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The Central Bank and *Chilean macroeconomic* policy in the 1990s

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This article aims to describe and analyze the formulation, implementation and results of the macroeconomic policy carried out by the Central Bank of Chile in the first half of the 1990s. Section I explains the importance of the macroeconomic balances from the standpoint of the Central Bank of Chile. Section II describes the Central Bank's objectives and its interpretation of the achievement of domestic and external balances. Section III summarizes the institutional, structural and conjunctural features which make the Chilean experience a special case. Section IV sets out the criteria adopted by the Bank in formulating and implementing its macroeconomic policy. Section V describes and explains the essential features of the monetary, exchange-rate, international reserves and capital account openness policies carried out during the period. Finally, section VI describes the most important results of the above policies and sums up the main conclusions of this study.

I

The basic macroeconomic balances

One of the most important items in the design of economic policy is the role played by the maintenance of the macroeconomic balances in the economic growth process. Fiscal, monetary, exchange-rate, wage and financial policies are of key importance for achieving and maintaining the fundamental macro-balances of the economy, both with regard to employment and stability of prices and of the system of payments (the domestic balance) and with regard to the external sector balance.

In order to achieve and maintain the domestic balance, the level of utilization of the production resources of the country must be such that it does not give rise to inflationary pressures greater than those provided for in the national economic programme. To this end, macroeconomic, and especially monetary and fiscal, policy must be aimed fundamentally at ensuring that aggregate domestic demand is in line with the production potential (the aggregate supply) of the economy.

Although it is true that, as a general trend, global expenditure should not grow more than the potential product¹ – a growth rate estimated at approximately 6.5% in real terms per year for the Chilean economy during the first half of the 1990s –² it is both possible and desirable to supplement domestic saving appropriately with resources of external origin for financing investment. This makes it desirable that the level of domestic expenditure should only exceed national income by a proportion which depends on the amount, nature and sustainability of the sources of external finance. In the case of the Chilean economy,

it was estimated that maintaining the external balances was equivalent to accommodating a trend deficit on the balance of payments current account within the range of 3% to 4% of GDP.³

A low rate of inflation is essential when it is sought to achieve ambitious goals in terms of economic growth, investment, employment and reduction of poverty. Since the Central Bank does not have the direct tools for achieving these objectives, it must concentrate its efforts both on reducing the rate of inflation and on progressing towards greater price stability; only in this way can it make an effective contribution to the achievement of such objectives and, hence, the development of the country. It should be noted that price stability is not an easy objective to attain, above all in a country with a history of chronic inflation, like Chile, and with several decades of application of very generalized price indexing mechanisms. Furthermore, in the first half of the 1990s the Chilean economy was operating, for all practical effects, in a situation of full employment and without idle production capacity.

A macroeconomic environment which ensures that inflation is first of all brought under control, then gradually reduced, and finally stabilized at a low rate is an essential prerequisite for achieving high rates of investment and sustained increases in employment and in factor productivity. Experience has shown, however, that bringing inflation down from very high rates to moderately low rates is the easiest part of the stabilization process. The most difficult part is achieving subsequent convergence towards the rates of inflation registered by the industrialized countries. This calls for an unremitting effort to establish conditions favouring a sustained process of slowing down inflation, while at the same time minimizing the presence of distortions which can bring about undesirable fluctuations, if not actual reversal, of that process. The requisites for achieving this result are, among others, the maintenance of strict control over the

□ The author wishes to thank Hector Assael, Gunther Held and Andras Uthoff for their valuable comments.

¹ Strictly speaking, this assertion is true when the economy is at its production frontier. When it is below this level, it can grow faster (if external constraints permit this). When the economy is overheated, however, it is necessary to adjust levels of activity, so that during this period expenditure must grow more slowly than the potential product.

² See P. Rojas, E. López and S. Jiménez, "Determinantes del crecimiento del producto potencial de Chile: el rol del comercio", in *Análisis empírico del crecimiento en Chile*, F. Morandé and R. Vergara (eds.), CEP/ILADES-Georgetown, Santiago, Chile, June 1997.

³ See N. Eyzaguirre and P. Rojas, "Las políticas monetaria y cambiaria en Chile durante los noventa", Santiago, Chile, Central Bank of Chile, January 1995.

public finances to avoid expansionary cycles in expenditure; a monetary policy which makes possible real interest rates consistent with the productivity of capital in the long term; a real exchange rate which ensures adequate competitiveness of the tradeables sector while at the same time making possible a level of utilization of external saving in keeping with the viability of the balance of payments in the medium term, and a financial policy which ensures the stability and solvency of the financial system, in order to forestall and prevent repercussions of a macroeconomic nature due to its possible malfunctioning, fragility or even crisis.

It would of course be an exaggeration to pretend that macroeconomic stability is sufficient of itself to achieve high and sustained growth rates. There are other elements of a more structural nature which are also decisive conditions for generating and promoting economic growth and which are connected with the existence of competitive and flexible markets, especially those for the factors of production, and the application of policies to regulate the structure and functioning of some key markets such as the financial market or monopoly markets, as well to foster the processes of saving and investment, human capital formation, and scientific and technological research.

The criteria set forth in the above definition of the macroeconomic environment are not easy to measure. There is therefore usually a good deal of discussion as to whether the levels of interest rates, the exchange rate or the balance of payment current account balance are the right ones for each particular period, and it consequently becomes difficult to judge, when taking a medium-term view, whether or not there are deviations from the macroeconomic equilibrium conditions. The greater the stability of the economy and the more ambitious the anti-inflation objectives pursued, the more complex this problem of diagnosis becomes. Thus, the conditions of macroeconomic instability which give rise to inflation of the order of 30% per year or more are easily identifiable, but those that represent only marginal deviations from an objective of a low rate of inflation, such as that registered in Chile towards the end of the first half of the 1990s, are the subject of considerable discussion and controversy. Prudence, good judgment, careful observation, comparison with the experiences of other countries, and an independent approach in making judgments are very important

assets for making a proper macroeconomic diagnosis in such circumstances.

The difficulty of precisely defining the right environment for the achievement of macroeconomic stability is the reason why, in practice, the rate of inflation is one of the main indicators used for assessing the skill of the economic authorities in controlling that environment.

It is not only the rate of inflation in a given period that is important, however, but also its sustainability in time. Obviously, authorities which repeatedly allow high rates of inflation do not have proper control of the economic situation; the economic agents end up by incorporating a factor of mistrust and uncertainty in their patterns of conduct, which causes them to believe that somehow and some time it will be necessary to make an adjustment in expenditure. There are also situations of low inflation where the policies applied are not sustainable either, however. These cases, which are marked by significant fiscal deficits or balance of payments current account deficits, have usually been followed by the sudden resurgence of latent inflationary problems.⁴ In these situations, the fiscal and current account deficits are useful indicators for anticipating that in most cases the low rates of inflation observed will not be sustainable in time.

Only those cases where the Central Bank and the government economic authorities have been able to create a sustained environment of low inflation—low in terms of its level or trend—have been successful and have therefore been capable of generating expectations that the current macroeconomic policies will be maintained or, if changes have to be made, that these will be carried out gradually.

In short, the results obtained in terms of inflation and the implementation of policies which are in keeping with the objectives pursued in this respect are of fundamental importance for securing the credibility of economic policy. This credibility encourages the process of saving and stimulates business investment, initiative and innovation, with a corresponding positive impact on the creation of jobs and economic growth.

⁴ It should be noted that there are some cases where, when there are well-developed capital markets of adequate depth, moderate fiscal deficits are not necessarily a source of inflationary pressures.

II

Policy objectives

The Charter of the Central Bank of Chile lays down three objectives for that institution: those of ensuring the stability of the currency, the proper functioning of domestic payments, and the proper functioning of external payments. The Charter also states that when adopting agreements the Central Bank must bear in mind the general lines of the government's economic policy. During the 1990s, the Central Bank of Chile has concentrated its efforts on the gradual, systematic and sustainable reduction of inflation, the definition of a range within which the balance of payments current account deficit must be maintained, and the establishment of suitable conditions for ensuring the stability and soundness of the domestic financial system.⁵

Consequently, the formulation and execution of the Central Bank's policies were not directly aimed at the achievement of other government economic policy objectives such as stimulating economic growth, increasing saving and employment, or improving income distribution. There were three reasons for this: first, because the Bank's objectives are defined by law; second, because the instruments available to the Central Bank are limited, to such a point that some observers claim that the institution does not have the necessary capacity for achieving the three objectives laid down by law, and third, because the achievement of these objectives was approached in such a way as to make it functional to the government's global development strategy of economic growth with equity.

The objectives laid down by law for the Central Bank of Chile were implemented on the understanding that they would be defined in a long time

horizon, so that their achievement would take place over time, in a sustainable manner. This would also help to give credibility to macroeconomic policy and impart stability and sustainable dynamism to the development process. Another basic feature of the way the Central Bank's objectives were understood was that they should be achieved within a balanced context, without giving rise to traumas in other key areas of the economy and without it being necessary or even desirable to show spectacular immediate achievements. Instead, priority was given to continuity, a systematic approach, solidity, stability and credibility, together with global macroeconomic balance, with its corresponding positive impact on saving and investment decisions, employment and wages, in a kind of virtuous circle of the economic development process. The alternative would have been to flaunt the apparently rapid and highly successful or even spectacular achievement of a few objectives, but at the cost of giving rise to serious imbalances in other key areas of the economy or society. Experience shows that achievements of this type are marked by their fragility and short duration in time, consequently making it necessary to slow down or even reverse reforms and policy implementation, thereby affecting the confidence of the economic agents and the effectiveness and bases of the macroeconomic programme.

1. The anti-inflation objective

Article 3 of the Charter of the Central Bank of Chile lays down that one of the objectives of the institution is to ensure the stability of the value of the national currency. In other words, it lays down the objective of price stability, which was interpreted in the first half of the 1990s as the systematic and sustainable reduction of the rate of inflation to single-digit levels.⁶

The priority given to the objective of price stability is often questioned on the grounds that the re-

⁵ The present article only analyzes the actions of the Central Bank of Chile with regard to two of these objectives: the control of inflation and the maintenance of the external balance of the Chilean economy. Much of the success achieved in the attainment of these two objectives has been due to the establishment of suitable conditions for the soundness of the domestic financial system and their supervision and follow-up, however. Although it is outside the scope of this article, the "financial development" option (including not only the banking system but also the non-bank financial intermediaries and their proper supervision and regulation, in contrast with the more simplistic policies of "financial liberalization") has played an important part in the establishment of a macroeconomic and institutional framework favouring coherent economic policies.

⁶ The Central Bank's aim was to bring the inflation rate down to the level of the industrial countries, that is to say, between 2% and 3% per year. In accordance with this objective, inflation was to be brought down to single-digit levels by 1995-1996 and then gradually approach the figures in question.

ally important goal is economic development and monetary policy should therefore be subordinated to that objective. This type of criticism is more frequent in periods or situations when the campaign against inflation, reflected in a monetary policy seen as restrictive, leads to a slowdown in the growth rate of the economy.

Empirical studies on the relation between inflation and growth carried out on the basis of data corresponding to developing countries suggest however that, all other things being equal, a higher rate of inflation means a lower rate of growth in the long term. This relation is even more marked in countries with moderate or high inflation. Likewise, the same empirical studies also show that in countries with low and stable inflation rates—around a single digit—variations in those rates tend not to have a serious effect on the economic growth rate.

