CHAPTER 5

External Debt and Financial Liberalization in the 1970s

During the 1980s, most Latin American countries were facing a dramatic problem of external indebtedness. The sharp deterioration in international markets registered since 1981 affected the developing nations with unusual severity; the drop in export prices and worsening access to the markets of industrialized countries, the rise in international interest rates, and the sharp reduction in capital inflows all contributed to the strongest negative external shock in the last half century.

In addition to a generally recessive character, the effects of the external shock on debtor economies displayed considerable diversity, which was due to the varied bargaining power of each country, the different speeds and magnitudes of indebtedness, and the development strategies adopted in earlier years. The latter was also a determining factor in the level of development that each country had reached when it was hit by the external crisis. In other words, there were nations whose economies stagnated or even contracted during the 1970s, yet others grew vigorously by channeling the abundant external supply of funding in international markets into productive investments.

This chapter focuses on the external debt of Chile. Because of its close relationship with the workings of the domestic capital market and the balance of payments policy, the main features and results recorded in these two areas will be discussed here, too.

As was shown in chapters 1 and 2, the Chilean economy recorded a poor performance during the period 1973–82 (see Arellano and Cortázar 1982; Edwards and Cox-Edwards 1987; Foxley 1983; and Ramos 1986). The failure of this experiment was associated to a significant extent, albeit not exclusively, with the trade and financial policies implemented in the period in question. The way in which these policies were

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applied made it possible for the external debt to grow very rapidly. At the same time, instead of supporting domestic capital formation, the increase in debt discouraged it. This outcome had five relevant causes: the rapid and indiscriminate import liberalization (especially of consumer goods), the exchange rate appreciation in combination with the sharp reductions in effective protection (see chap. 2), the persistence of high real interest rates on the domestic capital market, the overwhelming freedom given to the market forces to decide on the use of funds of both domestic and external origin, and the difficulty of identifying the market's comparative advantages or finding attractive opportunities for productive investment.

Finally, great vulnerability in the national economy was generated. Thus, in view of the passive and neutral domestic policies pursued (see chap. 2), the authorities were left with no policy tools with which to deal with external stocks. Furthermore, growing indebtedness and the magnitude of the deficit on the current account as early as 1980 obviously could not have been sustained in the medium term, even had the international financial crisis not taken place. Consequently, the external sector was placed on a course that would inevitably call for a traumatic adjustment process. The seriousness of this situation was exacerbated, of course, by the fact that during the 1970s the national productive base and adjustment capacity were weakened rather than strengthened. Thus, for example, the gross investment rate fell by almost one-fifth compared to the 1970s and the GDP growth rate diminished even more. Correspondingly, Chilean GDP suffered the deepest recession in Latin America in 1982.

The first section presents the main features of the financial liberalization process and supplies a few details of the official conceptual framework, the policies adopted, and the evolution of capital flows and the external debt; special attention is given to bank loans and the behavior of capital flows received by private debtors. Next the macroeconomic impact of external indebtedness is examined, especially the way in which it affected monetary and exchange-rate policies and the disequilibrating adjustment processes to which it gave rise. Then the evolution of interest rates—especially the persistent gap between domestic and foreign rates—is analyzed. There follows a discussion of the various sources of external vulnerability to which Chile was exposed as a result of its financial openness. I argue, contradicting the neoliberal approach, that the problems were concentrated in the private sector segment of the debt. I also attempt to explain why the massive financial inflows were accompanied by a drop in national savings and a decline in the investment ratio. The chapter closes with a brief summary of the lessons provided by the neoliberal experiment for financial relations and foreign debt management.

Financial Liberalization and Foreign Debt

An across the board opening to capital flows and full liberalization of the domestic financial market was the official policy in Chile. This section presents the conceptual framework on which the financial opening was based and then examines the way in which the principles were implemented. Finally, the volume and composition of capital flows and external indebtedness are analyzed.

The Analytical Framework of the Experiment

There are of course some very sophisticated neoliberal versions of how the liberalization of capital markets should work and of its effects compared to those of the so-called financial repression. The essential aspects of the official version can be conveyed by means of a very simple scheme, however.

The liberalization of the domestic financial market and the opening up to capital flows sought to increase overall investment and improve the allocation of resources. It was expected that there would be an increase in the volume of investment and its efficiency, which would provide the basis for vigorous and sustained economic growth.

In simple terms, the conceptual framework may be described in figure 5.1. Curves O and D show the supply and demand for funds in the market, which are identified with saving and investment, respectively. To begin with, there prevails a situation of "financial repression" in the sense that there are restrictions regarding the organization of new banks and the operations they can carry out and there is extensive rationing of the demand. Against this background, the authorities fix an interest rate (r_c) lower than the equilibrium rate for a closed economy (r_e). This determines a volume of savings, V_c, and demand is rationed at the same level (for the sake of simplicity, it is assumed that initially there is no net capital inflow). The volume of savings and investment (V_c) is less than that in a closed market situation with a free interest rate (V_e). At the same time, some nonprofitable investments are made, since rationing means that not all of the most efficient investments take place. Thus, some investments would be made that have returns equal to r_c, whereas others, with a higher yield, would remain without financing (in some of them, the return would exceed r_e since total investment would be V_c).

The domestic financial liberalization would allow a rise of r to its local equilibrium, and savers would face more options for investing their funds. Given the broader variety of options, there would be a larger supply (O_1, to the right of O) replacing the investment in nonproductive assets and supposedly raising the saving propensity by making it more

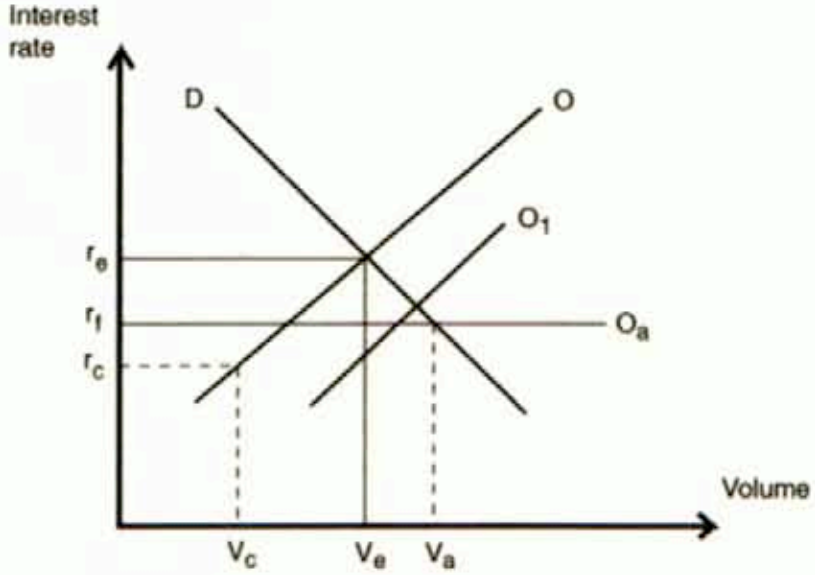

Fig. 5.1. Conventional framework of the liberalization of capital markets

attractive. On the other hand, the financial opening would allow capital inflows, which would complement the domestic funding for investment. With free capital flows, an investment volume of $V_a > V_e$ and an equalization of the interest rate at r_f would be reached.

