is also applicable if we leave aside the possible effect of changes in the CPI measurement methods.

expectations have also shown major adjustments in the face of this new global scenario (Figure 4).

However, the main issue in the most likely scenario, is the effect on inflationary pressures of the increase in output gaps and the decrease in international commodities' prices resulting from the global recession. Its effects on the inflation forecasts for the next two years are highly relevant and have enabled the application of countercyclical policies. The anti-inflationary commitment ensuing from monetary policy conduct based on a flexible inflation targeting regime has paved the way for an important and unprecedented adjustment of monetary policy. Likewise, for monetary policy to be effective, rate changes must be transmitted to the entire yield curve, and this is achieved by implementing a monetary policy based on a credible anchor. In fact, since the Central Bank announced a downward bias of the MPR, the market has started to include this monetary easing at all horizons. Moreover, we can see today that the application of monetary easing is also reaching lending rates (Becerra et al., 2009), and this should still be so after last week's drop (Figure 5).

Less output in Chile

As I have already mentioned, a lower output level bears important consequences on the inflationary outlook. To understand this, it is useful to define three distinct factors:

- The domestic business cycle.
- Real and financial impacts of the international crisis.
- Global confidence crisis.

I would like to refer to each of these three factors:

(i) The domestic business cycle

Domestic demand has grown rapidly in the past few years. This did not translate completely into a higher output level, since part of it diverged towards imported goods. During the 2004-2007 period, the average annual growth rate of domestic demand was 8.1%, i.e., 2.9 percentage points over output. During this same period, average annual growth in private consumption was 7.2%. Investment grew by a 12.1% annual average, thereby doubling the growth of output, and this resulted in the highest ever investment rates in our history. This process had to tone down necessarily, as it gradually occurred during 2008 (Figure 6). A certain degree of bunching of individual decisions on consumption and investment is usually seen, particularly when these have risen in response to common financial and global conditions. Something similar should happen in periods of weaknesses.

Therefore, this cycle cannot be expected to disappear or to be completely stabilized by monetary policy, which is in turn not advisable. Macroeconomic policies should only aspire to smooth out any fluctuations. Monetary policy, committed to price stability, can stabilize both inflation and the business cycle.

Halfway into last year, it was believed that a more restrictive monetary policy would contribute to reduce inflationary pressures in an international scenario showing less growth, but not a crisis. This was based upon the belief that, although the shock which had given rise to the increase in inflation was external, favoring a deceleration of internal demand would mitigate its propagation to other prices, which had already happened with the inflation records of part of the second and third quarter of 2008. However, a massive international crisis came on top of the natural evolution of the domestic cycle under a more restrictive monetary policy. This crisis, as we can see it today, is bearing a greater impact on output than we expected and than the one needed to bring inflation to target; and this has resulted in a change of sign of monetary policy aimed at mitigating the negative external impulse.

(ii) Real and financial impact of the international crisis

The global economic crisis has two kinds of domestic impacts. The first one is financial. Risk premiums rise and capital flows fall. As evidenced by the information available so far, we have not had any problems with external financing resources; however, the Central Bank has assured that, should such problems come up, it will provide any necessary liquidity in dollars and pesos for the financial system to continue providing credit adequately. The average cost of foreign financing has dropped, although for some companies it has risen, as a consequence of greater global uncertainty and of a less fluid operation of the international financial markets (Figure 7).

This crisis has also had significant implications in the real sector. Even though the world demand reduction affects all countries, the most direct impact has been borne by the economies driven by exports of manufactured products – particularly machinery and equipment – to developed countries (Figure 8). Some countries, such as Germany and Japan, have witnessed a severe effect on their output, although they initially were in a much better position than was the United States.

Therefore, although a decline in investment and in durable consumption in the world has a more direct impact on exporting industrial economies, it also results in declines in exports of countries which produce intermediate and basic goods, including Chile. However, our country should not be too affected thanks to a characteristic that has always been pointed out as a hindrance to our development – with which I agree – : the low value added, or the low human capital content, of our exports. Chilean exports are closer to being commodities, which face relatively abundant demands. There will always be a price at which to export. Thus, the greater impact is a decrease in the prices of our exports, since quantity limitations are smaller (Figure 9). Although lower prices push producers towards reducing their supply, with the ensuing implications on employment, output and investment, it is very different from what happens, for example, to producers of intermediate goods, specific for the automotive industry. Their demand falls dramatically and all their already started production piles up unsold. And this leads to a subsequent production standstill. This explains the intensity with which the crisis is impacting the more industrialized economies of Asia.