The objective of price stability, which is shared by almost all the Central Banks in the world—and certainly by all those which are independent, as is the Central Bank of Chile—is not an end in itself. Obviously, the main objective of the economic authorities as a whole is to achieve greater national development and improve the living conditions and quality of life of the population, for which a high economic growth rate is a necessary condition. This does not contradict the achievement of the anti-inflation objective, however. On the contrary, it has been shown both theoretically and empirically that price stability favours economic growth in the medium and long term. The Federal Reserve Board (Central Bank) of the United States, for example, recently published a study in which it shows that lower inflation increases the productivity of the economy. Moreover, inflation is actually a (non-legislated) regressive tax, since it most heavily affects those with fewer resources, who have less possibility of protecting themselves against it. Consequently, price stability also has a positive effect on income distribution and helps to achieve a society with greater opportunities. Thus, an institution like the Central Bank which seeks to achieve the anti-inflation objective is also collaborating and assisting in the medium and long-term economic development of the country.

During the 1990s, the Central Bank of Chile has taken the view that price stability is a necessary condition for rapid and sustained economic progress and that international experience proves this. From this standpoint, such stability is just one of the measures for the achievement of the more global objective of

good economic performance. An ambitious objective, but one which can reasonably be attained in the case of the Chilean economy, is to arrive at low and stable annual inflation rates like those currently registered in the developed countries. Beyond any doubt, it would be best to be able to live in a world without inflation. The rigidities which have to be faced in real life, however, may make it necessary to permit a slow increase in the price levels of the economy, although at very low rates, in order to facilitate some adjustments in the structure of relative prices. Improvements in the quality of goods and services also involve a tendency toward a statistical rise in price levels. Nevertheless, a stable annual rate of inflation like that registered in the industrial countries could be described, without exaggeration, as thoroughly positive, since the serious problems associated with inflation tend to disappear as the rate of inflation approaches this range.

The aim of achieving a rate of inflation similar to that of the developed countries is also justified because the internalization strategy of the Chilean economy becomes much more efficient in a context of domestic price stability. Likewise, the fact that the consolidated public sector (even after inclusion of the Central Bank accounts) does not show a deficit, together with the increasing soundness of the macroeconomic performance of Chile, indicate that there are no reasons for having inflation rates higher than the international levels. It should, however, be noted that the generalized indexing of the Chilean economy on the basis of past inflation suggests that it would be desirable to progress gradually towards the objective of price stability, for such an approach minimizes the short-term costs in terms of economic activity and employment connected with price stabilization policy, while at the same time the economic authorities steadily gain credibility. This tends to impart growing legitimacy to the anti-inflation policy and makes it possible to further improve monetary policy and make it more efficient, without unnecessarily sacrificing other economic policy objectives.

2. The external balance objective

Article 3 of the Charter of the Central Bank of Chile also lays down that another of the institution's objectives is to ensure the normal functioning of external payments. In other words, it lays down the objective of achieving external balance, which has been interpreted as meaning that the balance of payments cur-

rent account is an important element and that any deficit on it must be kept within a predetermined range.⁷

It is often objected that too much importance is attached to the balance of payments current account deficit in the design of macroeconomic policy. It is maintained that the developing countries need external saving to finance investment, and that this deficit is not very important if its financing is covered by net inflows of "private" and "voluntary" capital. It is also argued that the deficit is not a cause for concern when the excess of imports is concentrated in capital goods, especially if the latter are designed to increase the production capacity of the tradeables sector of the economy.

Although the above considerations do make some sense, they are not so important compared with what really matters: the acceptable limits—in terms of both size and duration—of the balance of payments current account deficit. The emphasis placed on this deficit, which is fundamentally a reflection of the excess of domestic expenditure over the income of the economy and, more specifically, the emphasis placed on controlling the trend deficit of the balance of payments current account, are justified by the decisive influence that external constraints—including the impact of the evolution of the terms of trade and of international interest rates, among other factors connected with Chile's form of insertion in the international economy—have always had on the vulnerability of the Chilean economy in the past.

Moreover, focusing attention on the evolution of the balance of payments current account deficit is another way of taking care that external saving does not take the place of domestic saving but complements it, so that the latter may finance a high and significant percentage of domestic investment, which is a decisive factor for the stability and sustainability of economic growth.

An item of the greatest importance in the design and execution of Chilean macroeconomic policy in the first half of the 1990s has been the fact that the Central Bank has always resisted the temptation to relax monetary policy ahead of time, in spite of the

easy situation in the external sector due both to the very favourable evolution of exports, whose volume grew at an average annual rate of 10%, and the significant net inflow of external capital, which averaged 6% of GDP. It may be noted that in this period there was heavy pressure for relaxation of the monetary policy (reduction of domestic interest rates) and the modification or even complete elimination of the system of an exchange rate variation band, the international reserves policy, and also the policy designed to deal with short-term inflows of external finance. Yielding to this pressure would have led to greater appreciation of the Chilean peso that that which actually took place during this period, but the distinctive feature of macroeconomic policy in those years was in fact its clear and firm definition and defence of the global strategy, maintaining the monetary policy as long as was necessary to make serious and solid advances in the control of inflation and refusing to allow a larger deficit than that laid down for the balance of payments current account. In this way, the Central Bank helped to consolidate high economic growth for Chile, financed primarily with domestic saving, and in the process it ensured a gradual but credible, sustained and sustainable reduction of inflation, without endangering the medium- and long-term external equilibrium of the Chilean economy.

Consequently, regardless of who was "responsible" for excess domestic expenditure (the public or private sector), the source of its financing (inflows of voluntary external financing or expansion of domestic credit), the composition of imports (consumer or investment goods), or the use made of the latter (expanding the production capacity of the tradeables or non-tradeables sector of the economy), the prime objective of Chilean macroeconomic policy in the first half of the 1990s was to establish conditions which would prevent the generation of a balance of payments current account deficit that might bring into question the sustainability and credibility of the macroeconomic policy.

Although the exact size of the current account deficit that a developing country can reasonably sustain is hard to specify and may vary from one country to another or over time within a given country, the range of 3% to 4% of GDP mentioned above for Chile in the early 1990s was arrived at on the basis of three main guiding criteria.

First, although the trend deficit on the balance of payments current account was substantial, it made it possible to keep steady or slightly improve the usual indicators of external solvency such as, for example,

⁷ In the case of Chile, this range was determined, on the one hand, by the fact that it was estimated that the potential product in dollars, at a constant real exchange rate, grows at the rate of about 8% per year. Furthermore, as the external debt in the early 1990s was slightly more than 50% of GDP, a balance of payments current account deficit of (a maximum of) 4% of GDP means that the external debt/GDP ratio would remain constant. The range adopted (between 3% and 4% of GDP) meant that it was not desired to exceed the limit of an external debt equivalent to 50% of GDP; indeed, it was considered prudent to gradually reduce this ratio, which did in fact take place.

the external debt as a proportion of GDP or of exports of goods and services.

Second, in the light of the level of net international reserves considered desirable, a balance of payments current account deficit of that order of magnitude was in line with the projections of the supply of net medium- and long-term external financing available to Chile.

Lastly, the acceptance of significantly higher levels of current account deficit, even though they

may be considered capable of being financed for a certain length of time, leaves the economy exposed or vulnerable to changes in the liquidity conditions or expectations of international financial markets. These may register sudden big changes due to various types of shocks, ranging from those of a political nature to others such as significant falls in the terms of trade of the economies of the region or rises in interest rates in the industrial countries.

III

Initial conditions

Some structural features of the economy, such as the initial conditions and the institutional context in which macroeconomic policy was carried out in the 1990s, are of great importance because they define and delimit certain special situations which such policy had to deal with in the case of Chile.

a) Structural reforms

At the beginning of the 1990s, the Chilean economy had already been operating for some years with a scheme under which various structural reforms had been made, including tariff reduction and simplification, the privatization and radical modification of the Social Security system, liberalization and new legislation for the banking system, fiscal reform, and the privatization of a large number of public enterprises. Many of these reforms suffered serious setbacks over the course of time, but in general the tendency was to reformulate and improve them rather than reverse them.

b) Growing openness to the exterior

The Chilean economy is small and quite open to international trade and finance. During the first half of the 1990s, these features became still more pronounced. Thus, the coefficient of exports of goods and services as a proportion of GDP rose to over 35%, tariffs were lowered from 15% to 11%, the regulations on the foreign exchange earnings of Chilean exporters were steadily eased and finally completely removed, and various bilateral free trade agreements were put into effect.

On the financial level, there was also a process of growing openness to the exterior, with regard to both the inflow and outflow of capital. Foreign investments by Chileans were completely liberalized,

except for those made by banks, pension fund management companies, insurance companies and mutual funds. In the case of these institutions, the liberalization process was more gradual and selective, both through legal restrictions and through those of a prudential nature, mainly promoted by the Central Bank. There was also a growing process of liberalization of capital outflows by non-residents. Thus, for example, the minimum term for the repatriation of foreign investment capital was reduced from three years to one year, the outflow of investments under chapter XIX of the Compendium of International Exchange Regulations was completely liberalized,⁸ and the advance repayment of foreign debts was liberalized, as was the minimum percentage of external credit that must accompany foreign direct investment.

With regard to the inflow of capital, there was a significant increase in foreign direct investment, and new mechanisms were authorized and developed such as ADRs (American Depositary Receipts), bonds, and bonds convertible into equity, the conditions of which were also liberalized over time. Because of the negative impact that the excessive inflow of short-term external finance was having on monetary and exchange rate policy, the rate of inflow of such capital was checked and the cost of this type of finance was increased by imposing a requirement for a one-year non-interest-bearing compulsory reserve in respect of most external credits and other sources of foreign-currency financing, which meant an extra charge inversely proportional to the term of such financing.

⁸ A set of regulations governing the conversion of external debt into investments, introduced during the crisis of the early 1980s.

c) *High rates of domestic saving*

Another significant feature of the Chilean economy in the early 1990s was the high level of domestic saving. Thus, whereas in the first half of the 1980s domestic saving was less than 10% of GDP, in the second half of the decade it exceeded 16% and in 1989 it was a little less than 24% of GDP. Between 1992 and 1996, the level exceeded 25%. It may be noted that the volume of domestic saving depends on the country's attitude and policies with respect to external saving, since there is abundant empirical evidence of the replacement of domestic saving by external saving, which generally takes place when, in particular circumstances, there is indiscriminate acceptance of "excessive" inflows of external finance, especially of a short-term nature.

d) *Development of the capital market*

There has been very considerable development of the capital market in Chile, which has made possible increasing deepening of the financial system. In particular, the demand for Central Bank financial paper, both by banks and by pension fund management companies and insurance companies, has helped not only to create a long-term capital market but also to ensure the smooth execution of open market operations, which have become an effective monetary policy instrument.

e) *Fiscal surplus*

In recent years, the fiscal budget has always shown a surplus, which made it possible to bring about a relative reduction in both external and domestic debt. The most noteworthy point, however, is that such a surplus was essential if it was desired to offset the substantial quasi-fiscal deficit registered by the Central Bank because, on the one hand, of the sequels of the "rescue" of the private Chilean financial system carried out in the early 1980s and, on the other, the losses suffered by the Central Bank as a result of the significant buildup of international reserves in the first half of the 1990s.

f) *Effective GDP very similar to the potential GDP*

It may be recalled that in the five-year period from 1985 through 1989, the main macroeconomic constraint was the shortage of foreign exchange, due mainly to the over-appreciation of the peso in the late 1970s and early 1980s and the consequent balance of payments and external debt crisis and its sequels. Moreover, the high average annual growth rate of GDP in that

period (6.6%) is largely explained by a recovery from the sharp drops suffered in 1982 and 1983 (14.1% and 0.7%, respectively), which meant that in that five-year period the effective evolution of GDP was far below that of the potential product (except in 1989).

