In the first part of this section, we will examine the global changes in the industrial sector. In the second part, we will try to progress to a disaggregate analysis.

Macroeconomic Effects

We will examine the overall changes in the manufacturing sector on the basis of production, value added, and employment indices. The corresponding data appear in table 3.5.

Manufacturing production was drastically affected by the economic recession of 1975. That year, industrial output dropped by 26 percent, while GDP fell by 17 percent. As could be predicted, this meant that the subsequent recovery was more intensive in the manufacturing sector than in the others, producing high rates of "growth" from 1977 to 1979. Still, this was only a partial recovery. More than eight years after the neoliberal economic policy was first implemented, industrial value added per capita was 18.5 percent below its 1973 value, as can be seen in table 3.5.

This performance resulted in a notorious drop in the share of manufacturing in GDP from 26 percent in 1970 to 20 percent in 1981. Finally,

TABLE 3.4. Distribution by Income Brackets of Consumption of Imported Goods: Main Nontraditional Imports in 1978 (percentages of total consumption)

Item	Highest 20% of Households	Middle 60% of Households	Lowest 20% of Households
Color television sets	100.0	0.0	0.0
Automobiles	98.6	1.4	0.0
Imported whisky	94.0	6.0	0.0
Imported cigarettes	92.0	8.0	0.0
Cassettes	72.8	26.8	0.4
Tennis racquets	71.8	28.2	0.0
Electric blenders, mixers, and food processors	71.8	28.2	0.0
Motorcycles	65.3	34.7	0.0
Watches	59.7	34.7	5.6
Toys	56.1	41.4	2.5
Stereo equipment, record players, and tape recorders	51.3	48.5	0.2
Transistor radios	32.9	57.8	9.3
Black-and-white television sets	18.8	71.2	10.0
Share of each bracket in total consumption	51.0	43.8	5.2

Source: Instituto Nacional de Estadísticas, *III Encuesta de Presupuestos Familiares*, 3 (May 1979).
Note: Only includes those products that could be identified in the survey as "nontraditional" imports. Unless otherwise specified, includes consumption of domestic and imported goods.

this deterioration was also revealed in industrial employment: from 1976 on, it has remained at levels markedly lower than those of 1970. This was caused in part by the diminished importance of labor-intensive industrial activities such as textiles and garments. There was also a drop in employment in areas where output increased; but remember that the value added per unit of gross production decreased, which naturally resulted in a reduction in labor demand.

Consequently, the figures reveal the lack of realism in statements that claimed that the industrial sector had been behaving dynamically. On the contrary, overall production and employment in the manufacturing sector was deficient from 1973 through 1981. After the spectacular drop of 1975, the sector recovered strongly between 1977 and 1979, losing its velocity in 1980 and falling off in 1981. Evidently, the invasion of imported consumer goods in 1980–81 played a crucial role in this. Finally, without even having recovered its 1973 or 1974 levels, the sector suffered another spectacular drop of 21 percent in 1982.

It is revealing to compare the evolution of output in the manufacturing sector to its trend in the 1960s. A short digression to examine the period in between, 1970–73, will be useful. "Normal" production was estimated for the 1970–73 period using the historical growth rate for industrial value added during the 1960s (5.9 percent per year).[12] Output was 5 percent less in 1974 than in 1971. The negative outcome can be explained by two facts: investment was low in 1971–73 and the sector's organization was severely disrupted, with some of the deterioration being irreversible. Nevertheless, assertions by supporters of the military coup that the industry was "destroyed" in 1973 are belied by the resumption of production immediately after the September 1973 coup: there was no generalized destruction, although there definitely was a halt to growth. The loss of accumulated production in 1971–73, estimated with our explicit assumptions, would be between 11 and 14 percent of the value added for 1973. This was one of the costs of the disorder, lost discipline, and macroeconomic disequilibria predominant in these three years.

