Monetary Policy, Inflation and Economic Activity: The Case of Chile*

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Ⅰ. Introduction

The monetary policy framework that has been used in Chile over the past few years —i.e. an inflation-targeting regime with a flexible exchange rate, based on a solid fiscal stance and a robust, well regulated and supervised financial system—, has permitted the country to attain and maintain a low and predictable inflation rate, improve its capacity to accommodate external shocks, and contribute to the creation of an overall environment that favors economic growth. Thanks to this policy framework, combined with a market economy and growing international integration, further enhanced by good external conditions, the country has been able to return to growth rates of around 6% and materially reduce output variability with respect to its potential.

Although I am supposed to speak here about Chile's economic outlook, because of what I have just said, I cannot avoid referring to the policy

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framework where such an outlook is grounded. For the same reason, I will cover two subjects in my speech today: one, the role of macroeconomic policies in influencing inflation and growth; and two, recent developments and prospects for the Chilean economy.

Ⅱ. The role of macroeconomic policies in inflation and growth

Around the world, remarkable progress has been made over the past twenty years to reduce inflation. While in the eighties, annual inflation in a large sample of countries was around 60% (48% considering African countries), in the period 2000-2003 it was just 5.2% (or 9.3% with African countries). This achievement began in industrialized countries and spread to less developed economies later on. Several factors have been behind this phenomenon, but there are two that I would like to single out now:

(1) The high economic and social cost of high, unpredictable inflation, including its detrimental effect on income distribution and poverty, which generated political demands to governments for implementing stabilization programs;
(2) Advances in the knowledge of macroeconomics that have made it possible to avoid inflationary policies and to progress in the design of more efficient stabilization programs.

Today I would like to focus on the latter issue, namely advances in macroeconomics.

Up to the seventies, economists had a vision of the economy's operation that fostered monetary and fiscal policies with an inflationary bias. The practice of the time, very influenced by certain empirical evidence that showed a negative relationship between inflation and unemployment in low-inflation economies (the famous Phillips curve)(Fisher 1926; Phillips 1958), believed that macroeconomic policies had a permanent effect on the unemployment rate (and on the gap between actual and potential output).

Influenced by these ideas, many countries made attempts to reduce their unemployment rates permanently, under the assumption that the only cost would be a (moderate) increase in inflation. To the surprise of governments and central banks that adopted such policies, the attempt to control unemployment with expansionary macroeconomic policies ended up with not only high and accelerating inflation, but with higher unemployment. At the same time, and especially in Latin America, inflation was believed to be the result of exogenous price adjustment processes, which had to be validated by monetary policy to ward off a sharp increase in unemployment.

This picture began to change in the late seventies. In industrial countries, high, growing inflation (as high as 24.3% in England in 1975 and 13.5% in the US in 1980) brought severe political costs with it. Also, analytical advances by Friedman(Friedman 1968) and Phelps(Phelps 1968) from the late sixties, that spoke of a "natural" rate of unemployment, began to appear in the macroeconomic debate. Friedman and Phelps claimed that the natural unemployment rate was mainly determined by the workings of the labor market and not by macroeconomic policies. Also, that any attempt to reduce permanently the unemployment rate below the natural rate would accelerate inflation. These advances, combined with the introduction of rational expectations—that began to consider the effects of the expected course of economic policies on the private sector, righting the notion that economic agents could be systematically wrong—led to a revision of the way the economy operates and, as a corollary, of the role of macro policies. Thus, by the early eighties economists reached a consensus, recognizing that monetary policy has no long-term direct effects on the unemployment rate, output, or its growth rate. The only way in which monetary policy indirectly affects the long-term values of these variables is through attaining and maintaining low and predictable inflation. This has positive effects on potential output, as it creates a more favorable setting for employment, investment and factor productivity increases. As Alan Greenspan rightly put it in his address to the US Senate (16 February 2005, page 6):

> (…) For our part, the Federal Reserve will pursue its statutory objectives of price stability and maximum sustainable employment—the

> latter of which we have learned can best be achieved in the long run by maintaining price stability. This is the surest contribution that the Federal Reserve can make in fostering the economic prosperity and well being of our nation and its people.

This analytical framework is what is increasingly driving countries to implement monetary policy schemes that define price stability as their chief objective. The achievement of it has been further strengthened by a worldwide movement that promotes the autonomy of central banks, thus empowering them to direct monetary policy at price stabilization, free of opportunistic political considerations.