The savings rate would rise, despite the lower interest rate, if the shift of supply were sufficiently strong, as in figure 5.1. This is a common assumption that is both explicit and implicit in the neoliberal reforms of the financial market.

The exchange rate policy adopted is a determining factor in the final outcome. To reach an equalization of interest rates, there must be no expectations of variation in the real exchange rate (deflated by net inflation). Initially, this was sought through a policy of minidevaluations, as described in chapter 4. Subsequently, a fixed exchange rate was adopted. Official policy assumed that, in a free trade regime such as it was already at work in 1979 with a fiscal surplus and an exchange rate close to the "equilibrium level," freezing the nominal exchange rate would rapidly prevent domestic inflation from exceeding external inflation. Thus, the exchange rate would become the anchor for stabilizing the level of domestic prices. The authorities thus formally adopted the most extreme type of monetarism, that is, the monetary approach to the balance of payments, with its neutral monetary policy.

The official approach assumed that financial liberalization would work efficiently since capital flows were managed by private agents and mostly without official guarantees. Thus, capital would only enter the

country if the debtor expected a net return for its use that would allow him or her to service interest payments. Therefore, the growth in the external debt was the reflection of a healthy economy (De la Cuadra 1981, 1025) and private debt would not present the threat of insolvency. This problem would only arise in the case of public debt (Robichek 1981, 172).

A naive vision of the working of private institutions prevailed. Statements by the authorities that users knew how to distinguish between good and bad banks were frequent. The fact is that prudential supervision was very lax in Chile.[1]

The discrepancies between the official approach and the real world were very marked. The volume of national savings and capital formation was less than V_c; that is, instead of growing it decreased sharply. The domestic interest rate stood at unexpectedly high levels and was spectacularly higher than the international rates (table 5.5). Fixing the nominal exchange rate in 1979 led to a significant loss of purchasing power and a growing external deficit. Private indebtedness grew notably, encouraged by the risky assumption that its real cost would remain low and that there would continue to be easy access to loans in the future. Finally, the excessive indebtedness, with the correspondingly rising service, weakened the productive system and the payments capacity instead of strengthening them.

The New Institutional Framework

In this period, three subperiods may be distinguished with regard to the implementation of financial policies.[2] The first ran from 1973 to 1975, when there were no substantial changes in the domestic financial system; banks nationalized under the previous regime remained under state control. On the other hand, various measures undertaken in order to encourage foreign investment and foreign credits had little effect, in the sense that net inflows were negligible.

The second period began in 1975 with the drastic reform of the domestic financial system and the privatization of most of the commercial banks. Together with liberalizing the interest rate in April of the same year, freedom for readjustments (monetary corrections) in operations exceeding ninety days and for interest payments on short-term deposits were granted (see Arellano 1983). On the other hand, quantitative

1. Interestingly, something similar occurred in industrial countries with the regulation of loans to developing countries. See Valdés-Prieto 1989 on the relaxation of norms to facilitate the recycling of oil surpluses.

2. For more detailed background on regulations on capital flows, see the appendix to Ffrench-Davis and Arellano 1981.

controls on loans in national currency, which principally aimed at channeling credits into production rather than consumption, were eliminated, and authorized operations as well as their conditions for the different financial institutions were standardized.

The tendency toward uniform treatment also included foreign banks. Their activities had been restricted during the governments of presidents Frei and Allende. In December 1974, restrictions prohibiting their operation in the country were lifted. Nevertheless, the opening to external financing was slower. This gradualism contrasted with the rather abrupt trade liberalization. In the following years, however, there were heavy capital inflows, which grew rapidly between 1977 and 1981. The determining factors were the abundance of funds available on the international market, the low initial bank debt of Chile, the image of creditworthiness that Chile had achieved, and the absence of domestic and external restrictions regarding the use of the funds.

Finally, in the last part of the period, from the end of 1981 onward, despite the further liberalization of capital inflows, the supply shrank drastically, as a result of both the emergence of the international financial crisis and the late recognition by bank creditors of the excessive indebtedness of Chile. When the Mexican debt crisis officially exploded in August 1982, Chile found itself in the midst of a deep crisis. In fact, from the second half of 1981 on, GDP had been decreasing persistently (see Marcel and Meller 1983).

The gradual nature of liberalizing controls on the size and terms of capital flows was meant to ensure control over the money supply, which for several years played the principal role in anti-inflation policy. It was considered that, in view of the sizable difference between the domestic and foreign interest rates, abrupt liberalization of the capital account would attract credit in such volume that it would endanger the price stabilization program.

Official statements insisted on the transitory nature of the restrictions. Indeed, with the passage of time the capital account was liberalized through increases in the quantitative restrictions bounds or their replacement with more flexible or diminished controls.

In 1981, when the net use of foreign savings jumped to 21 percent of GDP,[3] financial inflows (under article 14 of the law on foreign exchange operations) were subject to a minimum stay in the country of twenty-four months and the compulsory deposit of a percentage of the credit (10 or 15 percent, depending on the term) in the case of operations for less than sixty-six months. There were no special restrictions on the volume

3. Figures in 1977 constant prices rescaled with average RER for 1976–78. In current U.S. dollars, the net use of foreign capital was 14.5 percent due to the abnormally increased value of GDP in 1981 as a result of outlier exchange rate appreciation.

of credit that the banks could borrow abroad and lend in foreign currency in Chile, but there was still a limit on the guarantees they could grant. During 1982, in the midst of the crisis of the Chilean economy, the minimum term of twenty-four months was eliminated and the compulsory deposit was set at 5 percent of the foreign loan, which was a rate similar to the reserve requirement for domestic bank deposits.

Financial Capital Flows and Indebtedness: Volume, Sources and Uses

Capital flows grew rapidly from 1977 onward. Even though Chile recorded a large and growing current account deficit in the following years, the net capital inflow was sufficient to allow a significant accumulation of international reserves until 1981. This capital surge took place in a context of dynamic expansion of the external sector, especially of imports of nonessential consumer goods. Inflows were overwhelmingly concentrated in credits to the private sector with no state guarantee. Foreign direct investment and loans to the public sector accounted for less than 20 percent of inflows.

Table 5.1 shows several indicators of annual capital movements. The flows, expressed in constant prices, increased significantly in the second half of the 1970s (cols. 1 and 2). Columns 3 and 4 show that capital movements rose sharply as a share of gross domestic investment and GDP. This was partly a result of the relative stagnation of the latter two variables during the 1970s. External savings (deficit on the current account) and the capital service also grew, with some ups and downs, in relation to exports (cols. 5 and 6), in spite of the dynamic growth of the latter in the early years of the neoliberal experiment. The total debt service in 1982 amounted to 88 percent of exports of goods and services, that is, three times the coefficient of the years 1970–74.