In the period from 1992 to 1996, in contrast, there were almost no unused resources in terms of idle production capacity or in the labour market, while the external constraint disappeared as a result of the strong growth in exports and the big inflow of foreign direct investment and international credit during those years. Moreover, because of the overheating of the economy in 1989 and the subsequent evolution of expenditure, GDP growth in the 1990s was close to the limit of the production frontier, or, in other words, the actual level of GDP was very similar to the potential level of the product.

With regard to the economic situation at the end of 1989, this had been preceded by a five-year period in which, as already noted, there had been strong growth of economic activity, led by the increase in gross fixed capital formation and exports. In this context, with GDP growth of 9.9% in 1989, there was obviously excess spending, reflected not only in a level of economic growth which was not sustainable over time, but also in the speeding up of inflation and excessive growth of imports. This situation required an adjustment process in 1990, which was marked by the adoption of an austere fiscal policy and a restrictive monetary policy.

g) *Generalized indexing of prices*

Generalized indexing of prices is another feature of the Chilean economy. As a result of chronic inflation and the size and unexpected fluctuations of price increases, Chilean society had got used to "living with inflation", protecting itself from some of its harmful effects by the incorporation of price readjustment clauses based on past inflation. In this way, such decisive prices as the exchange rate, interest rates, wages, rents and taxes, among others, have to a large extent incorporated indexing clauses which, while they have relieved some of the problems caused by inflation and have helped to increase financial saving, have also affected the design and execution of fiscal, monetary, exchange rate and wage policies.

h) *Almost complete absence of domestic fiscal debt*

There is practically no domestic fiscal debt in Chile: its place is taken by the domestic debt of the Central Bank. Thus, as a consequence of the rescue

operation for much of the private banking system affected by the financial crisis of the early 1980s, the Central Bank directly and indirectly took responsibility for avoiding the effects of the monetization of that rescue operation by issuing domestic debt paper, mostly in "readjustable" pesos. Likewise, in the 1990s the Central Bank took responsibility for and paid the cost of avoiding the monetary impact of the significant accumulation of international reserves, by issuing its own debt paper, so that in practice it has been responsible not only for monetary policy but also for that of the Treasury, that is to say, for managing the domestic public debt.

i) Autonomy of the Central Bank

Another feature worthy of note is the recently introduced autonomy and independence of the Cen-

tral Bank, which is a decisive factor in the design of macroeconomic policy and in the institution's will and credibility for combating inflation, with the consequent impact on fiscal policy and the formation of expectations among the various economic agents.

j) The shared objectives of the government and the Central Bank

Finally, another important point is the fact that the government and the Central Bank share the same objectives. Thus, beyond any differences of opinion and emphasis which may exist between the two, there has been coordination and collaboration between the fiscal and monetary authorities with regard to the broad lines of macroeconomic policy, and this has undoubtedly contributed to the effectiveness of the design, formulation and results of that policy.

IV

Criteria for the formulation and execution of macroeconomic policy

In the light of the initial conditions of a structural, institutional and current nature which marked the Chilean economy at the end of the 1980s, the Central Bank laid down four basic criteria which were to govern its action during the first half of the 1990s.

1. The global macroeconomic balance

A fundamental criterion in the Central Bank's anti-inflation policy was to avoid giving rise to major imbalances in other key areas of the economy. Thus, achievements with regard to inflation must not be secured at the cost of generating a substantial increase in the levels of unemployment and idle capacity, upsets in the financial markets or an unsustainable deterioration in the external accounts. Such internal or external imbalances not only involve high costs in themselves but also undermine the credibility of the stabilization effort, shed doubts on its sustainability, delay its effects, and finally turn out to be counter-productive if that effort finally has to be abandoned halfway.

2. The medium- and long-term horizons

A second fundamental criterion for understanding the Chilean Central Bank's actions in the first half of the 1990s was the time horizon that it took into account in adopting its policies. It always tried to ensure that its decisions gave priority to the stability and solidity of the economy, which meant setting itself a time horizon that took account mainly of medium- and long-term trends; in other words, the Bank's policies must go beyond the short-term, day-to-day situation.

The current or short-term economic situation must of course be observed with close attention, since it affects the future evolution of the various economic variables. Nevertheless, the Central Bank must take its decisions in the light of the medium and long term, because ultimately what it really wants to do is to ensure the stability of the main macroeconomic variables over time, and not give rise to transitory or temporary booms which later have to be reversed, with the consequent negative impact in terms of accentuating the cycles of activity and contraction, as well as the greater uncertainty generated in the taking of decisions by the economic agents.

There are various grounds for the importance of the medium- and long-term horizon in the Central Bank's decisions. On the one hand, there is an ongoing discussion about the medium- and long-term effects of short-term measures. Thus, in certain circumstances it is possible to stimulate economic growth temporarily by relaxing monetary policy. This would reflect a short-term approach, however, since generally speaking it would adversely affect the long-term growth possibilities of the country. Moreover, it would undoubtedly be necessary sooner rather than later to apply an adjustment policy and hence return to a more restrictive monetary policy. It is because of this conflict between the short and long term that many countries have decided to make their Central Banks autonomous, entrusting them with the basic objective of combating inflation. Monetary policy is thus given a longer time horizon, precisely because of the need to avoid the application of a short-term approach in its execution; when such an approach is taken, it tends to be reflected in the adoption of hasty or even frankly mistaken monetary policy decisions every time that one or another of the economic indicators shows a certain amount of weakness.

Secondly, the Central Bank of Chile has been criticized on a number of occasions, perhaps by persons who were not aware of the medium- and long-term approach taken by it in its actions, for not having achieved major advances in terms of price stability. It was claimed that it would have been possible to make faster progress in this respect, and reference was often made to the experiences of other countries of the region which appeared to be obtaining quicker or more spectacular results than Chile in controlling inflation. In response to this criticism, it should be pointed out that there has in fact been notable progress in controlling and reducing inflation. Thus, after standing at 27.3% in 1990, the growth rate of prices went down steadily to values almost identical with the planned goals in terms of inflation. In 1996, inflation was 6.6%, which was very similar to the goal of 6.5% set for the end of the year. Moreover, although indexing does have some positive aspects, it makes the abrupt reduction of inflation too costly in terms of its effects on the product and employment. For this reason, it has been preferred to deal with inflation through a gradual strategy, on a secure and consistent basis. It should also be noted that Chile has not used the exchange rate for anti-inflation purposes. If it had done so, it would have

progressed more rapidly in bringing down inflation, but most likely the short-term benefits of that strategy would have been offset by the costs that would be incurred in the longer term. The painful experience of the early 1980s was something that the Central Bank of Chile was not willing to repeat. As was made clear on that occasion, the use of the exchange rate to achieve better anti-inflation results is a policy which more often than not tends at some point in time to lose its effectiveness and to begin to militate against the possibility of achieving the objective pursued.⁹

Third, experience has shown that monetary policy takes some time to begin to affect the course of the economy: for a country like Chile, the measures in this field must be taken bearing in mind their effects in the following 6 to 18 months.

Finally, on various occasions the conduct of agents who are using very short-term horizons conflicts with the elements defining the conditions for medium- and long-term equilibrium and development. Thus, for example, financial logic, which is more often than not of a very short-term nature, may give signals and determine prices which cause the tradeables sector of the economy to take mistaken decisions with regard to investment and resource allocation. Likewise, short time horizons like those typical of some information media or specific sectors of activity may affect expectations and investment decisions and even the policy options of the authority, through signals and prices which are not correct from the medium- and long-term development standpoint. Thus, this once again justifies the medium- and long-term approach taken by the Central Bank, which helps to correct or at least limit the distorting effects of an excessively short-term approach on the conduct of the economic agents.

3. Prudence and graduality

The Central Bank is an institution which, by the very definition of its objectives—seeking the stability of the currency and the normal functioning of internal and external payments—must be very prudent in its actions. Any decision taken hastily, without prior appraisal of its effects, can and usually does have

⁹ Sooner or later, the appreciation of the currency becomes unsustainable and costly and complex side effects are generated in other key areas of the economy, such as loss of competitiveness and deterioration of the banking system and/or the need for an eventual devaluation which completely wipes out the progress made against inflation.

extremely harmful consequences for the functioning of the economy.

Moreover, the approach based on the use of medium-term horizons also suggests that a prudent reaction should be taken to the short-term variations displayed by some individual indicators. Monetary and exchange rate policy decisions must be based on the trends of a broad set of indicators, and not on very short-term data covering one or two months. In effect, the policy measures adopted by the Central Bank of Chile were not the result of hasty reactions to indicators for a particular month or period or isolated figures, no matter how spectacular they might be. It should be clearly understood in this respect that the monthly fluctuations shown for example by the Monthly Index of Economic Activity (IMACEC) or the consumer price index itself (CPI) merely represent a couple of items in a considerable group and only assume their true importance when they used, not in an isolated manner, but in terms of their trend values and in conjunction with other complementary indicators such as the evolution of employment, wages, the exchange rate, expenditure, the trade balance and the balance of payments.¹⁰

In line with this approach, the Central Bank must proceed on solid bases, although this does not mean reacting in a tardy manner. On the contrary, the really important thing is that the institution should always try to take measures which anticipate inflation rather than waiting for the latter to show itself openly. Thus, as inflation usually reveals itself with some delay, the Central Bank must be on the watch for incipient signs of inflationary pressures and must act firmly to forestall them and neutralize them as soon as possible. It is neither prudent nor efficient to put off certain adjustments until the imbalances are reflected in the inflation rate itself. At that point in time, the inertia introduced through nominal adjustments in wages and prices, together with the loss of credibility in respect of the anti-inflation commitment of the authorities, make necessary stronger adjustments which secure the same results against inflation, but at a considerably higher cost in terms of employment and economic activity.

Consequently, the reactions of the monetary

authorities must be timely, but never hasty. Sometimes, the institution is criticized for not reacting immediately to particular market signals. The truth is that on most occasions it would have been a mistake for the Central Bank to react to a short-term phenomenon which has a high probability of being reversed in the future. Acting in this manner would only result in the adoption, within a short space of time, of decisions in one direction or another which soon had to be reversed, thus eventually merely adding still more "noise" to the economy and generating adverse effects on the level of activity, investment and employment.

On the contrary, the past experience of Chile, as well as of various other Latin American countries, indicates that very drastic or shock-type measures are justified mainly in the case of critical or very special situations, such as very high and uncontrollable inflation or a growing fiscal deficit, or else in order to bring about a significant turnaround in expectations. The impact of the Central Bank's policies is so great, however, and has so many repercussions on different economic sectors, that as a general rule the Bank must be extremely prudent and proceed in a gradual manner in adopting its decisions. For the same reason, it is necessary to make systematic assessments of the direct and side effects of those decisions. Graduality and prudence are therefore very good guidelines for the taking of decisions, since they make it possible to correct situations in a non-traumatic manner. To put it more bluntly, the Central Bank should not have any interest in seeking to show spectacular results which the slightest unforeseen event could reverse but should prefer forms of progress which are more gradual but have stable and solid bases on which they can be firmly consolidated.