It should be noted that the mandate to pursue price stability does not preclude the Central Bank to implement countercyclical measures that help to bring output closer to its potential, thus smoothing the cycle. However, said smoothing should not stand above the price stability objective. In fact, the analytical ground that sustains countercyclical policies is the short-term tradeoff between inflation and unemployment (the output gap), which is considered in monetary policy design. For example, when using a long horizon for the policy plan—12 to 24 months in our case—it is implicit that, in addition to the normal lags with which monetary policy operates, pushing inflation too hard to return to the target after a price shock entails cyclical costs not worth paying. Also, whenever a demand shock hits, it is possible to bring inflation closer to the target and, with the same policy, also smooth the business cycle. This, because the cycle itself creates fluctuations in inflation. This latter type of countercyclical monetary policy is the policy that the Central Bank of Chile has been applying over the past four years.

A monetary policy regime that incorporates price stability and the countercyclical role of it, to which a substantial number of countries have converged, is the inflation-targeting regime. This is the scheme that the Central Bank of Chile began preparing in the early nineties and completed in 1999.[1)] The alternative of using monetary aggregates or the exchange rate (including a band) as an inflation anchor has been abandoned my most

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1) For an evaluation of Inflation Targeting frameworks in Chile and other Latin American countries, see Corbo and Schmidt-Hebbel(2003).

countries. This, because in the case of monetary aggregates, said anchor is dependent on money demand instability and the associated volatility of interest rates and parities. An exchange rate anchor also has problems because in a world where capital markets are increasingly integrated, currencies are very susceptible of suffering speculative attacks if agents perceive that, for a number of circumstances, the probability of the anchor being abandoned or adjusted has increased. These attacks usually end up in costly exchange rate and financial crises (e.g., Chile, 1982; Mexico, 1995; Thailand, Indonesia and Korea, 1997; Russia, 1998 and Brazil, 1999). Even countries that have tried to elude this problem by introducing institutional schemes that favor a fixed parity, such as the European exchange rate mechanism of the nineties, or currency boards, have incurred in high costs that have driven them to abandon the fixed exchange rate (Spain, Portugal and the U.K. in the nineties, and Argentina in 2001). Other countries, to escape speculative attacks and maintain a fixed parity, have gone to the extreme of abandoning their currencies, as Ecuador and El Salvador did recently. Abandoning the national currency is an extreme solution for countries that have no other credible way to attain price stability(Corbo 2002). The cost is that they resign not only to monetary policy as an instrument (which can help in smoothing the cycle), but also to the nominal exchange rate as a variable that can be used to adjust the economy when changes occur in its fundamentals. This can be costly and difficult, particularly when a real currency depreciation becomes necessary. By contrast, the combination of inflation targeting with exchange rate flexibility also facilitates the economy's adjustment to long-lasting shocks that call for a change in the relative prices of both tradable and non-tradable goods and services.

To sum up, the policy framework that Chile has chosen and used over the past five years is sustained on recent theoretical advances and on a vast experience of many countries, which validate the need to assure a stable macroeconomic environment.

Let me now move to the second subject of my presentation, that is, recent developments and prospects for the Chilean economy.

Ⅲ. Recent developments and prospects for the Chilean economy[2)]

Chile's output and income are growing robustly, with inflation under control. This expansionary cycle began in the second half of 2003 and gathered momentum throughout 2004. Such a macroeconomic setting clearly reflects both the positive external conditions and the impulse that monetary policy has inscribed in the Chilean economy. This has manifested in the strong dynamism of credits, in manufacturing output, in the growth of gross fixed capital formation, in the robustness of private consumption and in the growth of exports. Even in the labor market, doubts have faded about whether it is behaving accordingly with the present stage of the cycle, thanks to the strong recovery of employment along with a growing labor force.

Favorable external conditions have continued into this year. After some slowdown in the second half of 2004, the world economy is picking up, so 2005 is foreseen as another year that will surpass the historic average. Such growth is still led by the US, China, the rest of emerging Asia and Latin America. By contrast, Europe and Japan are expected to continue sagging, yet growing more than they did in the second half of 2004. In the US, growth is being driven by consumption and investment, and is sustained by an improved labor market and good corporate profits. China continues to incorporate productive factors and technology into its products, while benefiting from the expansion of its markets, both domestically and abroad. The year 2005 should see strong growth, despite recently applied restrictive measures. Europe is suffering the (negative) effects of weak labor markets and currency appreciation, while in Japan export growth is slowing and internal consumption continues to be weak.

In terms of growth, projections for world GDP in 2005 and 2006 are in 4.2% annually, while our main trading partners are expected to grow by 3.6%.