To sum up, the international crisis is bearing real effects on our output, specifically on our exports, but its reach in Chile is more limited than the effect on other economies which are based on manufacturing exports.

(iii) Global confidence crisis

As from last September, global confidence plummeted throughout the world (Figure 10). Individuals as well as companies adopted a “wait-and-see” attitude in view of the high uncertainty and deterioration of the economic outlook. As it is likely to happen in more uncertain scenarios – and, in this case, extremely uncertain – , individuals stop consuming abruptly and companies dramatically revise their investment and production plans. Therefore, propagation of the financial crisis effects was worsened by a massive loss of confidence. These losses of confidence may lead to recessions which are self-fulfilling prophecies. People say: “things are looking down, so we'd better not spend,” so nobody spends, and it is this same public who, some time later, say: “I told you, things were looking down.” However, in this case, the loss of confidence has been definitely well-grounded on the relentless crisis the world is currently undergoing, but whose effects are being in turn worsened by this same loss of confidence.

Confidence crises are hard to fight by using just traditional tools of economic policy. Confidence indicators of households and companies should bounce back up as months go by, as a result of sustainable and credible expansionary macroeconomic policies and objective communication about reality. In Chile, particularly, we are able to face this negative international scenario, thanks to our healthy economy and expansionary policies.

In our January monetary policy report (IPoM), we forecasted that, in the most probable scenario, the Chilean economy would grow between 2 and 3% this year. In such scenario, it was estimated that the GDP of our trade partners would grow 0.4%; however, after all the past months' corrections, this figure is now estimated to have turned into a more than 1% decrease. As I said at the beginning, this is a major change of scenario, which will certainly affect the growth projections of our economy. Although every month we carry out exercises in which we try to measure the impact of macroeconomic changes on our own baseline scenario, we do not yet have a final and complete revision of such scenario which may allow us to estimate, with a reasonable degree of certainty, the expected growth for 2009. However, it is not hard to guess that such growth shall be below the 2-3% range we estimated in January. The exact figure remains to be seen. Anyway, a useful background could be the change in the projections of the analysts who answered the Economic Expectations Survey carried out by the Bank or the last issue of *Consensus Forecasts*. In these projections, the expected growth for this year went, respectively, from 2% and 1.9% in December to 0.2% and 0.0% in March.

Actions taken by the Central Bank during the crisis

Since the beginning of the crisis, halfway through 2007, the actions taken by the Central Bank have been focused on three fields:

- Accumulation of reserves.
- Supply of peso and dollar liquidity.
- Monetary easing.

In the first half of last year there was an unusual strengthening of the peso, within a context in which there were great risks of deterioration of the international financial environment, such as it actually happened. At the same time, inflationary pressures had been relatively limited during the first quarter. In this scenario, the Bank's Board decided to strengthen our international liquidity position by accumulating 8 billion dollars over an eight-month period. In order to preserve independence of monetary policy, that is, not to subordinate it to the foreign exchange policy nor to a specific value of the exchange rate, the chosen method was a pre-announced and mechanical daily purchase of 50 million dollars. In fact, the degree of independence was such that, later on, the interest rate could be raised when faced with a more complex inflationary scenario, without the need for stopping intervention.

Halfway through September, liquidity tensions grew substantially around the world, as well as in Chile. This led the Board to bring the reserve purchase program to an end when almost 6 billion dollars had been accumulated, and the country had reached quite a comfortable international liquidity position, which would enable us to mitigate any possible sudden stop of capital flows.

Besides, in view of the worsening of liquidity problems, the Bank announced the supply of liquidity in pesos and dollars through repos and swaps. Later on, in October, the range of eligible collaterals was broadened and the dollar swap program was extended for six months. Then, in December, an extension for all of 2009 was announced for the repos and swaps program, and the range of eligible collaterals was broadened further. The purpose of these measures was to align market rates with the Monetary Policy Rate and to alleviate foreign currency liquidity tensions. Both objectives have been accomplished, and the scarce demand for dollars through swap transactions show that our economy still has a fluid access to the international financial markets. In all cases, and to ensure adequate liquidity, instruments designed last year will continue to be in force throughout this year and, if necessary, they will be extended in order to ensure the proper operation of the financial system, so that it may be able to play its role of channeling credit to the non-financial private sector.