In short, the data show that from 1977 onward capital inflows captured a growing relative weight in the Chilean economy. The coefficients reflecting their incidence show a debt-servicing burden substantially greater than that for Latin America as a whole in the 1970s and early 1980s (Bacha and Díaz-Alejandro 1983; Ffrench-Davis 1983b).

Debt activity (as reflected by the volume of gross transactions and amortization payments) increased faster than net capital flows since the terms of the loans became shorter. This was a direct consequence of the increased share of private creditors in total debt, which operate with shorter maturity terms. The magnitude reached by capital movements is reflected by the fact that, in the two-year period 1980–81, gross inflows were equivalent to 24 percent of GDP.

During the period under analysis, significant changes took place

with regard to the agents (creditors and debtors) participating in capital flows. Among creditors, 84 percent of the external debt in 1981 was with banks and financial institutions, which had accounted for only 19 percent in 1974 (see table 5.2). This increased participation by private lenders was reflected in a decline in the nominal amount of bilateral debt with official institutions. This reassignment of borrowing was partly the result of greater use of the supply of foreign banks, which before 1977 had been relatively little used by Chile compared to other semi-industrialized nations. From then on, however, it rapidly caught up. Chile's per capita bank debt in 1982 exceeded U.S.$1,000, compared to a regional average of U.S.$600 and only about U.S.$500 in the case of Brazil (Ffrench-Davis 1983a, table V.5). On the other hand, Chile's bank debt increased by 57 percent per year between 1977 and 1981, compared to an average of 28 percent for developing countries as a whole.

With regard to debtors, after 1975 the growing net capital inflow

TABLE 5.1. Deficit on the Current Account and Capital Flows, 1970–82

Year	Balance on Current Account (1)	Gross Inflow of Loans (1977 U.S.$ millions) (2)	External Financing of Investment (%) (3)	External Financing and GDP (%) (4)	Export Deficit (%) (5)	Debt Service Coefficient (%) (6)
1970	−166	941	6.8	1.4	6.5	27.0
1971	−367	772	15.5	2.8	16.9	38.4
1972	−690	1,302	36.4	5.4	40.0	27.9
1973	−441	1,106	24.7	3.6	20.7	25.4
1974	−256	1,064	12.0	2.1	8.9	35.1
1975	−534	1,109	32.5	5.0	29.3	55.6
1976	160	1,086	−11.4	−1.4	−6.5	52.7
1977	−551	1,390	34.1	4.6	22.5	52.8
1978	−965	2,559	50.9	7.4	38.5	58.7
1979	−933	2,691	42.2	6.6	27.3	50.8
1980	−1,382	3,270	51.2	9.0	36.8	47.7
1981	−3,348	4,640	108.1	20.7	103.2	70.8
1982	−1,693	2,238	87.2	12.2	53.4	88.5

Sources: Calculated on the basis of Central Bank of Chile, *Balanza de Pagos*, *Deuda Externa de Chile*, and *Cuentas Nacionales* in 1977 pesos.

Note: All nominal figures were deflated by the external price index (EPI; Ffrench-Davis 1984) in order to convert them into figures at 1977 prices. Column 3 measures the percentage relationship between the deficit on the current account and gross fixed capital formation. Column 4 indicates the relationship between the deficit on the current account and gross domestic product. Column 5 is the relation between the deficit on the current account and exports of nonfinancial goods and services. Column 6 is the gross outflow plus net interest payments as a share of exports of nonfinancial goods and services. For the conversion into U.S. dollars of the figures for GDP and investment, which were originally given in 1977 pesos, the average real exchange rate for the three-year period 1976–78 was used, expressed in 1977 pesos per U.S. dollar of the same year.

was received mostly by the private sector while the government moved toward a budget surplus and amortized its external debt. This situation was in line with a deliberate policy of the government, adopted as part of its program of reducing state participation. This was facilitated by the change that took place in international markets: the loss of weight on the part of official financial institutions, which operated mostly with governments; and the vigorous emergence of private international capital markets, which offered access to both public and private debtors.

Table 5.3 shows the composition of the total outstanding foreign debt of public and private borrowers. Since international reserves grew steadily until 1981, part of the debt was not used. I call this the total "gross debt" and call "net debt" the portion used to finance the deficit on the current account (gross debt minus the increase in reserves). This has implications for determining the origin of the macroeconomic disequilibrium that Chile experienced (exogenous or endogenous) as well as for an examination of the effects of the external debt on domestic purchasing power.

When foreign credit has as its counterpart a higher current account deficit (corresponding, for example, to a similar increase in imports stimulated by a revaluation of the exchange rate or a further import liberalization), the recipient of the loan increases its purchasing power without a direct impact on the liquidity of the rest of the economy. When the external credit ultimately involves an increase in reserves, however, the

TABLE 5.2. Total External Debt and Debt with Private Financial Institutions, 1974–82

		Financial Institutions	
Year	Total Debt (U.S.$ millions)[a] (1)	U.S.$ millions (2)	Share in Total (%) (3)
1974	4,776	923	19.3
1975	5,453	1,352	24.8
1976	5,392	1,506	27.9
1977	5,763	2,144	37.2
1978	7,153	3,723	52.0
1979	8,790	5,885	67.0
1980	11,325	8,579	75.8
1981	15,700	13,169	83.8
1982	17,263	14,986	86.8

Source: Central Bank of Chile, *Deuda Externa de Chile, 1982*, August 1983, tables 1, 3, and 11; Ffrench-Davis and Arellano (1981, table 7).

[a]Total debt refers to the disbursed outstanding stock at the end of the year. In addition to the traditional foreign debt, it includes national currency liabilities, liabilities with the IMF, and short-term debt contracted by sectors other than the monetary system, with the exception of direct foreign-trade operations.

debtor's purchasing power is increased at the expense of the rest of the economy through a reduction of domestic credit or public expenditure or by restrictive monetary open market operations.

An estimate of the impact of capital flows is shown in columns 3 and 4 of table 5.3, which present the total debt minus the international reserves of the respective sectors. As the accumulation of assets was concentrated in the public sector (Central Bank), from 1975 up to 1981 this was reflected in a substantial reduction in its net liabilities. In the case of the private sector, in contrast, net indebtedness grew very rapidly, increasing by a factor of thirteen between 1974 and 1981. These data show clearly that capital inflows contributed substantially to the process of greater private participation in expenditure in the Chilean economy and to its concentration.

It should be noted that most of the private debt was contracted without state guarantee. Thus, in 1981 almost two-thirds of Chile's total debt lacked an official guarantee. That high share could have constituted a decisive bargaining factor in the renegotiations of the external debt.