It is important to emphasize the significance of graduality when describing anti-inflation policy, since although more significant and more rapid advances in this respect might seem desirable, they could end up having too high a cost in terms of employment and production, especially in cases like those of Chile, where indexing practices (on the basis of past inflation) are generalized and extend to the most varied kinds of transactions. Thus, as in other matters, in combating inflation the Bank gave priority to a strategy which is gradual but rests on solid and permanent bases. This has enabled the progress made not only to be solidly based but also to be perceived as solid and unlikely to be reversed in the future. Moreover, since the anti-inflation strategy

¹⁰ It should also be noted that this approach based on prudence and graduality is not only useful for understanding the monetary and exchange rate policy of the Central Bank of Chile during the 1990s, but also for understanding its strategy with regard to the opening up of the capital account.

itself formed part of the approach based on the global macroeconomic balances, the Chilean economy has not shown any major imbalance which could give rise to fears of runaway inflation in the foreseeable future. It should also be noted that an inflation reduction policy which is gradual and sustained means that, as the Central Bank gains increasing credibility, contracts and expectations will incorporate the descending goals in terms of inflation established by the Bank, thus minimizing the risk of giving rise to imbalances in other markets and consolidating the continued existence of the advances achieved in the past.

It is worth noting that, thanks to this gradual approach, it was possible to make a highly significant achievement: to stabilize inflation within a range not seen in Chile for decades past. Thus, on the last two occasions when the country attained a level of inflation similar to, although somewhat higher than, that registered in the mid-1990s, the accumulated imbalances were such that in a few months everything that had been gained was dramatically lost. One of these episodes was in 1981, when, after the fixing of the exchange rate, inflation went down to 9.5%; on that occasion, the external imbalance was so great that the following year it was necessary to devalue the currency and inflation rose to over 20%. The other, more recent, episode took place at the end of the 1980s, when, after going down to less than 13% in 1988, inflation speeded up again in 1989 because of the big increase in accumulated expenditure in previous years. The important thing, then, is to achieve a permanent, sustained reduction in inflation rather than bringing it down in one or two years only for it to speed up again later. Thus, in the period from 1992 to 1996, an average annual rate of inflation of 9.7% was achieved, which is the lowest rate registered for a five-year period in Chile for over half a century, and it must be emphasized moreover that this anti-inflation achievement took place in an environment of strong but sustainable growth of economic activity and solid external accounts.

The gradual approach, together with the use of a medium- and long-term time horizon, is also reflected in the strategy for the opening up of the capital account. As we shall see later in this article, the Central Bank has made significant progress in this field in recent years. Some analysts, however, maintain that the progress should have been even more rapid, even going so far as to suggest total and immediate indiscriminate financial openness. The problem of hasty openness is that it usually gives rise to seri-

ous upsets in the economy, including abrupt changes in the real exchange rate or problems in the financial sector. We may recall, for example, the experience of some Latin American countries in the indiscriminate opening up of their capital accounts in the late 1970s, as well as some more recent examples, prior to the Mexican crisis at the end of 1994, which mostly ended up as resounding failures, with a capital account that was more closed in practice than it had been before the attempt was made.

In saying this, we are trying to emphasize that although growing and decided linkages with the international financial markets are desirable, the success of this process depends largely on ensuring that its form, speed and selectivity are such as not to give rise to major upsets in the national economy. Financial openness must therefore be introduced in a prudent, careful and gradual manner.

4. The role of the market in determining key prices

In an economy, there are certain key prices which it is extremely important to determine correctly, that is to say, in such a way that they reflect the true supply and demand conditions, which are those of the most structural nature. The main prices are wages, interest rates, the exchange rate, and the prices of certain assets, especially those on the stock exchange and in the real estate sector. The two key prices where the Central Bank has intervened most directly are the exchange rate and interest rates. If these prices are out of line with their fundamental determinants, this usually causes serious damage to the financial system and adversely affects the basic macroeconomic balances.

There are important precedents, especially in Latin America, of distorted key prices which subsequently led to serious crises. Generally speaking, one of the first sectors to be affected has been the financial sector. Thus, for example, unsuitable legislation, supervision or regulations for the financial system have given rise to problems of what is known as "moral risk", which tend to foster the existence of abnormally high interest rates. Such interest rates, even though they are market rates, are not equilibrium rates and are not sustainable in time, and they end up by undermining the payment capacity of the financial system's debtors. What happened in Chile in the second half of the 1970s is a typical example of this. Quite a number of analysts attribute the financial crisis of that period to unusually high real interest

rates which, although they were market rates, could not be borne indefinitely by the system. In cases like this, monetary policy becomes very ineffective, while the fragility of the banking system is greatly increased, thus endangering the macroeconomic achievements.

Something similar can occur with the other key price mentioned above: the exchange rate. Fixing an excessively depreciated exchange rate, or carrying out indiscriminate or over-hasty opening up of the capital account, usually results in heavy external indebtedness, generally of a short-term nature, and an over-appreciated domestic currency. When this situation has to be reversed –in order to cope with the servicing of that debt– the effects are usually traumatic: big falls in real wages and employment and/or reductions in the liquidity and solvency of the financial system, all of which jeopardize the macroeconomic balances. Moreover, the effects of an over-appreciated domestic currency on the balance of payments current account make the country very vulnerable to any kind of external shock or to changes in the expectations of international creditors and investors.

In short, distorted key prices can produce serious crises both in the financial system and in the maintenance of the macroeconomic balances.

This does not mean that the authorities should constantly intervene in these markets. Indeed, the

contrary should be the case: that is to say, official intervention should be kept to the minimum, or carried out only when a major short-term imbalance is being produced; instead, mechanisms should be established which make possible suitable regulation and supervision under which the market can operate more freely and efficiently.

In the light of the foregoing, it should be noted that one of the explicit objectives of the Central Bank was to give the market an increasingly large role in the determination of these key macroeconomic prices, because as the Chilean financial and exchange markets develop and become deeper and more sophisticated, there will be fewer and fewer market flaws in the determination of such prices. Examples of this are the broadening of the range of fluctuation of the exchange rate, the application of more flexible rules on the exchange operations that banks can carry out, and the development of private mechanisms for covering exchange risks. In the monetary and financial area, an example is the growing use of the system of auctioning Central Bank promissory notes, so that the Central Bank now concentrates the bulk of its monetary policy on direct management of the one-day interest rate, while the market is an increasingly prominent actor in the determination of interest rates for longer terms.

V

Central Bank policies¹¹

1. Monetary policy

The monetary policy of the Central Bank of Chile has been based on the aim of keeping short-term real interest rates at a level in keeping with the targeted inflation.¹² The reason for this policy lies in the influence of interest rates on the rate of expansion of aggregate expenditure.

In order to achieve a nominal objective such as price stability, monetary policy must have some nominal "anchor". Two of the most frequently used anchors are the control of some monetary aggregate and the use of the nominal exchange rate. In the case of Chile, the first of these was discarded because no stable and predictable link was found between the nominal monetary aggregates and nominal expendi-

ture or income, due mainly to the instability of short-term demand for money. In these circumstances, the establishment of fixed intermediate goals would not

¹¹ The control of aggregate demand, which is the main foundation of macroeconomic stability, calls for coordination between fiscal policy and monetary policy. Moreover, this coordination must go beyond measures to avoid the monetization of public deficits and must also extend to control over the growth of public expenditure in the medium term and the design of an explicitly counter-cyclical fiscal and tax policy. An analysis of aspects of the coordination of these two policy areas and of the fiscal policy of the period in question is outside the scope of the present article, however. The omission of this issue here is in fact an acknowledgement of its importance, which is so great that it would require treatment equivalent to that given to the Central Bank policies themselves.

¹² Because of the indexing of the Chilean economy, real interest rates have been used: i.e., rates adjusted by the rate of inflation.

be an efficient way of achieving a given objective, and furthermore it would give rise to big fluctuations in interest rates, which would affect investment and economic activity. In various international cases, the use of the nominal exchange rate as a monetary anchor has proved to be a very risky instrument which usually involves high costs in terms of employment and loss of external competitiveness. Generally speaking, the anti-inflation achievements obtained through this instrument are only temporary, as occurred in Chile in the early 1980s, for over-appreciation of the local currency adversely affects the achievement of external balance, giving rise to a devaluation which ends up by wiping out or even reversing the advances made in the reduction of inflation. Moreover, an anchor of this nature leads to excessive rigidity in the design and formulation of general economic policy.

The instability of the relationship between these intermediate objectives and the final objective of controlling inflation caused the Central Bank to centre its action directly on the final objective: the reduction of inflation. Thus, the nominal anchor of monetary policy was the explicit inflation goal, announced each year by the Central Bank in its official report to the Senate. The inflation goal was scheduled to follow a downward path, and its value was fixed by agreement with the Ministry of Finance with a view to progressing towards price stability, but without sacrificing economic activity, employment or other key macroeconomic variables such as saving and investment, the external balance, or the stability and solvency of the financial system.¹³

The role of the inflation target as the guiding thread of its policies has permitted the Central Bank to take timely preventive action, based on the whole of the information available, directly adjusted in the light of the evolution of the underlying or trend inflation. A tradeoff of the flexibility provided by a strategy based on the final objective of reducing inflation, without intermediate monetary policy objectives, is that it requires great credibility. It should be emphasized that although the Central Bank did not lay down explicit intermediate objectives, it was always on the watch for the first signs of macroeconomic imbalances, especially deviations between the levels

and growth rates of domestic expenditure and the effective GDP, on the one hand, and between the effective and the potential GDP, on the other.

The gap between the growth of domestic expenditure and the growth of GDP is a signal of the future evolution of the country's external accounts. If the growth in expenditure is very rapid, this indicates that there will be an accentuation of the balance of payments current account deficit. Depending on the initial starting point, the evolution of the terms of trade, and the external balance objective, such a deterioration may not be a cause for much concern. A significant and lasting discrepancy is more than just a warning sign about the failure to comply with the external equilibrium objective and the need to carry out an adjustment, however.

The gap between the effective and potential GDP, for its part, is a sign that there may be problems in the domestic component of the inflationary trend, although the lag and size of that relation may vary. Naturally, in order to determine this gap it is necessary to have some kind of estimate of the potential GDP.¹⁴

Nor is it possible to ignore the importance of certain conditions which ensure the proper functioning of a market economy and have a positive effect on productivity.¹⁵

We should not lose sight, however, of the fact that the product gap—that is to say, the difference between the effective and potential GDP—is only one of the factors determining inflation. In any case, it is necessary to make a distinction here between the growth rates and levels of the product. Inflation depends mainly on the levels of the product or, in other words, it is the difference between the effective GDP and the potential GDP which puts pressure on prices. This is an important point, because if at a given moment a country has a level of product which is significantly below the potential level, it may grow faster than the potential product itself, thus reducing

¹³ This policy obliges the monetary authorities, in the event of an unexpected disturbance or when the effective inflation deviates significantly from the target figure, to make the changes needed to deal with these situations and comply with the inflation goal whenever needed and as vigorously as is necessary.

¹⁴ For this purpose, a production function is estimated in which the physical stock of capital is undoubtedly an important element which reflects the existence of a close correlation between economic growth and the rate of investment. This does not, however, mean that there is a simple linear relationship between growth and investment, nor does it mean that we can ignore the fact that there are other elements in that function, such as technology, the labour force and its level of skills.