It is important to highlight that, for mechanisms of monetary policy transmission to work correctly, the money market must be aligned with the MPR. There is no gain in reducing the interest rate if such reduction is not transmitted to the rest of the market. Therefore, when the crisis worsened, the first task was to ease liquidity pressures.

The unfolding of the crisis and its consequent effects on inflation forecasts brought the possibility for a monetary easing. Said monetary easing has had a significant extent when compared to our past experiences and to what has been done by other central banks. During the first quarter, the MPR was reduced by 600 base points – from 8.25% to 2.25%.

It is important to note once again that our economy has not suffered any of the problems undergone by other economies in their financial systems. Therefore, monetary easing in Chile does not seek to re-establish the operation of credit, as it may happen elsewhere; rather, it has been totally consistent with the inflationary outlook. This is the result of a credible inflation targeting scheme, which acted consistently with its objective when inflation threatened to be undesirably high, and is doing so with the same consistency now, when inflation threatens to be undesirably low.

Although reductions in the interest rate have had an unprecedented intensity, they have been consistent with the prevailing circumstances. They are intended to mitigate the risks of a negative impact on the Chilean economy of a lengthy deterioration of the global economy, and this has caused the MPR to be adjusted more rapidly, instead of being gradually adjusted as before. Besides, in view of the recent evidence, a quick adjustment could accelerate its transmission to market rates, beyond what the decrease in itself would imply, and this could have also been made easier through the removal of the stamp tax. In this way, as we have already said in our last meeting’s statement, we have moved the MPR closer to a level which we consider is better aligned with the current macroeconomic scenario and the risks we are being faced with. However, it is still too early to sing our praises, since events are happening so fast that we cannot rest on the work we have done so far. Nevertheless, as we also mentioned in said release, any potential downward adjustments to the MPR will be similar in size and frequency to our historical patterns, which are far from what we have been witnessing in the last quarter. This is mainly because it is necessary to give time to the transmission mechanisms of the monetary policy to work, so that the consequences of decisions already made can be seen in practice.

Final remarks

I would like to end with some lessons about monetary policy conduct which have stemmed from the great inflation rise that has taken place since mid-2007, into our current international situation.

In the first place, many times it had been noted that Chile was one of the countries where the highest increase in inflation – more than tripling the target – was observed, with the interest rate rising less than in other economies with lower inflationary pressures. As I have already argued, our policy response was completely consistent with a flexible monetary policy framework. As the price shock became stronger and more persistent, monetary policy became more restrictive. This same flexibility in managing monetary policy enables us to react quickly to the strong deterioration of the external conditions today. Fortunately, our economy is solid enough to absorb significant changes in the course of monetary policy, without this being a threat to stability.

In the second place, inflationary dynamics are highly complex and cannot be linearly mechanized based on historical evidence. Early this decade, when inflation was consolidating at low levels, we saw that persistence of inflation had dropped substantially, thereby reducing the impact of propagation via indexation and other phenomena that were characteristic of our high-inflation past (García and Valdés, 2005). When inflation reappeared, persistence did so too, and many analysts then thought that it would stay with us for a long time, since they believed indexation had revived strongly. I do not wish to discard this reasoning, but we have learned a lesson here, which should be confirmed in future research, that persistence is not stable, highly non-linear, and it greatly depends on the global context. This is particularly valid in a small and quite open market economy.[7]

Finally, I would like to make a reflection on the communicational challenge we are now faced with. Not only must we apply the right policies, but also put them in the right context. I have described a highly adverse global outlook, and some could have reservations about an authority doing this, since it could generate some degree of pessimism. Quite on the contrary, I believe that one must talk realistically and, besides, if we ignore how serious the global situation is, it would mean that we don't have a clue to what is really going on. Trust is gained with sincerity and adequate policies for the current times. There is a second element that enables me to talk freely and bluntly: the conviction that our economy is healthy and very well prepared to face this present condition, which is something that did not happen in any of the former external crises. Monetary and fiscal policies are being implemented with a high degree of expansiveness, so as to limit any effects of the current international crisis as much as possible. This is, undoubtedly, very good news.

Thank you very much.

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[7] We could argue that, as it was done when inflation rose, it was the result of the domestic demand cycle which, after growing fast, slowed down dramatically. However, slowdown of demand is happening throughout the world and a decrease in inflation is observed at a much higher level in Chile. Therefore, we are witnessing structural factors which go beyond changes in demand.