With regard to the intermediaries, up to 1977 the private sector obtained a significant part of the credits directly abroad because of the quantitative restrictions faced by domestic banks in these operations. Two qualifications should be noted, however. On the one hand, the segment of the nonfinancial private sector with most access to external credit was that with the closest connections to national and foreign

TABLE 5.3. External Debt, by Borrowers, 1973–82 (U.S.$ millions)

	Gross Debt		Net Debt		Private Sector Share in Net Debt (%)
Year	Public Sector (1)	Private Sector (2)	Public Sector (3)	Private Sector (4)	(5)
1973	3,276	786	3,063	716	18.9
1974	3,896	879	3,709	773	7.2
1975	4,426	1,027	4,252	931	18.0
1976	4,252	1,140	3,718	1,016	21.5
1977	4,319	1,444	3,763	1,339	26.2
1978	4,858	2,295	3,648	2,147	37.0
1979	5,018	3,772	2,882	3,053	54.9
1980	4,905	6,426	1,569	5,986	79.2
1981	5,145	10,561	1,878	9,761	83.9
1982	5,892	11,371	3,866	10,586	73.2

Sources: Calculations based on Central Bank of Chile, *Boletín Mensual* and *Deuda Externa de Chile*.
Note: Column 1 excludes state-guaranteed debt and external debt contracted by the Banco del Estado de Chile. Column 2 includes state-guaranteed debt and debt contracted by the Banco del Estado de Chile. Columns 3 and 4 represent the gross debt minus the international reserves of the Central Bank and the financial system, respectively. For measuring reserves, holdings of gold were valued at a constant real price of U.S.$42.222 per ounce of fine gold, base 1977.

banking institutions. On the other hand, a substantial share of these loans had bank guarantees. From 1978 onward, the domestic financial sector gained greater importance in the direct intermediation of external private financing. Table 5.4 gives details about the credits that entered the country under the terms of article 14. The private sector captured 94 percent of the gross inflows.

In spite of the expansion of external indebtedness and the increase in the current account deficit, the government did not show much concern in this respect. On the contrary, it maintained that what mattered was the way in which the real net debt evolved, the interest rate paid, and the sector (public or private) indebted.

The official figures for the real net outstanding debt showed a reduction over the five-year period 1976–80: it decreased from U.S.$5.3 billion in 1975 to U.S.$4.3 billion in 1980 (in 1977 dollars). Two external factors explained this reduction in contrast with the high annual rate of indebtedness. The first factor in terms of its importance was the rate of international inflation, which eroded the real value of the debt stock; as a second factor, debt also decreased in response to the rise in the value of reserves maintained in gold. These two factors explain a drop of U.S.$2.7 billion in real net debt during the five-year period (see Ffrench-Davis and Arellano 1981). Thus, instead of having decreased by 18 percent in real terms, the debt would have grown by one-third and would have shown a sharp acceleration toward the end of that period in the absence of these two factors. It was therefore clear that the rapid growth of external indebtedness was dangerous as well as harmful to

TABLE 5.4. Article 14: Gross Annual Flows of Credit by Debtors, 1976–82

		Percentage Breakdown			
			Private Nonfinancial Sector		
Year	Total Flows (U.S.$ millions) (1)	Public Sector (2)	Non-guaranteed (3)	Guaranteed (4)	Financial Institutions (5)
1976	262.6	13.3	86.3		0.4
1977	336.4	13.2	80.1		6.7
1978	780.2	4.2	31.0	26.0	38.8
1979	1,245.2	1.8	34.7	21.6	41.9
1980	2,503.7	3.1	14.5	17.6	64.8
1981	4,516.7	1.9	20.6	4.6	72.9
1982	1,770.8	24.4	24.7	6.1	44.8

Source: Based on data from Central Bank of Chile, "Créditos Liquidados Artículo 14," December 1980; and *Boletín Mensual*, no. 662 (April 1983).

Note: Column 1 shows the gross annual flow of disbursed credits minus compulsory deposits. The breakdown over columns 2 through 5 was estimated on the basis of that for Santiago.

national development, as will be shown later. Nevertheless, the government insisted right up to the end that entering into debt was good business because the real interest rate was very low or negative; furthermore, debtors were in the private sector, which was subject to "free" market laws so that, in the official view, there could be no doubt that borrowing was efficient.

Indebtedness and Macroeconomic Adjustment

The massive process of external indebtedness between 1977 and 1981 had significant effects in many areas of the national economy. The process profoundly affected aggregate demand and its composition, contributed to the spectacular concentration of wealth (see chap. 9 and Dahse 1982), considerably altered the functioning of the savings/investment process, and conditioned to a decisive extent the handling of monetary and exchange rate policies.

The initial impact of external indebtedness involved an increase in the availability of foreign exchange. This gave rise to two possibilities. One was an increase in international reserves, which is usually accompanied by an increase in the money supply; the other consisted of an expansion of the current account deficit. In practice, up to 1981, the growing indebtedness manifested itself in both ways simultaneously, since the net capital inflow was greater than the capacity to absorb it. The current account deficit steadily increased by considerable amounts (see table 5.1, cols. 1 and 4). In 1980, net use of foreign capital was close to the equivalent of 9 percent of GDP, in contrast with an average of 5 percent for Latin America as a whole. The difference between the volume of funds received and those used gave rise to the increase in international reserves registered up to 1980; in that year, Central Bank reserves represented 68 percent of annual imports of goods.

The rapid accumulation of reserves had substantial effects on the country's monetary and foreign exchange policies. Furthermore, the huge capital flows meant that a very high proportion of the total credit available in the national economy had originated from foreign sources. Despite its volume, the substantial gap between domestic and external interest rates persisted. The following section is devoted to these three issues.

Monetary Policy and the Crowding out of Domestic Credit

From 1975 onward, net purchases of foreign exchange by the Central Bank constituted the main source of expansion of the money supply

(Ffrench-Davis and Arellano 1981, table 13): in the three-year period 1978–80, these operations represented more than 100 percent of the total money issued. As noted, the overwhelming proportion of net purchases of foreign exchange by the Central Bank came from the private sector. Indeed, in some years foreign exchange operations with the public sector even had a contractive effect. With regard to the credit of the Central Bank, the public sector recorded a negative balance from 1975 onward, whereas that of the private sector showed modest expansion throughout the period. This situation continued until 1981, when the serious macroeconomic imbalances that had been building in the Chilean economy began to emerge openly and the loss of international reserves began. Correspondingly, the monetary effect of exchange operations became markedly restrictive.