¹⁵ Thus, it is well known that prices which accurately reflect the conditions of relative scarcity, competition, openness of the economy, etc., among others, are important factors which make it possible to raise the levels of productivity and hence the level—and probably also the growth rate—of the potential GDP.

the product gap, without this resulting in major inflationary problems.¹⁶

With regard to the implementation of monetary policy, the product gap was just one of a number of indicators, although this did not mean that it was any less important. Thus, there are other indicators which also have to be taken into account when taking a decision on monetary policy. In the case of Chile, the indicators used included those on the labour market (nominal and real wage increases, narrowness of the market, etc.); the evolution of the monetary aggregates (growth rates of M1, M2, etc.); credit information (growth rates of consumer loans, mortgage loans, total credit to the private sector, etc.); indicators of aggregate expenditure (industrial sales, imports, private consumption); and the evolution of inflation and of some prices (the exchange rate, prices in the non-tradeables sector, etc.). Thus, for example, if the country was affected by a recession but at the same time wage demands continued to rise, the monetary policy should not be relaxed until those pressures on costs disappeared. The same would apply if other indicators, such as those just mentioned, were not in line with the Central Bank's objectives with regard to price stability. In short, what we are trying to emphasize is that the product gap is not the only determinant of inflation.

A problem arises with the above approach when there are mixed signals. Theoretically, an increase in the product gap should be accompanied by other elements which also show a fall in inflationary pressures. This is because a low economic growth rate reduces the growth rate of demand for both money and credit. Likewise, as demand in the labour market goes down, wage pressures should also go down. This is what we ought to be able to expect in theory: to have clear signals for both the short and the long term. In practice, however, monetary policy is a good deal more complex and it is not possible to wait for the long term in order to have signals that are less ambiguous. The fact is that mixed signals are the rule rather than the exception. For example, the recovery of an economy may be just around the corner, but it may be far from being reflected in the product or other measures of economic activity. In this case, if the monetary authorities over-react to the product

gap they could be giving rise to problems of inflation in the future or making them worse. This means that although the product gap is an important indicator, it should not be given excessive weight and still less should it be considered as the final objective of monetary policy. Once again, what is involved here is the credibility of the Central Bank. In order to maintain this, it is essential that the Bank should show a strong commitment to its main goal: price stability.

At the same time, some comments are called for on the well-known topic of timing in monetary policy. We have already mentioned some of the reasons why giving disproportionate weight to the product gap may be inappropriate in terms of the objective of price stability. Another reason is related with the monetary authorities' skill in choosing the right moment. The information on the evolution of economic activity suffers from significant lags, and the limitations of the main indicators are well known. There are also lags between the moment when monetary policy measures are applied and the moment when they begin to take effect. Consequently, the monetary authorities are always faced with the risk of over-reacting—in a recession, for example—if they do not see signs of a recovery. In these cases, it would be prudent to use other indicators to confirm or deny possible reactivation. Impatience in this respect, reflected in the provision of an extra monetary stimulus by the Central Bank, could finally set off still greater inflationary pressures. The opposite would occur in boom periods: if a slowdown had already begun, then greater monetary restrictions would accentuate it. In short, it is essential that monetary policy should try to be anticipatory and preventive and that the monetary authorities should always be conscious of the existence of lags and the fact that belated action may heighten the economic cycle instead of softening it.

With regard to the execution of monetary policy, in mid-1995 a change was made in the way this had been done for more than a decade. Thus, with a view to using more flexible and efficient instruments, the Central Bank stopped directly fixing the interest rates of 90-day Central Bank paper and concentrated its policy on the one-day interest rate.¹⁷ The aim of these

¹⁶ This is one of the factors which explain what happened in Chile in the second half of the 1980s, when the starting point of the GDP was very low because of the severe recession that took place at the beginning of that decade.

¹⁷ As a complement to its interest rate policy, the Central Bank also made an important change in the determination of the liquidity conditions of the economy, allowing the market to play an increasingly large role in determining medium- and long-term interest rates and extending the maturity of the domestic public debt.

measures was, on the one hand, to give the market a greater share in determining the price of all the documents issued by the Central Bank, and not just the interest rate for medium- and long-term documents; and on the other, to regulate liquidity more efficiently and prevent expectations of possible changes in the interest rate of the longer-term documents of the Central Bank from distorting inter-bank market operations. In fact, the use of the one-day interest rate as a main monetary instrument has been shown to be an effective way of minimizing the influence of capital gains or losses and an efficient tool for countries with more developed financial markets. Furthermore, this measure was in keeping with the growing financial integration of the Chilean economy, making possible a more flexible way of implementing monetary policy, for because of the interrelation of domestic and external interest rates it is desirable to eliminate any rigidities which encourage undesirable movements of financial resources and prevent adjustments from being made in a manner more evenly shared between the exchange rate and interest rates, in order to make monetary policy management less complicated and more efficient.

To sum up, the new form of monetary policy is more effective because it gives the Central Bank more initiative and flexibility and permits greater frequency in movements of short-term interest rates, which in turn affect the rest of the rates, themselves increasingly determined by the market. All this makes possible better control of liquidity conditions in order to influence the evolution of aggregate expenditure and inflation. Under these conditions, the impacts and the volatility caused by disturbances affecting the Chilean economy are shared out evenly between movements of the exchange rate, interest rates and the international reserves, and the reconstitution of portfolios.

2. Exchange rate policy

After the recovery of access to voluntary external financing in the 1990s, the experience of the early years of the previous decade made the economic authorities wary of basing the struggle against inflation on a single instrument such as the exchange rate. Such a practice can lead to serious macroeconomic imbalances and thus to failure. It has also been seen that any attempt to force the value of the real exchange rate up to a high level is also doomed to failure if the exchange rate policy is not accompanied

by extremely austere macroeconomic policies, which may lead to the sacrificing of future growth capacity, because of the adverse impact that this context usually has on investment.¹⁸ Consequently, an artificially high real exchange rate does not have any point either, except in critical situations. The exchange rate policy of the first half of the 1990s therefore sought to avoid serious deviations which could divert the market exchange rate from its medium- and long-term equilibrium path.¹⁹

In the first half of the 1990s, the Chilean economy was in a phase of development different from that of previous decades. Its structural reinsertion into the international economy was becoming increasingly evident, both in the area of finance and in that of real trade. The export sector was diversifying and considerably expanding its coverage of products and markets. The economy was much more open, and tariffs continued to be reduced. Foreign investment in and by Chile was increasing to very high levels. Moreover, all the indicators of external creditworthiness were markedly improving, while the country risk and external vulnerability were going down significantly, and exchange rate policy also had to adapt itself to this new environment.

Thus, during the first half of the 1990s the main objective in the formulation and execution of exchange rate policy was to complement the fiscal and monetary policies in order to achieve the external balance of the economy in the medium term. To this end, efforts were made to ensure a suitable flow of

¹⁸ After the 1982 crisis, Chile faced serious external constraints due mainly to the end of voluntary capital inflows. This made it essential to adopt a real exchange rate which was sufficiently high to generate the necessary foreign exchange by stimulating exports and import substitution activities. The fiscal and monetary policies of this period were aimed fundamentally at achieving a "high" real exchange rate, mainly thanks to the high rate of unemployment, which made possible a drop in real wages. On the other hand, although expenditure was kept at a moderate level in order to avoid the inflationary spiral that could be provoked by the devaluations, it did not prove possible to make any progress against inflation.

¹⁹ In an economy like that of Chile in the 1990s, it is not reasonable to suggest that the Central Bank should fix the real exchange rate, for the growing process of trade and financial integration, the volatility of the terms of trade, changes in the country risk rating, investment in the tradeable goods sector and the unequal technological development of the tradeable and non-tradeable goods sectors cause the equilibrium real exchange rate to vary. This means that as these structural changes take place, the level of the real exchange rate which gives external balance changes, and the Central Bank must permit the necessary adjustment.

external saving to complement domestic sources for financing investment, which meant seeking a balance of payments current account deficit of 3% to 4% of GDP, of a structural or trend nature, as a way of achieving the Central Bank's legally mandated objective of ensuring the normal functioning of external payments.²⁰ The reason for maintaining this range is that a smaller amount of external saving is not sufficient for a country like Chile, which requires an external contribution in addition to its domestic saving in order to finance a high rate of investment, while on the other hand the existence of balance of payments current account deficits constantly higher than this range could endanger the solvency of the Chilean economy. In short, the aim was to avoid levels of external indebtedness so high that they could increase the vulnerability of the national economy to unexpected shocks.²¹

A second objective of exchange rate policy was to deal with the temporary short-term fluctuations in the exchange rate in order to partly neutralize the effect of the inflow of speculative capital, which could adversely affect the achievement of both the domestic and the external balance.

At the same time, the policy followed made possible continued gradual progress in the strengthening of the Chilean peso, avoiding traumatic adjustments and giving the business sector time to increase its productivity and adapt to the new situation, in order to maintain the dynamism of the export sector.

²⁰ This range (3% to 4% of GDP) must not of course be taken rigidly, for in some years there may be temporary situations which lead to a level higher or lower than this. In 1992 and 1994, for example, the balance of payments current account deficit was much lower than the range in question, and there was even a small surplus in 1991 and 1995. On the other hand, in 1993 and 1996 the disturbances affecting the prices of the main export products were so great that the current account deficit slightly exceeded the 4% ceiling. The important thing is not the result of a particular year, but the trend observed in this respect. In this context, it may be reiterated that the equilibrium real exchange rate is that which permits the achievement of the objectives laid down for the current account in the medium and long term. This highlights once again the importance of the medium- and long-term criteria so often observed in the Central Bank's strategy in the first half of the 1990s.

²¹ This vulnerability has been markedly reduced. In 1993, for example, although this was a very negative year in terms of the prices of Chilean exports, the economy nevertheless grew more than 6% without this giving rise to inflationary pressures or pressures for devaluation. It should be noted that in the past the Chilean economy generally suffered severe recessions, accompanied by devaluations and increases in inflation, every time there was an external shock of any magnitude.

Three main elements stand out in the application of the above exchange rate policy: the existence of a broad pre-announced currency floating band; ii) the transition to a basket of currencies, to the differential incorporation of domestic and international inflation, and subsequently, to the trend-based appreciation of the Chilean peso; and iii) the possibility of Central Bank intervention within the band, through a "dirty float" mechanism.²²

Exchange rate policy was implemented through a system of a pre-announced band within which the market exchange rate was located. The width of the band was increased to plus or minus 10% around the central point of the band. This central point, termed the "agreement" ('acuerdo') exchange rate, is determined on the basis of a basket of currencies²³ whose weightings reflect the relative importance of the U.S. dollar, German mark and Japanese yen areas in Chile's external trade transactions. This central parity is adjusted daily by the domestic inflation of the previous month, less an estimate of the international inflation affecting Chile.²⁴ At the end of 1995, an additional discount of 2% per year was included, based on the productivity differential between Chile and its main trading partners, which meant a gradual appreciation of the peso in response to stable changes in the Chilean economy's linkages with the world economy.²⁵

The justification for the system of an exchange rate fluctuation band around a central parity is the

²² The aim of these interventions was to increase or decrease temporary fluctuations in the exchange rate, but not to try to break trends.