Table 1

Projected Growth for 2008

(GDP measured at market prices, percent)

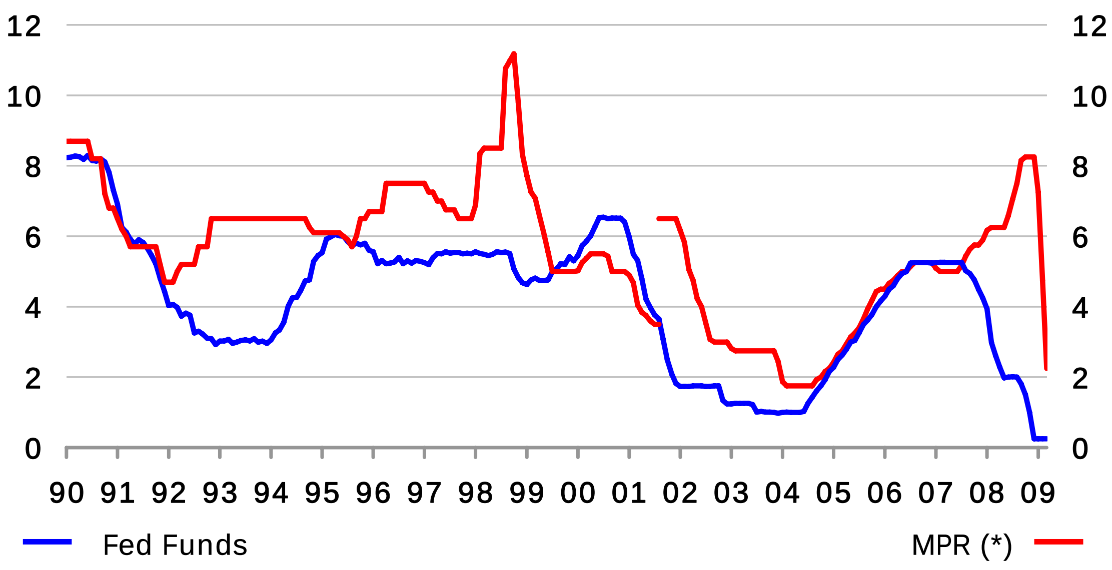
	Sep. 2008	Dec. 2008	Mar. 2009
World	2.5	0.4	-1.6
United States	1.4	-1.3	-2.8
Eurozone	0.9	-0.9	-2.6
Japan	0.9	-0.9	-5.8
Asia Pacific	4.6	2.7	-0.2
Eastern Europe	5.6	3.0	-0.5
Latin America	3.7	2.1	0.3

Source: Consensus Forecasts of corresponding date.

Figure 1

Chile's MPR and US Fed funds

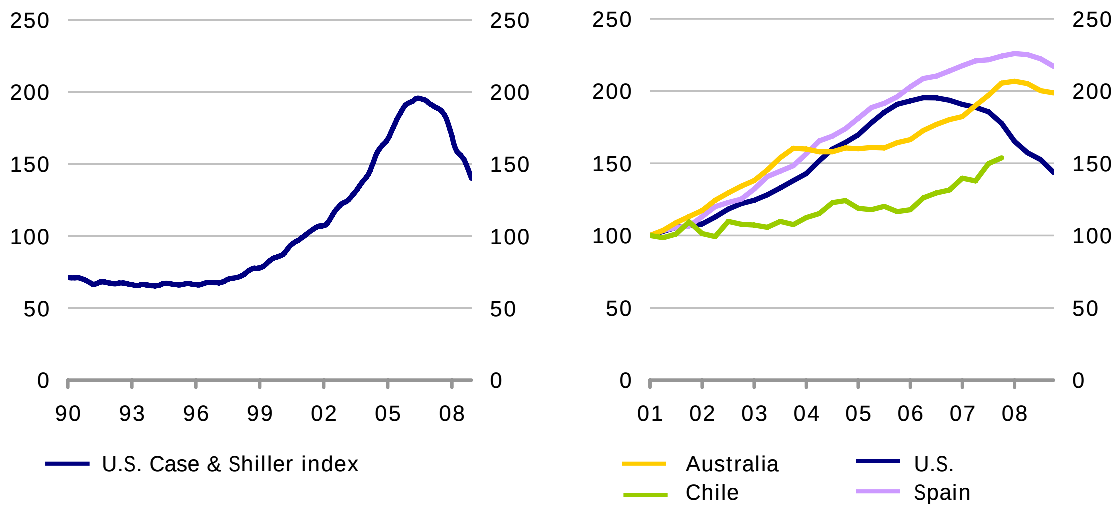
(percent)



(*) As from August 2001, the monetary policy rate is set in nominal pesos; before that, it was indexed to headline inflation.