As indicated earlier, during certain periods direct restrictions on capital inflows were imposed as an instrument of monetary programming. One of these restrictions was directed toward controlling the monetary effect of inflows by limiting the amount of resources that could be changed in the Central Bank each month. This limitation was enforced—with successive modifications in the maximum amounts of exchange operations authorized—in September 1977 and was held up to April 1980 (Ffrench-Davis and Arellano 1981). These restrictions were not sufficient to keep inflows to the private sector down to a volume consistent with the monetary expansion desired by the economic authorities. Consequently, the latter took action over the other sources of money issue and on the exchange rate. In both cases, there was a crowding out of the domestic economy by the sectors associated with foreign financing. Domestic credit to banks was restricted in the face of the increase in high-powered money. The exchange rate, for its part, was revalued in response to the accumulation of reserves, thus crowding out domestic producers of tradables.

Quotas in the expansion of liquidity remained in force as long as the closed economy monetary approach predominated. Subsequently, in 1979 the open economy monetary approach was adopted. Under this approach, the nominal exchange rate was frozen, a "neutral" monetary policy was explicitly adopted, and a process of automatic adjustment of the money supply was scheduled to take place. Thus, changes in the international reserves were to be the determining factors of the degree of liquidity of the domestic economy against the background of a balanced fiscal budget and stable low bank reserve rates.

The monetary approach to the balance of payments survived until mid-1982, with a "neutral" monetary policy based on the dollar standard. During the last year in which it was in force, a contractive "automatic adjustment" began to operate, with disastrous effects on employment and output (see chap. 2 and Arellano and Cortázar 1982).

Foreign Exchange Policy: Instability and Appreciation

Financial inflows were crucial in order to allow the handling of the exchange rate in the light of objectives other than those of efficient resource allocation without bringing about a deterioration in the overall balance of payments (up to 1981).[4] The use of the exchange rate to guide expectations (in 1976–79) and/or to anchor domestic prices (1979–82) did indeed result in lower inflation. Nevertheless, net inflation persistently decreased more slowly than expected by the authorities. The exchange rate was used as a variable to repress inflation, appreciating the peso during the process. This, together with import liberalization and the recovery in economic activity registered between 1977 and 1981, led to a significant current account deficit.[5] At the same time, the gradual real exchange rate appreciation reduced the cost of external indebtedness so that in 1979 and 1980 this cost was negative. Consequently, the flows were encouraged by the evolution of the real exchange rate, accentuating the growing current account deficit and the surplus on the capital account. Some of the quantitative restrictions used to control capital inflows helped to make private capital movements independent of short-term fluctuations in the exchange rate. Mention should be made in particular of the minimum term of two years for indebtedness and the compulsory deposits decreasing with the term of the loan. Typical Eurodollar loans, with long terms, were encouraged strongly by the expectation of continued real revaluation.

Interest Rate Differentials

The official approach anticipated both a sharp tendency toward a drop in financial spreads and the leveling of domestic and foreign interest rates in response to the overall liberalization of the financial system. However, throughout the period large differentials persisted between interest rates for loans and deposits on the domestic financial market. The level of both rates was notably high. Furthermore, in spite of the

4. An analysis of foreign exchange policies between 1965 and 1982 can be found in chapter 4.

5. The increase in the deficit was also associated with the rise in interest rates and the deterioration of the copper price. With regard to this latter item, the smaller fiscal income from this source in 1981, compared to the average for 1960–70, was equivalent to 0.7 percent of the 1981 GDP. The current figures for the contribution to fiscal income of the large-scale copper-mining industry have been deflated by the external price index. The deterioration in the copper price was partly compensated for by the improvement in the price of molybdenum, a rise in copper output, and mostly the capture of the economic rent of the copper deposits for Chile due to the nationalization of these activities in 1966, 1969, and 1971 (see Ffrench-Davis and Tironi 1974).

huge capital inflows recorded, especially from 1979 onward, domestic rates were considerably higher than international rates, as shown in table 5.5.

It may be noted that the ex-post gap between the domestic and external rates for loans never dropped below an annual rate of eighteen percentage points. In this respect, the traditional explanation that the differential was due to expectations of a higher devaluation than the effective evolution of the official exchange rate do not seem to have been valid. For example, between 1977 and 1982 the parallel or black market rate was very similar to the official rate (Meller and Solimano 1984). The easy access to the foreign exchange market that existed at that time and the spot nature of the parallel rate do not make it a precise indicator with regard to expectations of devaluation over twenty-four months, which was the minimum term for the entry of capital under article 14, but they do reflect the prevailing atmosphere of a quiet market in which there were continuing sales of foreign exchange by the public over bank counters.

It is quite possible that the market was not aware of the need to make an adjustment for external inflation when measuring the real exchange rate. It is therefore probable that the expected "foreign interest rate," comparable to the real domestic rate on the market, would be closer to its nominal level in dollars than to the ex-post rate given in column 2 of table 5.5. This nominal rate fluctuated between 14 and 23

TABLE 5.5. Domestic and External Real Interest Rates in Pesos, 1975–82 (annual percentages)

Year	Domestic (1)	External (2)	Differential (3)
1975[a]	121.0	–	–
1976	51.2	−21.1	72.3
1977	39.4	0.2	39.2
1978	35.1	3.8	−31.3
1979	16.9	−0.9	17.8
1980	12.2	−8.0	20.2
1981	38.8	12.4	26.4
1982	35.2	45.0	−9.8

Sources: Based on data from the Central Bank of Chile; Instituto Nacional de Estadísticas; Cortázar and Marshall 1980; and Ffrench-Davis and Arellano 1981.

Note: In 1982, the "preferential" exchange rate fixed by the government for debtors was used in calculating the external interest rate. This rate reflects the dominant segment of the market, of loans between thirty and eighty-nine days. The international rates paid correspond to the interest rate for bank credits through article 14 plus the cost of compulsory deposits and the financial spread, all converted into their peso equivalents.

[a]Second semester, after the freeing of the interest rate.

percent in 1976–82. Consequently, even using this hypothesis, there would still be a substantial gap with the domestic lending rate.

In addition to the domestic-external gap, there were substantial differentials between the domestic rates for deposits and loans. There were various reasons for these high spreads, and their significance was changing over time. This issue has been dealt with elsewhere (Arellano 1983; Ffrench-Davis and Arellano 1981; Ramos 1986, chap. 8). We shall therefore limit ourselves here to mentioning some of the aspects that have the greatest implications for the focus of this chapter, that is, the external debt and capital flows.

Traditional explanations are as follows: (1) high bank reserve requirements are a determining factor in the gap between domestic interest rates on deposits and loans (the financial spread), (2) the fiscal deficit and the inelastic demand for credit by public enterprises are responsible for the high interest rates on loans, and (3) the restrictions on capital flows are responsible for the differential between r_f and r_e (fig. 5.1). None of these possible causes was of significant importance during the whole period, however. The first of them was of some importance only in 1975–76 because of the high requirements for non-interest-bearing bank reserves and over 300 percent inflation per year. Nevertheless, very large financial spreads, net of the costs of reserves, persisted during most of the period from 1975 to 1982. Second, the fiscal deficit fell rapidly and substantially (reaching equilibrium in 1975) and turned into a solid surplus from 1976 onward (Larraín 1991, table 4.4). Finally, in spite of the persistence of restrictions on capital movements, such flows were huge, as was shown earlier. Consequently, orthodox analysis is not capable of explaining why, with net capital inflows equivalent to an average of 8 percent of GDP in 1978–80, the gap between domestic and external interest rates stood at an average of twenty-three percentage points per year (see table 5.5). In this period, as noted, it was clear that there were still no expectations of a massive devaluation.