As for commodity prices, both copper and oil have exceeded expectations held late last year. Copper is on an upward-sloping path this year to date,

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2) For details, see (Central Bank of Chile 2005).

and trades at over US$1.50 per pound, a nominal price unseen since the eighties. Behind these conditions are the strength of the main buyers, particularly the US, China and Korea, and the depreciated dollar, which combines with a weak short-run response of supply, suggesting that the high prices will hold for some months. Oil, meanwhile, has also followed an increasing path and is around US$50 per barrel (*Brent*). This is explained by the ongoing expansionary cycle of the world economy, and more circumstantial factors such as weather conditions in the Northern hemisphere, the upsurge of geopolitical problems in Iraq and the Middle East, and distribution problems in non-OPEC countries. The net effect on Chile’s terms of trade from higher copper and oil prices is positive in the margin.

Internationally, the policy of small increments to the monetary policy rate announced by the US Fed has led financial markets to post increases in their interest rates. Actually, the expected policy rate for late this year is at 3.75%. For the euro zone, considering the depressed outlook for activity, and inflation near the target, no movements are expected in interest rates before the fourth quarter. Overall, world financial conditions remain favorable, because although international interest rates have begun to rise, sovereign spreads remain at record lows. Furthermore, risk-rating agencies have reflected the improved macroeconomic conditions and policy conduct in emerging economies by posting better prospects and rates for them. This has resulted in good disposition of agents to invest in emerging economies and in a favorable outlook for portfolio flows.

Still, it should be noted that the risk balance faced by the international scenario, while better than a few months back, continues to be on the negative side. This can be related to the persistently high oil price, which can hinder world growth. Also, unsustainable fiscal and current account deficits in the US might unleash sharp dollar depreciations or faster increases in interest rates. Such a scenario might hit particularly hard the more vulnerable emerging economies, although I must say that, in anticipation of a possible deterioration of international financial conditions, these economies have taken advantage of the good market situation to strengthen their positions. An upsurge of inflationary pressures, especially in the US cannot be ruled out, with adverse implications on international financial markets. Finally, geopolitical problems persist.

With the Chilean economy clearly in an expansionary phase and the interest rate way below neutral (i.e., where monetary policy neither adds nor reduces pressure to aggregate demand), a marked monetary stimulus is no longer convenient. In this context, the Board of the Central Bank decided last August that the prevailing strong monetary stimulus was not necessary anymore, and began in September a normalization cycle that so far has accumulated a rise of 125 basis points in the policy rate.

The softened monetary stimulus is beginning to manifest in financial markets, but producing no big surprises or changes in investors' expectations. Thus, short- and medium-term interest rates have evolved in line with monetary policy interest rate increments, since the latter had already been foreseen and incorporated in the prices of financial instruments and in deposit and loan rates.

Furthermore, investors have not revised their expectations on the future path of interest rates. The figures differ depending on the source, but the main conclusion is that there have been no surprises. From the term structure of interest rates, it can be deduced that investors continue to forecast a gradual reduction of the monetary stimulus over the next twelve months, with an increase in short-term rates of around 155 basis points to December 2005, and 200 basis points to May 2006.

In contrast with the nominal interest rate increase, interest rates on long-term CPI-indexed instruments have shown a slightly downsloping trend. Although it may seem paradoxical, this behavior of CPI-indexed rates is consistent with the process of normalization and convergence of inflation-compensation spreads, especially the long-run ones, to 3% annually. Independent measurements of inflation expectations are consistent with this normalization path, although somewhat tuned down. Combined with this are conjunctural factors, such as the higher CPI variation expected by the market for the next three months, which increase the appeal of indexed instruments and provoke a transitory slump in their interest rates.

Notwithstanding these temporary fluctuations in long-term interest rates, it must be noted that present levels are the lowest in twenty years, and this continues to be a very strong stimulus for the expansion of domestic demand and especially of real investment. Actually, the current interest rates of CPI-indexed Central Bank bonds are below 3% or 4%, depending on the duration, less than several potential growth estimates for the Chilean economy and certainly well below its conjunctural rhythm of expansion.

This level of long-term domestic interest rates responds to the continuation of an expansionary monetary policy, whose stimulus is perceived by the market as gradually fading, but also to the favorable global financial scenario. As I said before, conditions for issuing international bonds remain very favorable. Real long-term rates in developed markets are below 2.0%, as can be inferred from the returns on indexed government bonds: 1.82% in the US; 1.76% in the U.K.; 1.9% in Canada.

On the other hand, credit conditions have also been influenced by the better financial situation of firms and households. This improvement of flows and balances has translated into reduced credit risk, intensified competition among credit suppliers and increased disposition to lend by financial institutions and other investors (banks' past-due portfolio fell by 17.7% over the twelve-month period ending last January and is now just 1.2% of total loans).

Accordingly, information collected in the Central Bank of Chile's banking loan survey last February indicate that bank conditions for granting credits are less and less restrictive, while the number of applications to bank loans continues to grow.