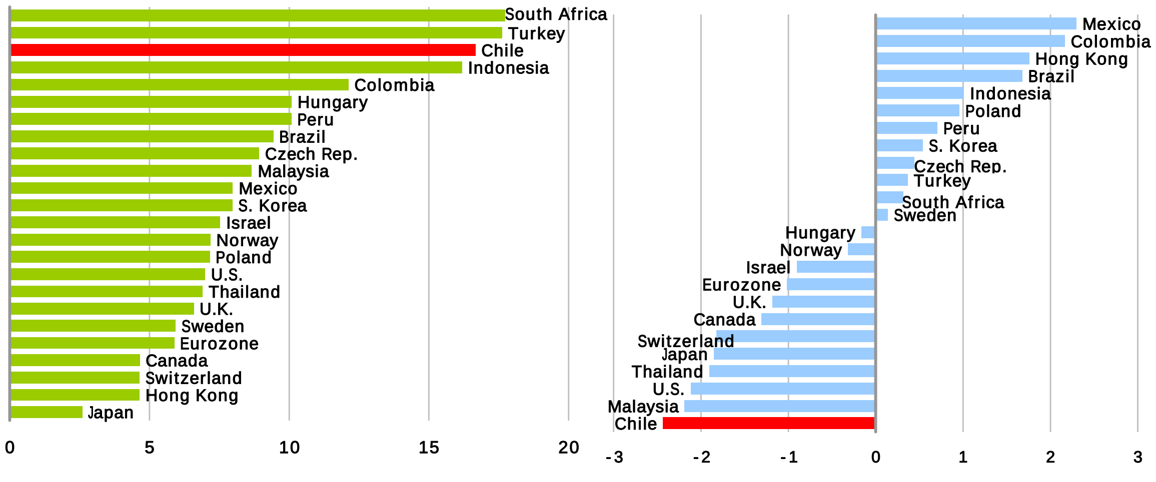
Sources: Central Bank of Chile and US Federal Reserve

Figure 2
Housing prices
(nominal index, first quarter 2001=100)



Sources: Central Bank of Chile and Bloomberg.

Figure 3
Accumulated CPI variation by country
(percent)

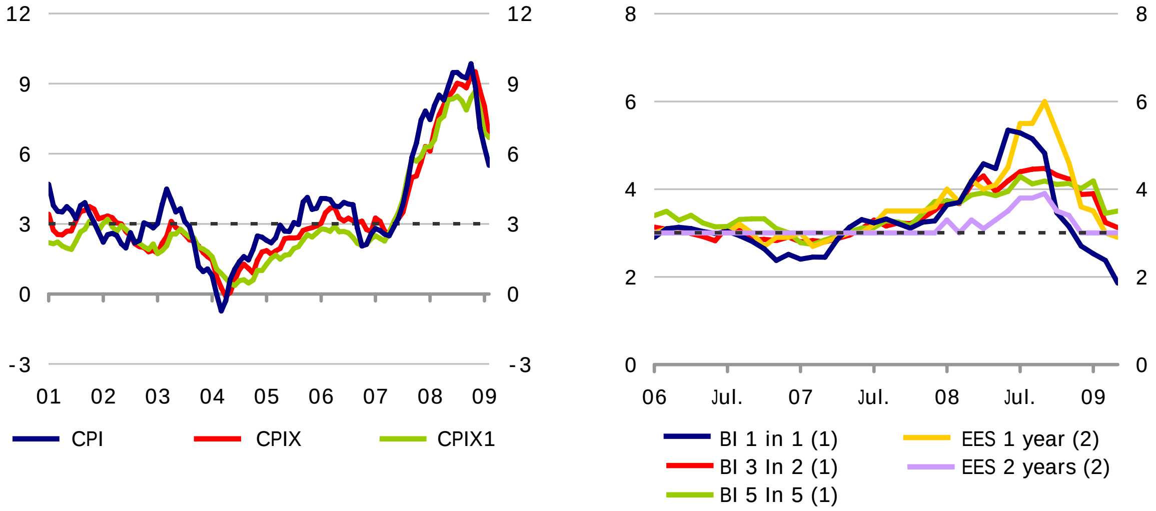


(a) Between January 2007 and October 2008.
(b) Between October 2008 and January/February 2009 (*).