²³ The linking of the peso to a basket of currencies, instead of solely to the U.S. dollar, made it possible on the one hand to make Chilean monetary policy more independent of that of the United States and, on the other, to give rise to greater short-term uncertainty about the peso/dollar exchange rate (unlike the peso/currency basket exchange rate), in order to serve the objective of discouraging interest rate arbitrage.

²⁴ Consequently, the central parity of the basket is announced a month in advance, for each day of the following month, whereas the peso/dollar, peso/mark and peso/yen central parities are announced daily, as the parities of the main currencies on international markets become known.

²⁵ In effect, between 1990 and 1996 the level of economic activity in Chile expanded at an average annual rate of 6.8%, whereas world production only grew by 3.1%. In the same period, the average productivity of labour in Chile rose at an average annual rate of around 4.7%, while total factor productivity grew by around 2.3% per year. As a result of the higher growth of productivity, international competitiveness increased, which was ultimately reflected in an expansion in exports and strengthening of the Chilean peso. The productivity differential adjustment in the exchange rate rules suggests that this situation will continue in the future.

belief that the long-term equilibrium exchange rate is a dynamic concept which must be given a certain degree of flexibility and that the economic agents do not possess at every moment in time the necessary information and background elements for determining the real equilibrium exchange rate. This view implicitly involves the need for the authorities to provide some guidance about the real exchange rate considered to be in keeping with the external balance of the economy in the medium term: this is precisely the role played by the "agreement" exchange rate in the centre of the exchange rate band, for two main reasons. Firstly, because the market—especially when short-term financial flows are of very considerable magnitude—may tend towards a real exchange rate which is considerably removed from the medium- and long-term equilibrium rate (an "outlier"). Secondly, because it is considered that if the economy departs substantially for long from the real equilibrium exchange rate, this would tend to produce major imbalances, with negative consequences for the functioning and performance of the economy.

It was also considered desirable to give some degree of exchange rate stability to the export sector. The difficulty of precisely predicting the real equilibrium exchange rate, the probability that this rate will get out of line with the basic macroeconomic balances, and the need to give greater autonomy and flexibility to monetary policy, especially in view of the growing linkages of the Chilean economy with international financial markets, all justified the application of a broad exchange rate fluctuation band. Such a band also makes it possible, within certain limits, for the market to play a more important role in determining the observed position of the exchange rate within the band, thus reflecting the criterion of graduality mentioned earlier.

In the five-year period studied, the exchange rate band was changed on two occasions, permitting in effect a drop in the "agreement" exchange rate. This was due to the need to adapt the reference value of the medium- and long-term equilibrium exchange rate to the new structural conditions in which the Chilean economy was operating. The Central Bank, which was faced with a growing inflow of foreign exchange due both to the very favourable evolution of exports and a significant entry of foreign investment and international finance, acted prudently and changed the centre-point and width of the band only when it was sure that the long-term equilibrium exchange rate was not properly reflected in the pre-

vailing "agreement" exchange rate. Thus, for example, the observed and foreseeable behaviour of non-traditional exports, the size of the balance of payments current account deficit, the increase in foreign investment in and by Chile, together with the growing unification of exchange rates and liberalization of the outflow of capital, the improvement of the external solvency indicators and the deepening of the Chilean foreign exchange market, were the main elements influencing the decision to allow a gradual appreciation of the Chilean peso.²⁶

It should be noted that the real appreciation registered by the peso during the 1990s, which was around 4.5% per year, was the result of a process of increasing economic balance due to the structural changes undergone by the Chilean economy in recent years rather than any manipulation of the exchange rate with the aim of artificially reducing inflation. On the contrary, a priority objective of the economic policies implemented in that period was precisely to avoid any artificial appreciation of the peso.²⁷

Thus, Chile's renewed linkages with the international economy, already referred to earlier; the behaviour of the country's exports and its balance of payments current account; the big increases in changes in productivity, especially in the tradeables sector of the economy, as compared with Chile's main trading partners; and the over-depreciation of the peso in the second half of the 1980s (to deal with

²⁶ It may be noted, however, that there was a generalized trend in the 1990s towards the appreciation of the currencies of the main Latin American countries, as well as those of a number of Central and Eastern European countries, for reasons of an international nature. Among these, special mention may be made of the relatively low interest rates in the industrialized countries, the lower country risk of the countries which had carried out structural reforms of their economies, and the decisions of important institutional investors in the developed countries to diversify their portfolio by making it more international. This meant a fresh impulse for foreign direct investment in production sectors and in portfolio investments, together with flows of shorter-term external finance to the countries of the region, all of which contributed to the appreciation of the Latin American currencies (with a relatively short interruption due to the Mexican crisis at the end of 1994).

²⁷ International comparisons with regard to the real appreciation of the Chilean currency show that the real exchange rate in Chile has been one of the stablest and least depreciated of the whole of Latin America, even though there were capital inflows into the whole of the region during the first half of the decade before the Mexican crisis. Thus, according to the uniform methodology used by the International Monetary Fund (IMF), whereas the real appreciation of the currency in the period from 1990 through 1994 came to 13% in the case of Chile, in Argentina it was 63%, in Colombia 21%, in Mexico 18%, and in Brazil 17%.

the extremely acute shortage of foreign exchange in that period), were all factors pointing to the need to allow the exchange rate to reflect the greater strength of the peso.

The Central Bank authorities' view in this respect was that this need for appreciation of the peso was a reflection of the consolidation of various structural changes in the Chilean economy in recent years, which meant that the equilibrium exchange rate was below the current value of the "agreement" exchange-rate. In more general terms, the progress made in Chile's trade and financial linkages with the international economy warranted a change in the medium- and long-term equilibrium exchange rate. Among the structural changes that the Central Bank mentioned as being of importance in this respect were: the reduction in the levels of relative external indebtedness, from an average of 106% of GDP in the three-year period 1985-1987 to 35% in 1994-1996; the buildup of international reserves, which in 1994-1996 were double the level of the 1985-1987 period as a percentage of imports of goods and services, representing over 15 months of imports in one of the years in the 1994-1996 period; the steady growth of exports, which achieved an average annual rate of 11.6% in real terms in the latter period, compared with the already high level of 9% registered in 1985-1997; and, lastly, the moderate level of external saving that the Chilean economy has needed (1.7% of GDP in 1994-1996, which was less than the floor level laid down and much less than the 6.3% balance of payments current account deficit registered in 1985-1987).

Finally, it is important to note that the Central Bank resisted the downward pressure on the price of the currency in a number of ways, including in particular massive purchases of international reserves, which will be analyzed in the following section.

3. International reserves policy

The international reserves policy applied by the Central Bank during the first half of the 1990s had two main objectives:²⁸ on the one hand, to make possible Chile's growing integration into the world economy, without exposing the country to any major risks deriving from changes in the economies of the main industrial countries or the volatility usually marking

the behaviour of some international creditors;²⁹ and on the other hand, to partly neutralize the short-term impact of inflows and outflows of capital on the exchange rate, through the purchase or sale of foreign exchange.

The first objective was achieved mainly thanks to Chile's abundant international reserves, which were one of the determining factors in the country's low risk rating for international investors; this rating stimulated foreign direct investment in Chile, while at the same time reducing the cost of the external financing offered to it. Furthermore, the significant accumulation of reserves by the Central Bank in those years³⁰ endowed Chile with great external strength, which was made evident above all early in 1995, when the Chilean economy was affected only minimally,³¹ and only for a very short time, by the turbulence reigning in international financial markets after the Mexican exchange crisis of late 1994. Finally, the comfortable international reserves position made it possible to use part of those reserves, without compromising the external liquidity and much less the external solvency of the country, to pre-pay the whole of the external debt still outstanding in respect of the refinancing of the crisis of the early 1980s, as well as the balance owed to the IMF.³²

²⁹ A high accumulation of international reserves is a necessary condition for enabling a small country to integrate in a sound and effective manner into the international economy, and part of the costs of that accumulation may be interpreted as the premium payable for an "insurance policy" to ensure that that integration is effective and does not give rise to any major upsets.

³⁰ Whereas in the late 1980s the international reserves were sufficient for five months of imports, in 1994 they covered 15 months of external purchases. Likewise, while in 1989 the net international reserves amounted to the equivalent of 10.5% of GDP, in 1994 they were a little under 26% of GDP. It is also important to note that, at the aggregate level, neither the public sector nor the non-financial private sector had heavy short-term external liabilities, and the net short-term external liabilities of banking system were only around 4% of GDP, so that the net position of the country with regard to liquid international assets was extremely sound.

³¹ It should be noted that although the Central Bank has made significant efforts to increase the yield on the international reserves, it should not be forgotten that these reserves are not maintained exclusively with the idea of obtaining high yields, but also as a precaution against unexpected external disturbances, in order to have sufficient international liquidity to cope with the latter properly.

³² The prepayment of the external debt helped to reduce the deficit associated with the existence of an interest rate differential between the international reserves and the external debt, as well as to further improve the indexes of external creditworthiness of the country, reducing the country risk and improving the Chilean private sector's conditions of access to international credit.

²⁸ There was also considerable progress in the management of international assets and liabilities, with the aim of improving the net financial position of the Central Bank.

The second objective was achieved through the purchase or sale of foreign exchange by the Central Bank, accompanied by open market operations to neutralize the monetary effects of the exchange operations: a system known as sterilizing interventions in the foreign exchange market. Indeed, in the first half of the 1990s most of the time the exchange rate was quite close to the floor of the band, if not actually on the floor itself. Apart from the purchases of foreign exchange made necessary by the mechanism of the band itself, the Central Bank's policy was to wait a prudential length of time in order to be able to distinguish whether the inflow of foreign exchange was of a more permanent or a transitory nature. In the latter case, when there was an inflow of short-term capital which could soon be reversed, the Central Bank proceeded to acquire that foreign exchange, accumulating international reserves in order to reduce the volatility of the exchange rate. Something similar was done in the case of transitory outflows of capital. If the inflow or outflow of capital was of a more permanent nature, the Central Bank often intervened in the exchange market, accumulating or reducing its reserves, not in order to go systematically against the market forces, which would be unsustainable in the long run, but in order to make the adjustment of relative prices which would probably be required more gradual in time.

The appreciation of the peso already referred to took place in spite of the significant effort to accumulate international reserves carried out by the Central Bank: between 1990 and 1996 the international reserves increased by US\$ 9.45 billion, equivalent to a little less than 4% of GDP per year. This stock of international reserves, which was relatively speaking among the highest in the world, has resulted in heavy costs to the Central Bank's financial position,³³ but it has undoubtedly contributed to the efficient and smooth integration of Chile into the international economy, by easing the rate of appreciation of the

Chilean peso and, within the policy of graduality already mentioned, to a non-traumatic adjustment of the price of tradeable goods compared with non-tradeable goods in the Chilean economy.

4. Balance of payments capital account policy

In a small, open economy like that of Chile, greater financial integration with the exterior brings substantial benefits which must be exploited. Among them are the availability of external saving to finance investment; the absorption of temporary shocks with regard to the terms of trade, and the diversification of risks and sources of national income, all of which makes it possible to smooth the path followed by consumption and derive greater benefit from comparative advantages through a deeper insertion of the country in the international economy.