In this scenario, money and credit continue to post high twelve-month growth rates. However, in the margin the growth rates of financial aggregates appear to be stabilizing and some measures of money are slowing down somewhat. Consumer interest rates are also rising, as are the rates for prime clients, who follow market rates very closely.

Finally, stock prices have increased past the levels of last year, reflecting the good performance of companies and better expectations of investors, who believe the good results will remain and improve.

To complete our review of the macroeconomic environment, let us take a look to domestic demand, employment and inflation. Domestic demand has been showing, since the second half of 2004, more vigor than in previous years, pushed mainly by gross fixed capital formation. Good prospects at the firms, the recovery of corporate profits and good macroeconomic conditions in general have not only permitted investment to eliminate the lag it was showing a year ago, but it is now posting surprising strength.

On the other hand, there are indications that private consumption has remained robust despite the rise in oil prices. The strong dynamism of employment, the recovery of household confidence and the still expansionary financial conditions suggest that in coming quarters this component of expenditure should continue to build up strength.

The maintenance of the fiscal rule within a context of substantial recovery of income, because of both accelerated economic growth and the high copper price, has resulted in a large increase in public savings and a 2.2% of GDP fiscal surplus in 2004. Within the framework of the current fiscal surplus rule, the fiscal budget for 2005 considers a bigger increase in public spending than last year, which will add a moderate thrust to the macroeconomic impulse that monetary policy will continue to provide. Thus, higher terms of trade have contributed to increase public and national savings, even beyond the substantial increase in investment, with which a current account surplus consolidated for 2004. This year, external accounts should reflect the greater domestic expenditure and less spectacular terms of trade, in a current account nearing equilibrium.

In mid 2004, the labor market began to show increased dynamism, dissipating a large part of the doubts and uncertainty regarding its behavior at the present conjuncture. Beyond the volatility observed in mid year and seasonal effects, available information place employment significantly above its 2003 level, and this can be linked to a substantial increase in formal employment. This, together with increased female participation and the changing composition of unemployment, suggest that the persistent rate of unemployment is no indication of widespread weakness in the labor market.

As for inflation, the volatility of fuel prices and parities, plus the variations in regulated rates, have had a temporary effect on CPI inflation. Also, over the past several months, core inflation measures[3)] have increased steadily, because of mild pressure arising from margin decompression, combined with reduced unit labor costs and inflation expectations still well anchored around the center of the target range. This reveals that the Chilean economy has managed to accommodate recent increases in aggregate demand without incurring in undesirable inflationary pressures. The inflation trend of recent months and expected for the next 12 to 24 months have convinced the Board that, in the baseline scenario, the monetary stimulus should continue to diminish gradually and slowly. This policy is consistent with a gradual convergence of CPI inflation projection to 3%, despite increased activity, thanks to the fact that, with the output gaps still present, the increase in costs, particularly labor related, continues to be bounded.

Thus, the foreseeable trend of unit labor costs and margins suggests that in 2005 inflationary pressures will increase gradually in comparison to 2004. Overall, CPI inflation will remain close to the lower bound of the target range, maybe below the 2% floor for some months, but it will depend crucially on the behavior of the world oil price.

In the medium term, closing output gaps and the gradual normalization of the monetary impulse should bring inflation to the center of the target range during 2006.

The main risk scenarios in the national economy derive from the possibility of output and investment reacting, more intensely than estimated, to today's good macroeconomic conditions. The strong increase that the various monetary aggregates continue to show and the surprisingly persistent growth in capital goods imports can be indications that this dynamism will go on. On the price and cost side, a scenario can be outlined where pressures on margins will cause an acceleration of core prices larger than the one considered in the baseline scenario, which may occur if the

[3)] There are two, one that excludes fresh fruits and vegetables and fuels(CPIX), and another that excludes the same plus regulated utility rates, indexed prices and financial services(CPIX1).

economy continues gathering strength. Finally, it is estimated that, aside from its effects on specific sectors, the restrictions in Argentinean natural gas supply, if similar in magnitude to those of last year, should not have any material macroeconomic incidence.

Overall, prospects for the Chilean economy look good, with growth projected between 5.25% and 6.25% for this year, inflation in the lower bound of the target range in 2005 and in the center of it in 2006, and a current account deficit smaller than 1% of GDP this year.

Abstract

The monetary policy framework being used in Chile has permitted the country to attain and maintain a low and predictable inflation, improve its capacity to accommodate external shocks, and contribute to the creation of a macro environment that is favorable to economic growth. This policy framework, combined with a market-oriented economy and the improved external conditions, permitted a growth rate of 6.1% in 2004, as well as positive prospects for coming years, while significantly reducing output variability.

Key Words: Inflation Targeting, Monetary Policy, Economic Growth, Chile / 물가안정목표제, 통화정책, 경제성장, 칠레

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