(*) For Canada, Hong Kong, Hungary, Israel, Japan, Malaysia and U.K., data up to January 2009.
For the rest, February 2009.

Sources: Statistics Bureaus of each country.

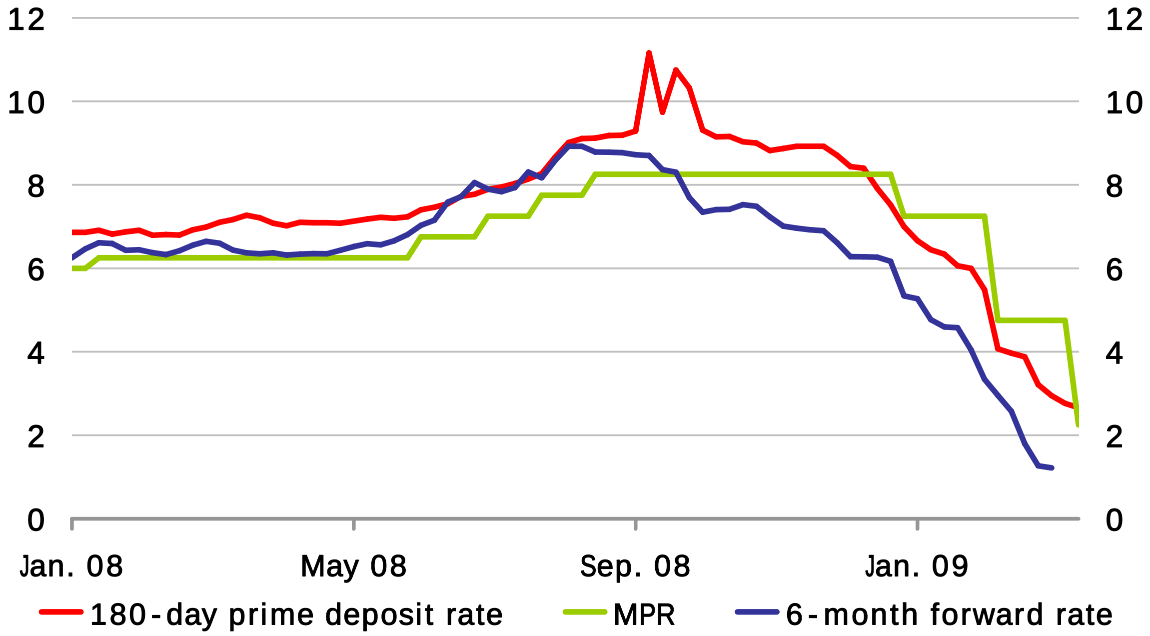
Figure 4
Inflation and expectations
(annual change, percent)



(1) Breakeven inflation calculation based on swap contracts.
(2) Economic Expectations Survey conducted by the Central Bank of Chile.

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

Figure 5
Monetary policy rate, deposit rate, and forward rate
(percent)