Greater financial openness also brings with it risks which must be taken into consideration, however. There are permanent costs and transitional costs. The loss of some leeway in monetary policy management and the destabilizing effects that capital movements can cause in a small economy are permanent costs of greater financial openness, while the risks associated with the adjustment from a historically closed capital account to a suddenly open one are transitional costs.³⁴

The conditions of access to external finance, which had been very limited for the region after the debt crisis, changed rapidly and significantly in the 1990s. A better perception of country risk, the low interest rates in the industrialized countries and a generalized expansion in capital flows to the so-called emerging economies significantly increased the supply of external funds. Quite suddenly, countries like Chile found themselves in a situation where the domestic yield on capital was higher than the

³³ The sterilizing interventions of the Central Bank have meant heavy costs for it, because of the higher interest rate that it must pay on the domestic debt issued, compared with the yield of the international assets it acquires. At the same time, the appreciation of the peso in real terms has caused a deterioration in the real value of these assets denominated in foreign currency, including credit to the government, compared with that of the domestic liabilities of the Central Bank. Thus, the effect of this policy has been to generate a bigger quasi-fiscal deficit of the Central Bank, which has been offset by the corresponding fiscal surplus.

³⁴ Historically, capital flows into and out of Chile were very restricted. After the abandonment of the convertibility of the peso, massive controls were established on capital outflows. Although over the course of time these controls were modified, the spirit of the restrictions was maintained, except for intermittent periods of greater freedom. With regard to inflows of capital, the limited conditions of access to external finance formed a natural restriction on them. Indeed, it was only in the 1970s that the developing economies, including Chile, were able to regain the large-scale access to external financing which they had lost after the Great Depression. For Chile, however, this only lasted a short time, since the international debt crisis of the early 1980s, together with the high level of external indebtedness which the country had built up in that brief space of time, led to a renewed suspension of access to international finance.

external cost of the funds, adjusted for country risk and for changes in exchange rate expectations.³⁵

In the past, this situation tended to persist in time or changed only gradually, insofar as the perception of country risk and lack of confidence in the local currencies limited the international arbitrage of funds. In the early 1990s, in contrast, a policy of unlimited financial openness would have encouraged the inflow within a short period of time of abundant short-term financial resources, destabilizing expenditure, asset prices and key prices such as the interest rate itself, wages and the real exchange rate.³⁶ The course that the economy follows if this tendency is encouraged is well known. Because of the size of the inflows, the first stage in the transfer process is a boom period in which asset prices and wages rise, consumption and investment increase, there is exchange rate appreciation, and imports become cheaper. This stage is hard to manage in macroeconomic terms, since it is necessary to contain the inflationary pressures generated in the domestic markets and to be on the watch against the generation of financial bubbles which further increase the divergence of prices from their equilibrium levels and encourage the arrival of even greater financial resources. This expansionary phase of the cycle sows the seeds for the subsequent phase of contraction, however, for as the balance of payments current account deficit grows and external liabilities are built up, the perception of country risk begins to increase³⁷, the

availability of external funds goes down, the volume of external transfers diminishes, and prices and expenditure must therefore begin a downward path.

In an ideal scenario, the inflows are reversed only gradually and the adjustments in key prices are smooth and do not give rise to serious upsets in the performance of the economy. The most probable and realistic scenario, however, is one in which the capital inflows stop and are even reversed abruptly, giving rise to a traumatic adjustment, because the economy is in a highly vulnerable position when it has a high level of external indebtedness and a significant current account deficit, especially if the external financing is of a short-term nature. Increases in international interest rates, falls in the terms of trade, or simply changes in external or domestic expectations may trigger off a sudden crisis of confidence which abruptly terminates the transfer of external resources. The external debt crisis in the region in the 1980s and the upsets in the international financial markets at the end of 1994 and in 1995 illustrate these risks very clearly.

In this latter scenario, the adjustment required involves a perilous combination of high domestic interest rates, a fall in the prices of domestic assets, and heavy depreciation of the real exchange rate, which inevitably brings serious problems in the domestic financial markets and gives rise to additional inflationary pressures; at the same time, and no less importantly, a significant increase in unemployment and a decline in the level of economic activity may be expected as a result of the difficulties produced in the financial and labour markets and the abrupt reduction in the level of expenditure. Chile's experience in the early 1980s, like that of other countries of the region, has shown that this pessimistic scenario is not only highly probable but also usually involves very significant costs for a long period of time. This is why in the 1990s, in order to maintain and further consolidate macroeconomic discipline and the external balance, it was decided to open up the capital account in a prudent manner, minimizing the risks of an undesirable adjustment that could endanger the progress already made.

From the standpoint of the domestic balance, emphasis must also be placed on the role of interest rates and their links with the form and rate of financial openness to the exterior. Thus, in order to achieve a level and rate of growth of domestic expenditure compatible not only with the prudent use of external saving but also with the production potential

³⁵ This differential between yields is due to past circumstances and to the structural reforms which have affected the productivity of the Chilean economy, which have little to do with monetary policy. Thus, if we take into account the relative endowments of capital and human resources in Chile, the limited access to external financing which the Chilean economy enjoyed until quite recently, and the low historical rates of domestic saving and investment, it is only natural that the domestic yield on productive capital, which must be distinguished from the yield on financial capital, tends to be higher than that observed in the industrialized economies.

³⁶ Furthermore, with regard to the financial sector institutions, hasty openness (without having first of all made suitable arrangements for the regulation and supervision of the financial intermediaries and of the corresponding authorities) can and usually does give rise to major problems. Chile had previous experience of this, when, in the absence of such regulations, there were perverse incentives in the financial sector which were later transmitted to the rest of the economy. It should be remembered that there are systemic risks involved in this sector, so that it is extremely important to act prudently when taking measures that affect it.

³⁷ Historically, this process has taken quite a long time to make itself felt.

of the Chilean economy, it was necessary that domestic interest rates should be higher than those prevailing in the main industrialized economies during the first half of the 1990s.³⁸

In other words, in view of the low country risk and the total absence of any expectations of devaluation (or, to be more exact, the expectations that there would actually be a revaluation) of the Chilean peso, after adjustment for these two effects the international interest rate was well below the domestic interest rate required for domestic and external macroeconomic balance. The dilemma facing the Central Bank was to find a way to close that gap in order not to give rise to inflationary pressures over and above those already programmed and/or additional pressures on the balance of payments current account. It should be noted that this dilemma had to be faced in a context of positive fiscal saving and public surpluses, a substantial buildup of international reserves (which was giving rise to a significant quasi-fiscal deficit), and a tendency towards strong appreciation of the Chilean peso.

In view of the foregoing considerations, the aim of capital account policy was to complement the fiscal, monetary, exchange rate and international reserve policies in order to prevent an "excessive" inflow of foreign exchange from adversely affecting the domestic and external balances. To put it another way, even if the fiscal, monetary, exchange rate and international reserve policies were well formulated and implemented, the continued entry of short-term financial flows into the country³⁹ would make it essential to check the rate of the net inflow of capital in order to avoid increasing inflation and/or a bigger balance of payments current account deficit. For this reason, it was decided to progress towards greater financial integration with the rest of the world, but in a prudent manner, at a rate, and with a selective approach, which were in keeping with that aim.

³⁸ The interest rates must be more or less in line with the yield of productive capital. In the course of time, high rates of investment like those observed in Chile, accompanied by further increases in domestic saving, will make it possible to reduce the spread between external and domestic interest rates.

³⁹ A distinction should be drawn between an inflow of foreign exchange due to very good export results or net inflows of medium- and long-term foreign direct investment, which of themselves lead to balanced appreciation of the peso, and an inflow of external finance, generally very short-term, due basically to the desire to take advantage of the arbitrage of interest rate differentials.

This policy was applied through various means. On the one hand, in the first half of the 1990s the outflow of capital was significantly liberalized.⁴⁰ Thus, not only were exporters given complete freedom to use the whole of their foreign exchange income as they saw fit, without any obligation to bring it into the country, but liberalization measures were also taken in various other fields.⁴¹ For example, the minimum period after which capital brought into the country by non-residents could be repatriated was reduced from three years to one year, and the issue of bonds and shares abroad (ADRs) was also permitted, subject to certain requirements which were gradually relaxed over time. At the same time, the repatriation of investments brought in under debt/equity swap arrangements (a system connected with the crisis of the early 1980s) was completely liberalized, as was the advance payment of foreign debts and the rules on the minimum percentage of external credit that must accompany foreign direct investment.

A measure of great significance which was complementary to the foregoing was the complete liberalization of foreign investment by Chilean individuals and firms, thus allowing them to diversify their risks better. Measures were also taken to promote greater international diversification of the asset portfolios of domestic investors, especially institutional investors. The latter were the only exceptions from complete liberalization, but they were nevertheless given increasingly wide options for investment abroad. The openness to the exterior of banks, pension funds, insurance companies and mutual funds was also increased, but less rapidly than for the rest of the economic agents, partly through legal restrictions and, for the first three categories, for prudential reasons connected with systemic risk and contingent fiscal commitments.

The entry of capital was opened up gradually and selectively, with measures to discourage the

⁴⁰ It should be noted that the growing openness to the outflow of capital is connected with Chile's strategy of development and insertion in the international economy. It is not designed to increase the value of the national currency, and may even have the opposite effect.

⁴¹ As well as giving complete freedom in the handling of export proceeds, a number of measures were taken in connection with the balance of payments current account, including a substantial tariff reduction (from 15% to 11%) and various free trade agreements, with the aim of securing growing integration of the so-called formal and informal exchange markets, all of which helped to deepen Chile's trade and financial integration into the world economy during this period.

shortest-term inflows. This gradual policy is justified by the desire not only to avoid major external imbalances, but also to permit a rate of change in relative prices which will allow the different sectors to make less traumatic adjustments over time. The selective openness process calls for the application of certain specific controls when necessary. Although the general trend was to gradually relax the disincentives for capital inflows, this was complemented with measures aimed at securing greater selectivity in capital inflows in order to reduce the country's exposure to volatile short-term financial flows, give monetary policy greater autonomy, and check the creation of bubbles in the stock market and the longer-term fixed income market. The latter measures were aimed at making inflows of capital (especially shorter-term capital) more expensive, restricting their overall volume, improving their "quality", and lengthening the term of Chile's external finance.

On the one hand, the reduction of the restrictions on the repatriation of direct investment capital from three years to one⁴² discouraged the arrival of big flows on the stock market, helping to forestall a price bubble there.

On the other hand, the rate at which Chilean firms could obtain credit or capital abroad was moderated, since the foreign sale of both bonds and stocks was made subject to certain minimum amounts and the fulfillment of certain requirements, determined by international risk rating firms, concerning the credit worthiness of enterprises or of the instruments that they wished to sell on the international market.⁴³ In this way, the authorities helped to limit the number of firms that could procure financial resources on the international markets, as well as the rate at which they could do so, thus helping to prevent excessive inflows of foreign exchange into the country.⁴⁴

Thirdly, a one-year non-interest-bearing compulsory reserve requirement was imposed on credit and other sources of external financing, in order to in-

crease the cost of bringing in short-term capital. In this way, it was sought to give monetary policy more leeway and autonomy so that ideally all the economic agents would face the same interest rate, determined by the Central Bank in order to achieve domestic balance, while at the same time checking the speculation and volatility inherent in very short-term capital and reducing the possibility of interest rate arbitrage.

From a more general standpoint, the set of policies aimed at securing a gradual and selective financial openness process made it possible to change the structure or composition of Chile's external liabilities, increasing the share of risk capital in total indebtedness and, within the latter, increasing the proportion of long-term capital compared with short-term funds. This helped to reduce the vulnerability of the Chilean economy to the vicissitudes of the world economy, the pro-cyclical behaviour usually displayed by external debt holders, and changes in the expectations of international economic agents.