Therefore, there are other significant factors that explain the behavior of interest rates and the financial spreads.

1. Various data suggest that the banking system was inefficient and subject to rising operational costs after the reform. One of the reasons for this prior to 1977 was the underutilization of installed capacity. Furthermore, the fact that the system operated with such short terms for both deposits and loans constituted another cause of increased costs. This would seem to explain why in 1978 the operating cost of the system was on the order of 8 percent of total loans, a very high figure in comparison with international standards. Nevertheless, even after discounting the operating costs, the spread still remained very high.

2. The short terms of financing facilitated the prevalence of high

rates.[6] Those who had no access to external credit had to face a severe domestic recession simultaneously with interest rate liberalization. Against the background of heavy propaganda to the effect that the recession would be brief, many businesspersons resorted to expensive short-term credit instead of closing down their operations, expecting a rapid reactivation of demand. Under these circumstances, debtors did not view themselves as taking out a loan at a real interest rate of 40 percent per year but rather as borrowing for thirty days at 2.5 or 3 percent, with the probability of renewing the loan for a few months.

Effective demand, however, remained generally depressed until 1981 (and lagged behind aggregate demand), and interest rates continued to be high and unstable. Remember that only in 1981 did effective GDP reach levels close to the productive frontier (see chap. 1). Given the continuing delay of the expected reactivation, a devaluation for producers of exportables, and a reversal of the trade reform hoped for by producers of importables, entrepreneurs engaged in successive renewals of their bank loans, with the increasing risk that this involved (see Harberger 1985; Held and Jiménez 2001; and Mizala 1992). This phenomenon was further strengthened by the credit requirements of activities that were adversely affected by trade liberalization (see chap. 3). In spite of business expectations that it would be abandoned, the liberalization process was maintained and even—unexpectedly on a number of occasions—further intensified until it culminated in a uniform tariff of 10 percent in 1979.

3. Some opportunities for highly profitable "investments" did arise. Numerous public enterprises were sold at prices significantly below normal market prices. Similar opportunities were offered by investments in real estate and financial assets, whose prices rose notably in real terms: The stock exchange price index increased fivefold in constant prices between 1975 and 1979 and almost doubled in 1980. The elimination of regulations on the use of credit made its rapid redistribution toward these uses possible, which were extremely profitable investments from the private point of view but created no new productive capacity.

4. A noteworthy increase in consumer credit, especially for imported durables was observed. Here, too, the suppression of previous restrictions on bank credit for consumers facilitated the shift in the composition of expenditures. Furthermore, import liberalization promoted an expansion of the demand for credit, to be used for marketing imported consumer goods. Thus, on its way through the financial system the savings of some nationals leaked toward the consumption of

6. On various occasions, it was the falling rate of inflation and the lagging adjustment of the nominal interest rate.

imported goods. This is one explanation for the drop observed in the rate of national savings in contrast to the sharp increase in financial savings, which multiplied by six between 1976 and 1981.[7] In the four-year period 1979–82, which was the period of alleged great success of the economic model, the rate of national saving (measured as gross capital formation minus the utilization of foreign capital, as a share of GDP), reached barely 9 percent of GDP.

5. The gradual recovery of domestic economic activity and wages from the very depressed levels of 1975, together with massive official publicity within the prevailing authoritarian framework, helped to create an image of a dynamic and rapidly growing economy.[8] And as economic recovery on the basis of the utilization of existing installed capacity began to come to an end, aggregate demand was fed with the very large external credits that propped up a consumption boom until far into 1981. The atmosphere of success thus created, together with the consequent expectations of growing permanent income, induced consumers and firms to continue increasing their indebtedness while it prompted the banks to renew and rapidly expand their credit lines. Within this framework, the banking institutions competed with each other, partly by reducing the cost of services (the financial spread) but also by reducing the guarantees demanded from their borrowers.

6. The banks allotted a significant proportion of funds to related companies and individuals. Thus, for example, in 1982 the main private bank, which was controlled by the biggest economic group in Chile, had 42 percent of its portfolio loaned to firms that were openly and directly related to the same group (Harberger 1985; Held and Jiménez 2001). Consequently, financial transactions became mere internal group operations, weakening appraisal criteria and procedures for recovering loans.

7. In a framework of renewal of loans and borrowing to pay interest, the high cost of loans in the domestic capital market helped to increase the demand for them rather than reducing it. Thus, the factors described previously tended to turn the demand for credit more inelastic. At the same time, the high financial costs produced an increase in

7. The stock of loans of the banking system in domestic and foreign currencies rose from 9 percent of GDP in 1976 to 55 percent in 1981. Figures that include assets of the Central Bank are 33 and 62 percent, respectively. See Arellano 1983, table 4.

8. As demonstrated by Schmidt-Hebbel, "the explosive rise in consumption of tradables between 1976 and 1981 . . . can be explained, in one half by diminished restrictions on credit or consumer liquidity, and the other half by expectations of higher permanent income and personal wealth, to a large degree stimulated by official euphoria and propaganda" (1988, 178).

the demand for funds in order to pay interest commitments, with this effect predominating over the pure price effect. The magnitude of the effect of financial costs is illustrated by the fact that between 1976 and 1982 an average debtor paid excess interest, over a real "normal" rate of 8 percent per year, amounting to the equivalent of 300 percent of the initial loan. In other words, a borrower who effectively paid 8 percent to the creditor each year, renewed the principal, and capitalized the interest commitments in excess of 8 percent would be liable by the end of 1982 for a debt four times the original amount in money of constant purchasing power.[9] It should be noted that, in contrast, a debtor in foreign currency on similar terms in 1982, just before the devaluation, would be liable for a real debt 44 percent below that contracted in 1976. Consequently, even after a massive real devaluation of 80 percent the debtor would have ended up with a debt just equal to the original amount (and equivalent to only a quarter of the liabilities of a person with a debt expressed in pesos). This calculation is, of course, sensitive to the period taken as a starting point. Thus, for example, "late" debtors who took out credits in foreign currency only in 1981 or the first half of 1982 suffered a serious loss, taking into account the real devaluations registered in the remainder of 1982. This is in sharp contrast to the case of "early" debtors.