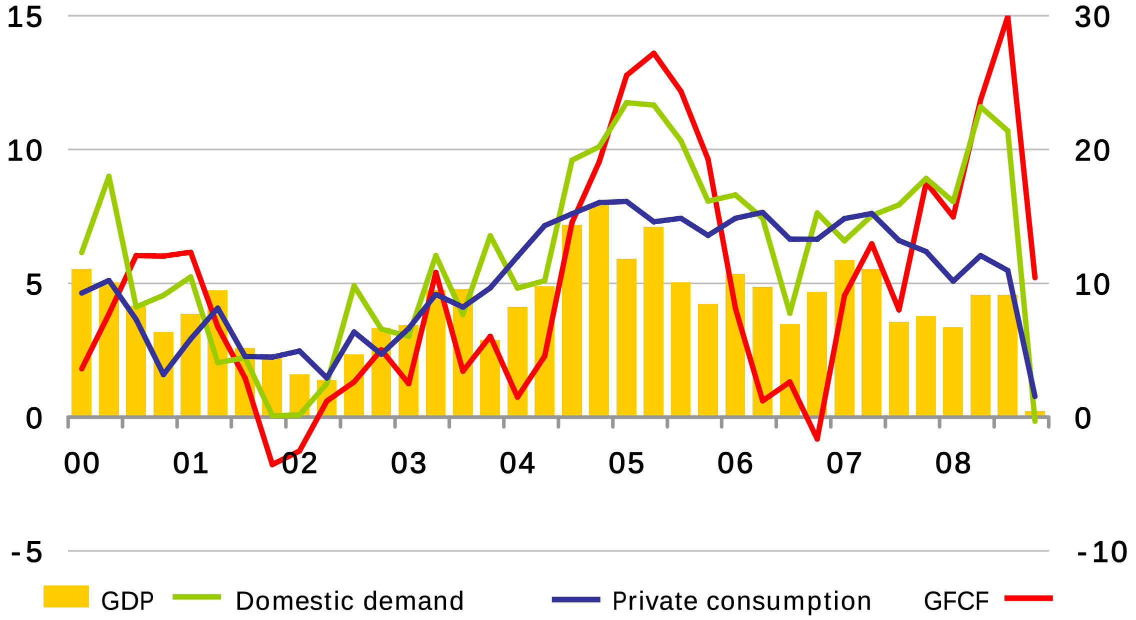


Source: Central Bank of Chile.

Figure 6

GDP and domestic demand

(real annual change, percent)

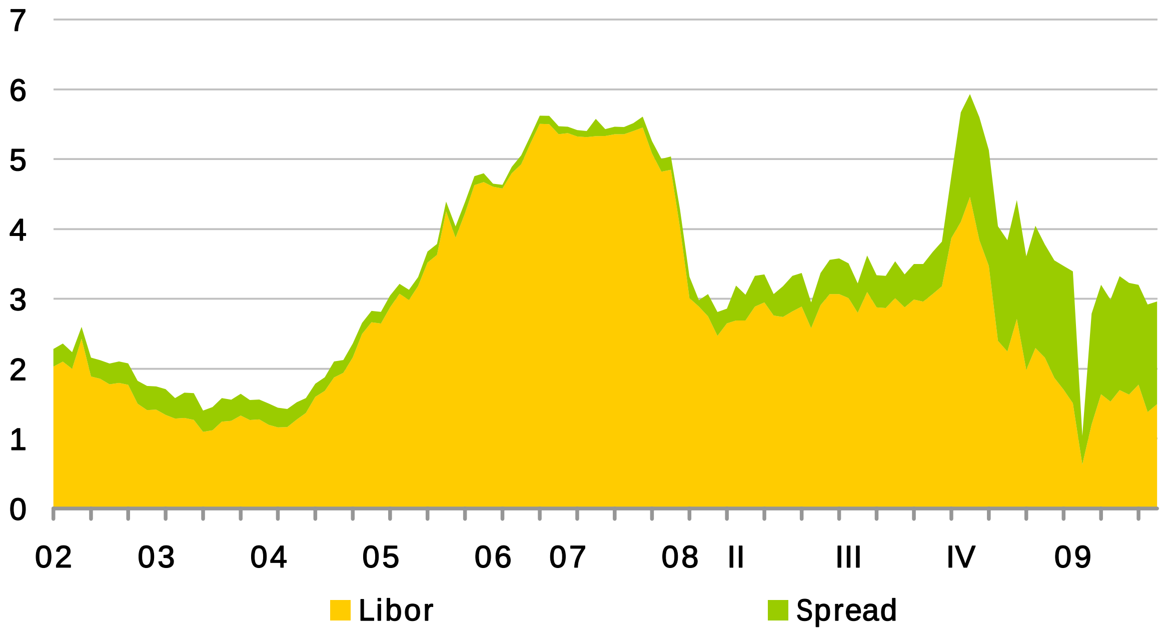


Source: Central Bank of Chile.