Although some other countries of the region carried out policies that were in formal terms more "liberal" or "open" than those of Chile with regard to the balance of payments capital account, domestic interest rates in those countries were higher than in Chile and displayed greater differences with international interest rates. This situation, which ought apparently to be the other way around, is attributable mainly to the greater country risk or risk of devaluation faced by those countries. Consequently, it is by no means clear that if a country rapidly carries out a total financial openness process it will effectively be able to integrate into the international capital markets in a sound and permanent manner. In short, a country is not "more integrated" into the international economy because it is more or less liberal, but because of the amount, cost, quality and permanence in time of the transfers of capital which are effectively available for it, and all these elements are usually associated with the confidence that the rest of the world has in that economy.⁴⁵

⁴² As already noted, this represented a liberalization measure compared with the situation prevailing in the late 1980s.

⁴³ These minimum amounts and requirements were also gradually relaxed, without being completely eliminated.

⁴⁴ Another advantage of this strategy, in view of the fact that before 1990 there were no Chilean firms active on the international stock and bond markets, is that the high creditworthiness and seriousness of the first firms entering the market generated positive externalities for those entering it later. A disadvantage of this measure is that in practice it favours "big" firms more than small firms or individuals.

⁴⁵ From a macroeconomic perspective, it might seem easier and probably also more necessary to be more "liberal" when there is a high international perception of country risk. In these conditions, the natural interest rate differential with the exterior, adjusted by the country risk and expectations of devaluation, provides sufficient leeway for carrying on an independent monetary policy and avoiding the destabilizing effects described earlier. It would be absurd, however, to conclude that it is desirable that there should be a high perception of country risk, since it is highly beneficial to be trustworthy and credible and thus enjoy an ample supply of external finance at low cost.

Finally, there are those who maintain that Chile's good macroeconomic performance in the early 1990s was due to its high level of domestic saving rather than to the macroeconomic strategy pursued. It should be noted, however, that domestic saving is not a constant which is independent of that strategy. Empirical

studies and experience suggest rather that "ingenuous" policies regarding the entry of foreign finance usually mean that external saving, which is often concentrated in the very short term, is used to finance an excess of domestic consumption expenditure and takes the place of domestic saving.⁴⁶

VI

Some conclusions

The main dilemma in macroeconomic policy in the 1990s was that in order to maintain the domestic balance it was necessary that interest rates in Chile should be considerably higher than in the industrial countries, while at the same time the country risk was going down steadily and there were expectations of revaluation of the Chilean peso. In view of the fact that the public sector registered an annual average surplus of 1.8%, that the accumulation of reserves was giving rise to significant quasi-fiscal costs, that the outflow of capital had been very sharply liberalized, and that the peso had appreciated in value at a rate of more than 4% per year in real terms (in spite of the Central Bank's efforts to discourage that situation), the dilemma facing macroeconomic policy was the following: whether to allow domestic interest rates to equalize rapidly with international rates, or whether to close that gap at least in part. The first of these approaches would have been essentially contradictory to the global strategy and would have led to excessive spending, higher inflation and/or additional appreciation of the peso, and a heavy balance of payments current account deficit, thus increasing the country's external vulnerability. Consequently, the policy followed was to reduce the interest rate gap by graduating the rate at which companies located in Chile could bring in external financing, while at the same time discouraging the inflow of short-term capital by making it more expensive.

Over the five-year period 1992-1996, the GDP grew at an average annual rate of 7.5% and unemployment stood at 7%. Real wages increased at the same rate as the average productivity of labour: 4.7% per year. Gross fixed capital formation increased by 14.2% per year (twice as fast as GDP), while domestic saving averaged 25.1% of GDP. The fiscal surplus was 1.8% of GDP, while fiscal saving came to 5.1%

of the product. The average real interest rate on bank deposits for between 90 days and one year was 8.9% per year. Domestic public indebtedness (of the Central Bank), as a percentage of GDP, went down compared with previous years, standing at 33.6%, while its average maturity increased year by year, averaging 3.2 years for the five-year period as a whole. Average annual inflation was 9.7%, the lowest rate for a five-year period since over half a century in Chile, because inflation went down from 27.3% in 1990 and 18.7% in 1991 (at a downward rate very similar to the annual inflation targets of the Central Bank) to only 6.6% at the end of 1996. The Chilean peso appreciated in value at an annual rate of 4.3% in real terms, while exports grew by 10.4% per year, likewise in real terms, which was 50% faster than the growth of GDP. The average annual deficit on the balance of payments current account was 2.2% of GDP. Foreign direct investment both in and by Chile reached unprecedented levels. Capital inflows averaged 6% of GDP, and the net international reserves were equivalent to 22.4% of GDP or one year of imports of goods. The external debt represented an average of 38.1% of GDP, or 15.7% after deducting the international reserves.

⁴⁶ Likewise, it would be a mistake to think that the Chilean economy has come out of the recent round of financial upsets almost unscathed solely because of its measures to discourage capital inflows. Its main strength lies in more structural factors, such as the high level of domestic saving and the coherence in the design and execution of the country's fiscal, monetary, exchange rate and international reserves policies. The compulsory reserve requirements and restrictions on the inflow of capital which are still in force are important to the extent that they facilitate such coherence. They are just one more element in an internally coherent piece of machinery.

These results show that in the first half of the 1990s Chile was successful in combining economic growth with increases in employment, productivity and wages, as well as saving and investment, while at the same time making significant progress in price stability, not only without endangering the balances in the rest of the economy, but actually making them more solid and secure (particularly in the case of the traditional Achilles' heel of the Chilean economy: the external sector balance).

It is no coincidence, however, that all these positive results have been obtained within the same period. These achievements are interrelated and strengthen each other, for there is a kind of virtuous circle between macroeconomic stability and sustained growth. Growth brings stability and stability brings growth.

There are many ways in which growth and stability are interrelated. Thus, for example, further consolidation of the process of placing the public finances on a sound basis, prudential regulation and strict supervision of the banking system, together with efficient allocation of financial resources—due in part to the existence of key macroeconomic prices which are not distorted—helped significantly to increase financial saving and direct it towards investment, avoiding the appearance of financial bubbles and furthering the stability and solvency of the country's banking system. The progress and deepening of the capital market also played an important role in the provision of long-term domestic financing, which is a decisive factor for increasing investment.

The maintenance of a climate of macroeconomic discipline and control of inflation helps to create an environment conducive to long-term planning, which, in turn, also raises the rate of investment and promotes the introduction of new technologies, which ultimately generate more growth. For its part, the maintenance of a situation of sustained growth guarantees the profitability of new investments and facilitates fiscal and monetary discipline. On the government side, the pressures on the budget are reduced when employment, wages and business profits are growing, while the increase in tax revenue makes it possible to satisfy the most urgent public needs without endangering the fiscal balance. On the Central Bank side, the task of keeping inflation under control is also facilitated when the economy is in a situation of sustained growth and low unemployment, since if it is necessary to apply contractionary measures there

will be a greater degree of acceptance which will in turn make possible a rapid and efficient adjustment.

It has been empirically proved that there is a correlation between higher economic growth rates and increases in the rate of national saving, though the reason for this is not so clear. Greater domestic saving, for its part, generates stability, since it reduces the vulnerability of the economy to external disturbances, while keeping the current account deficit down to moderate levels and maintaining favourable indexes of external creditworthiness permits timely access to external financing when this is most necessary, for example, in situations of unfavourable terms of trade. This reduces the risk of having to face an external crisis or to abruptly reduce the economic growth rate. Moreover, a high level of domestic saving cushions the effects produced on the economy by upsets in international financial markets, like those that many countries of the region had to face in 1995 as a result of the Mexican crisis.

There is something almost magical about virtuous circles: the whole is greater than the sum of the parts, because the individual elements mutually strengthen each other. When trends go in the opposite direction, however, virtuous circles may become vicious circles. It is therefore essential to place emphasis on the need to increase saving and investment, to maintain the external balance conditions, and in particular to ensure that all the agents involved persevere with macroeconomic discipline.

Although the Chilean experience of the five-year period dealt with here is of a very specific nature—since there are no such things as “exportable models” in economic policy—it is possible to highlight some elements which have been of fundamental importance for the results achieved.

First, this experience highlights the need for balanced fiscal accounts and proper coordination among fiscal, monetary, exchange-rate and wage policies. The follow-up and control of aggregate demand, in terms of both its level and its rate of change, is a necessary, albeit not of itself sufficient, condition for efficiently achieving the domestic and external balances.

Furthermore, it suggests that inflationary pressures on costs were substantially moderated by the fact that workers and employers gradually incorporated the Central Bank's projected downward levels of inflation into the criteria used both in labour bargaining and in fixing the prices of goods and

services. The growing credibility of the Central Bank played a crucial role in this respect.

The objective of reducing the magnitude of economic cycles by due anticipation on the part of macroeconomic policy of incipient but not yet evident excess expenditure and the identification of areas of leeway on the supply side also contributed to the results obtained. In this respect, the Chilean experience highlights the desirability of bringing a certain degree of flexibility into the formulation and execution of economic policy, in order to deal in a timely and efficient manner with the effects of domestic or external disturbances. This flexibility was of crucial importance for spreading the positive and negative effects of these disturbances over various markets and thus promoting a more balanced and sustainable adjustment of the economy. This more balanced mechanism for the adaptation of the various markets was also aided by the criterion of not allowing the key macroeconomic prices to diverge for long from their medium- and long-term equilibrium values, which has been a decisive factor in giving stability and sustainability to the Chilean economic growth and development process.

Also in connection with the foregoing, the Chilean experience suggests that the market should be gradually given an increasingly important role in the determination of key prices such as the exchange rate and interest rates, beginning with the long-term segment of the market, in order to gradually incorporate the private sector in the formation of short-term prices, as markets are deepened and become more transparent and competitive.

Concern for the balance of payments current account deficit as a guiding thread in macroeconomic strategy, together with a gradual but sustained downward trend in projected inflation, was the main line

of Chilean macroeconomic policy. Perhaps the biggest challenge that the Central Bank had to face in the first half of the 1990s was to cope with the enormous inflow of foreign exchange which marked that period, taking care to ensure that both the level and the growth rate of absorption (domestic expenditure) were compatible with the significant downward trend in inflation, as well as with the maintenance of the balance of payments current account deficit within very reasonable levels. This latter element was of decisive importance for maintaining the upward trend in domestic saving, so that such saving could finance the major part of investment and the Chilean economy could integrate into the international economy in a sounder and less vulnerable manner, on both the trade and financial level.

In short, the macroeconomic results of the five-year period from 1992 to 1996 were very satisfactory. High growth rates of economic activity and of employment, domestic saving and investment, as well as of real wages and productivity, were achieved in this period. At the same time, inflation was significantly reduced and is well on the way to matching the rates recorded in the industrialized countries. And most important, not only was all this achieved without endangering the external balance of the Chilean economy, but at the same time Chile's linkages with the international economy were further improved, solid external accounts were established, the indicators of the external creditworthiness of the country improved, and its vulnerability was reduced. Equally important was the fact that no imbalances were generated in any other key area of the economy, so that all in all it is possible to take an optimistic view of the possibilities of further increasing and deepening Chile's economic development.

(Original: Spanish)