8. Finally, foreign credit played a role different from the one traditionally assumed. It is usually supposed that these funds enter into an integrated market characterized by great substitutability between resources of domestic and external origin, so that both types of interest rates would tend to equalize. It is probably true that the external credit did help to relieve the demand for funds on the domestic market. Nevertheless, the effects of the factors mentioned earlier were stronger and therefore pushed up the lending domestic interest rate. This was the result of persistent market segmentation. In effect, only some debtors could borrow directly from abroad or gain access to credit through the intermediation of local banking. As a result, the difference between the domestic and external interest rates reached notably high levels. As already stated, the explanation for this does not lie in the expectations of devaluation, since until far into 1981 these were of no significance, but it is to be found in the significant segmentation that prevailed in the financial market. Of course, this segmentation was not absolute. In the market, there were borrowers

9. These calculations were made using the corrected consumer price index. If the official consumer price index had been used, the total amount of the "real" debt would have been 5.3 times greater. The cumulative "error" in the calculation of the official consumer price index in the three-year period 1976–78 was close to 30 percent. See Cortázar and Marshall 1980.

who had simultaneous access to domestic and external sources of funds in diverse proportions.[10]

Credit of external origin was available on a very large scale, representing as much as 40 percent of the total loanable funds of the financial system (including foreign loans) in 1981. The interest rate differentials therefore had substantial effects from both the resource allocation and income distribution points of view. Small- and medium-sized producers were mostly relegated to the segment where high interest rates prevailed. In contrast, entities related to financial institutions and the main economic groups had easy access to external credit, either directly or through the intermediation of national banks. This noteworthy and persistent market segmentation helped to explain the spectacular concentration of income and wealth in these years.

Worsening of the Portfolio and Prudential Supervision

The external debt was associated with a domestic credit boom. Total availability of funding was expanded by nonguaranteed (see table 5.4, col. 3) and guaranteed (col. 4) direct external loans, external credits intermediated by local banks (col. 5), and other loans from these banks. These loans were based on the liquidity generated through foreign exchange operations and the corresponding accumulation of international reserves by the Central Bank.

The credit expansion took place in an environment of very lax prudential supervision. Credits to related parties grew at an accelerated pace, mostly without guarantees. To avoid the prevailing norms, debtors made use of cross credits and turned to dummy firms as well as operating from offshore institutions. In the face of high interest rates, the banks renewed the debts and allowed new credits with the objective of paying the interest commitments (or the capitalization of interest); between 1976 and 1981, loans rose by 38 percent each year in real terms. Nonperforming loans seemed to be low, and the banking system exhibited high profitability on capital, on the order of 17 percent in 1979–80.

Provisioning for risky portfolios, both total and individual, was low. In 1979, total provisioning was reduced from 2 percent of the loans to 0.75 percent, and it was stated that priority would be given to individual provisions but without implementing the latter. When the banking crisis exploded in January 1983, it appeared that 19 percent of outstanding loans had been made to related parties in 1982 and represented 249

10. There was also significant dispersion within the domestic market itself. For example, the average publicly offered lending interest rates exceeded the weighted annual average rate calculated by the Central Bank by five and ten percentage points in 1979 and 1980, respectively.

percent of the capital and reserves of all private banks. The profound weakness of the financial system as a result of the neoliberal reforms became evident in the following year, with enormous economic and fiscal costs mounting to nearly one-third of annual GDP (Held and Jiménez 2001; Sanhueza 1999).

External Vulnerability and the Dynamics of Indebtedness

The growing indebtedness generated great vulnerability for the Chilean external sector. In fact, the form assumed by the transfer of external resources and the incentives provided by the economic model led to a crowding out of domestic savings and a decline in productive investment (see table 5.1, col. 3) and, paradoxically, the crowding out of the production of tradables, which lost share as part of GDP (the production of exportables increased less than the reduction in production of importables).

As was shown earlier, for several years the real external debt did not appear to be growing strongly in spite of the rising deficit on the current account. The behavior of real net indebtedness, the ease with which new credits could be obtained, and the low real international interest rates led many countries to take a complacent attitude during the 1970s and early 1980s. This was backed up by the opinion prevailing in domestic official circles and international financial institutions (IFIs) that since indebtedness was predominantly private its use would naturally be efficient (see Robichek 1981, 171–72).

The growing indebtedness made gradual exchange rate appreciation possible. This, in turn, made it still more attractive to resort to external loans; thanks to the appreciation, the real cost of foreign loans was negative during almost the whole period of financial liberalization. At the same time, domestic asset prices rose vigorously. The process was thus self-encouraging, exacerbating capital inflows, which increased aggregate demand and allowed the continued exchange rate appreciation. This led to the growing accommodation of the national economy to a massive financial inflow.

In the productive sector, however, what was taking place was the opposite of what was expected by the government. The savings and investment ratios were notably below the levels reached in the 1960s: the rate of gross fixed capital formation barely reached an average of 15.5 percent of GDP in 1974–82, and in its best year (1981) it did not exceed the average of 20.2 percent of the 1960s. An increasing proportion of inflows was directed toward the consumption of imported goods,

crowding out spending on national products and domestic saving. There was a discouragement of investment, especially in the production of tradables. The most obvious "comparative advantages" were located in the purchase of assets on the domestic market from deeply indebted firms at reduced prices. Except for some sectors making intensive use of natural resources—such as fruit production, forestry, and fisheries (which did indeed expand) and luxury construction—investors ran into the difficulty of identifying comparative advantage: exchange rate appreciation, high interest rates, the cutback of public support for productive development, the reduction of public investment, the sharp trade liberalization all combined to provide a discouraging environment for productive investment.

Paradoxically, in spite of the climate of euphoria and the close communication between the government and economic groups, productive investment languished in a context of drastic changes in relative prices and aggregate demand and the absence of an active and complementing role of the state (see articles by Ffrench-Davis, Foxley, and Muñoz in CIEPLAN 1983).

Apart from the poor performance of the productive system, it was obvious that the dynamics imparted to the external sector could not be sustained for long, even if there were no changes in the international environment. Nevertheless the official view was that the process would be self-regulated. It was believed that because there was no fiscal deficit, since the money supply was less than the value of international reserves, and monetary policy was "neutral," a currency crisis could not arise. Several authorities even affirmed that there were some economic arguments in favor of revaluation (De la Cuadra 1981, 1024). It was thought that imports of consumer goods would rapidly reach the saturation level and that the adjustment capacity of the economy had been strengthened by the reforms imposed since 1973. In contrast to these beliefs, when the international financial problems were about to emerge in 1981, the trade deficit amounted to 11 percent of GDP and the current account deficit stood at 21 percent. For a long time, there had been an evident need to reduce the external imbalance and devalue the outlier exchange rate (see Harberger 1985).