Figure 7

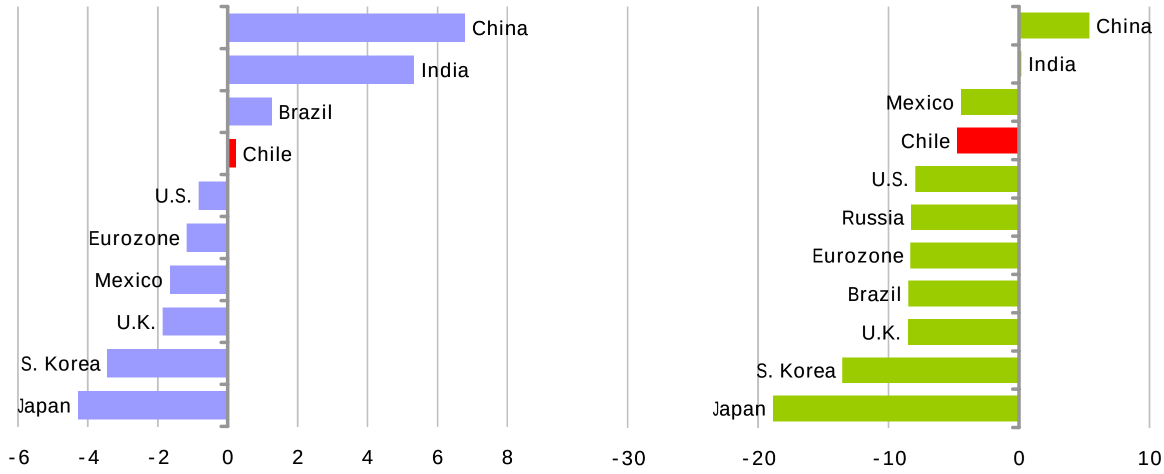
Cost of foreign banking credit for Chile's residents

(percent)



Source: Central Bank of Chile.

Figure 8
GDP and manufacturing production
(real annual change, percent)



(a) Annual GDP change in GDP in 2008.Q4

(b) Average annual change in manufacturing output between October 2008 and January 2009.

Sources: Central Bank of Chile, CEIC Data and Central Bank of China.

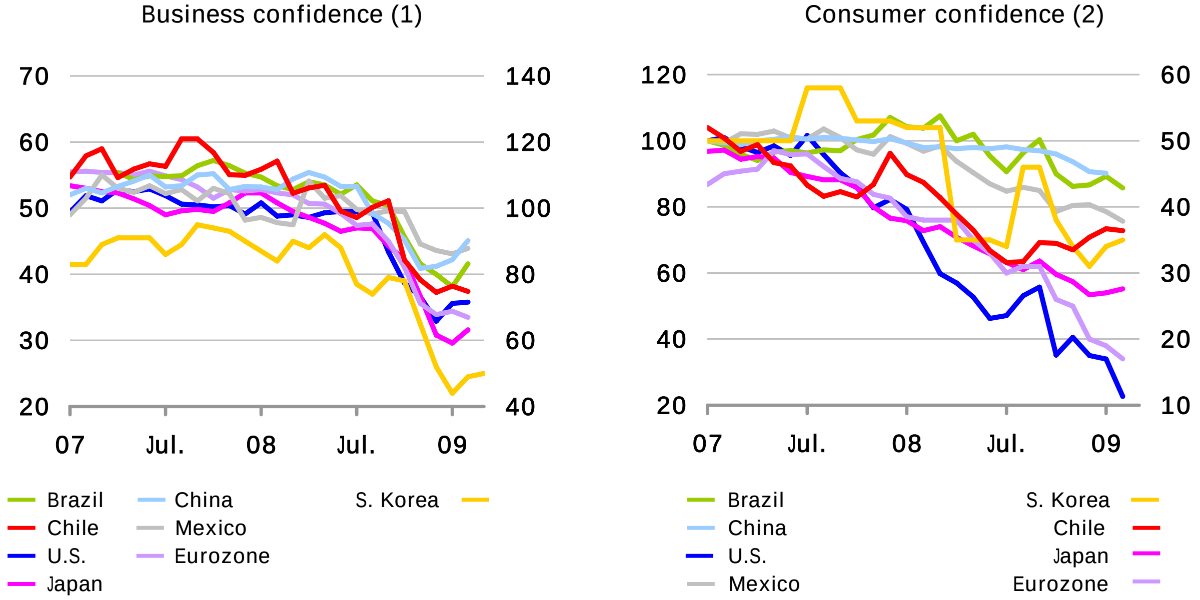
Figure 9
Chile: Total export volume and price
(annual change, percent)

Source: Central Bank of Chile.

Figure 10

Economic perception

(diffusion indices, percent)



(1) S. Korea is anchored in 100. (2) Series for Japan, the Eurozone and S. Korea anchored in 50. Other series, indices with base January 2007=100. For Chile, Adimark's IPEC and ICARE/Universidad Adolfo Ibañez indices.

Sources: Adimark, Bloomberg and ICARE/Universidad Adolfo Ibañez.