The Chilean difficulties in capturing external credits in late 1981 coincided with a domestic situation in which there was a pressing need for fresh resources in order to pay increasing interest and amortizations and cover the huge current account deficit. Regarding the first two items, the composition of external debt showed three strongly negative features. First of all, the prevalence of flexible interest rates amid significant rate increases in the international market together with a climbing outstanding debt led, between 1978 and 1982, to interest payments multi-

plied by four (to 7 percent of GDP). Second, short-term indebtedness rose from a "normal," sustainable amount of trade credit to 20 percent of the total debt in 1982 (or 13 percent of GDP), thus doubling its share. Third, amortization commitments of private debt increased at an accelerated pace and were projected to triple between 1981 and 1985.

Furthermore, the government had dismantled most economic regulation mechanisms, productive capacity had been weakened, and firms were heavily indebted. Thus, the effects of external shocks were multiplied in the domestic economy, with a decline of GDP of 14 percent in 1982, concentrated in the manufacturing and building sectors (with a combined decline of one-fifth).

In short, the external shock found Chile in a highly vulnerable position, and this multiplied its negative effects on the national economy. As documented in chapter 2, if the value added in financial activities and the trading of imported goods (both based on shaky grounds) is deducted, the per capita national product in 1981, before the effects of the shock, stood only at a level similar to 1974 (see table 2.1). Despite emerging modern sectors in the domestic economy, this is an unmistakable sign of stagnation compared to the growth of the region in the 1970s. Consequently, the abrupt deterioration observed in 1982 came at a time when the economy was already functioning badly.

Some Lessons from This Experience

I would like to emphasize four lessons deriving from the financial opening process. They refer to the distortions caused by indiscriminate opening with regard to equity and allocative efficiency, to the alternative ways in which domestic and foreign financial markets can interrelate, to criteria regarding the regulation of volumes of capital movements, and to the channeling of funds to productive investment.

Financial liberalization is not neutral concerning the allocation of resources, especially during the transition from a closed to an open economy, because of the pressures generated on variables such as the stability of aggregate demand, the composition of the money supply, and the level of the exchange rate. During the transition, it is necessary to adjust the structure of aggregate supply and demand and allow a bigger gap between domestic expenditure and output. The key questions in this respect refer to the optimum path to be followed by the adjustment, how to ensure that inflows are channeled toward investment, and whether access to external funds and their cost will be stable in the future. The financial market operates with very short term horizons and naturally does not take the repercussions on productive activity into account.

Consequently, it is essential that the opening process should be regulated in a manner consistent with macroeconomic sustainability (see Ffrench-Davis 2000, chap. 6).

With respect to the impact on the financial sphere itself, access to external credit is not homogeneous, not only because of domestic regulations but because of the nature of international financial markets. In practice, this type of funding has been available mainly to some segments of the national economy such as large import and export enterprises and firms associated with foreign financial institutions. In the case of credit for importers, for example, the differences in cost analyzed earlier meant that the opening process constituted yet another form of removal of protection from those engaged in import substitution. The differential observed among agents regarding access to and the cost of external credit affects not only allocative efficiency but income distribution. In particular, the opening of the capital account in Chile provided substantial profits for those who were able to obtain external credits (see Zahler 1980). There can be no doubt, however, that the effects and their distribution will depend on the forms of regulation and channels of intermediation used. Thus, for example, the effects on income distribution and the level of investment vary depending on whether the intermediation is carried out by enterprises, by commercial banks, or through the Central Bank or a public institution responsible for promoting productive investment (such as CORFO).

From another point of view, the shift from public to private entities as the destination of foreign funds and the concentration observed in the access to those funds had noteworthy consequences in the political sphere. First, they contributed to the spectacular concentration of economic power observed in these years. Second, they generated powerful antidevaluation forces, which, together with the prevailing economic ideology, gave free rein to the pronounced appreciation up to mid-1982. In this connection, the antidevaluation pressures of importers were reinforced by those of the economic groups growing ever more indebted in foreign currency.

A second lesson that emerges from the Chilean experience and others in the Southern Cone is that indiscriminate liberalization does not lead to rapid integration into a single market of domestic and external funding. Indeed, the opposite occurred. An alternative option leading to an integrated market, functional for national development, would imply: (1) channeling external funds, except for trade and compensatory credit, into a common pool with domestic resources; (2) eliminating the exchange rate risk borne by debtors abroad by denominating the external resources transferred to the domestic market in the domestic currency; (3) explicitly pushing the market toward a maturity structure

consistent with productive investment, which calls for long maturity terms; and (4) regulating real interest rates with the objective of avoiding both negative real rates and excessively high rates, since both extremes are prejudicial to the efficiency of investment.

A third lesson is connected with the destabilizing nature of capital flows. In small countries and those where the domestic markets are not fluid and integrated, the instability can be very disturbing in the supply of funding to LDCs for domestic economic activity. A feature of great practical significance is that international financial markets experience sharp fluctuations, which are promptly transmitted to the domestic markets unless there is some form of regulation, principally during the expanding part of the cycle (e.g., in 1977–80). In addition to this overall feature of these markets, the supply of new funds available to each country in particular is subject to abrupt changes in response to variations in the lenders' perception of the countries' creditworthiness or profitability or in connection with the exposition that credit lenders are willing to take in each country. The latter is more closely related to the total amount of the debt than to the net flows in each period. For the debtor countries, however, it is the net transfer (net flow minus interest payments) and the corresponding financing of the current account that is the most relevant variable for their short-term policy and macroeconomic balances.

In the macroeconomic literature, there is a useful discussion on price regulations on capital flows associated with the externalities generated by marginal debtors. The policy recommendation is to apply an ad valorem tax on interest designed to compensate for the *externalities* that rise with the amount of debt (see Harberger 1985). This mechanism makes it possible to tackle the particular problem of a country that faces a stable supply of loans with a positive trend. Likewise, specific taxes can reduce short-term speculative flows by making them more expensive compared to longer term movements (see chap. 10 and Tobin 1978). Nevertheless, the existence of external instability in the supply of funds requires more complex prudential macroeconomic mechanisms, which tend to stabilize the volume of credit recorded in each period. This can be done, for instance, through the introduction of borrowing limits for national banks (a mechanism in widespread use in developed economies), the auction of external debt quotas, ad valorem taxes that fluctuate according to the intensity of the offer of external funds, and compulsory deposits. These will also carry out a fundamentally distributive function, taxing the differentials between domestic and foreign interest rates. When, sometime in the future, an abundant but probably unstable supply of financial credit becomes available again, we should not forget the lessons provided by recent years regarding the huge private and social costs of excessive and disturbing external indebtedness.

A fourth lesson is that, except in the case of flows of a compensatory nature, the regulation of capital flows should consider their channeling toward complementing domestic savings and investment. Insofar as these funds are directed toward the domestic financial market without any clear guidelines as to their destination, they can easily filter through to consumption. The experience of various developing countries suggests that the final use of funds is determined to a significant extent by the way in which capital inflows are regulated and channeled (see Ffrench-Davis and Reisen 1998). Consequently, the effective channeling of external funds toward productive investment represents a necessary condition if external saving is to contribute to capital formation and domestic development.