Let us return to 1974. The methodology that takes the actual level of industrial production as representative of its "normalized" level in 1974 does not overestimate, but rather underestimates, the actual productive capacity: the sharp contraction of aggregate demand had already begun in the second half of 1974 and was negatively affecting the annual

12. Since in 1970 actual output was lower than "normal," partly owing to the effects of that year's presidential election on domestic production and sales, the normal growth rate is also applied to the actual production of 1969 in order to provide a hypothetical estimate for 1970. It appears that this method does not overestimate potential output, as the actual figure for 1971 was 3 percent larger than the "normalized" figure for that year.

level of output.[13] The effect can be partially seen by observing that between October 1973 and September 1974, that is, during the first twelve-month period of the new government, industrial output was 3.4 percent higher than during the 1974 calendar year.

To estimate figures for 1974–80, we applied the 1960s growth rate to the actual value of production in 1974. Finally, in order to take the international recessionary environment into account, the growth rate of manufacturing in less developed countries (LDCs) (0.9 percent) was used for 1981–82.

From mid-1974 until 1981, the sector operated below its productive capacity and significantly below its historical trend: The gaps between actual and trend production were caused by a series of events. Output losses in 1975 were due primarily to the contraction of aggregate demand.[14] During the 1977–81 period, however, production responded principally to the changes in demand patterns induced by the across the board import liberalization with exchange rate appreciation, the concentration of income, and the drop in domestic investment as a result of a recessive and unstable macroeconomic environment and high outlier interest rates (Mizala 1992; Agosin 1998). Negative pulls for desubstitution were significantly stronger than the positive pulls for specialization and export dynamism. In 1975–81, effective production was on average about one-quarter below the "normal" level.[15] This forgone production, between 1975 and 1981, measured by the method just described, was remarkably large.[16] At its worst, 1982 saw an additional drop of 21 percent.

13. There was a large drop in real wages; the surveys conducted in January, April, and July by INE show that the average decrease was 16 percent compared to the same months in 1973. The decrease strongly influenced sectors that produced goods intensively demanded by middle- and low-income consumers. An outstanding example was that of the textile and clothing sectors.

14. The contraction of aggregate demand was associated in part with a significant worsening of the terms of trade beginning in the second half of 1974 (see chap. 5). The negative terms of trade shock was 6 percent of GDP in 1975 compared to 1972. It must not be forgotten that this worsening followed a strong 5 percent improvement in 1973–74. In fact, during the first year in which the new economic policy was applied, the copper price was extremely high. Nevertheless, the transitory high revenues were not saved.

15. Estimates based on the output index of the Manufacturing Association (SOFOFA), disaggregated by group (three digits of the ISIC rev. 2) show that productive capacity would be 37 percent greater than actual output in August 1978 using the "maximum historical" method with moving bimesters. It should be noted that the index of actual output for the period October 1973 to September 1974 was 10 percent higher than in 1978.

16. Adoption of a free trade policy should reduce, presumably for several years, the pace of expansion of the manufacturing sector. This reduction should be compensated for by growth in other economic activities. This did not occur, and per capita GDP growth in 1974–81 was one half that recorded in the 1960s.

Table 3.5 shows the contrast between the evolution of the manufacturing sector in Chile compared to the sets of developed and developing countries. Moreover, it shows an absolute decrease in sectoral employment (col. 5).

It is undeniable that import liberalization did not "destroy" national industry, just as it is undeniable that it was not destroyed in 1973. The liberalization did, however, contribute strongly to the overall poor performance of the industrial sector and of the entire Chilean economy between 1973 and 1981. The productive capacity of the sector was seriously damaged, and many firms were needlessly destroyed; survivors, naturally, tended to be stronger. Was the period too short to judge and a necessary investment in the future? Altogether, despite the evident need to reduce the average level and dispersion of effective import protection in 1973, the net balance appears to be overwhelmingly negative. The information presented in the next subsection provides additional support for this hypothesis.

Effects on the Structure of Manufactured Production

The structure of industrial output changed significantly during the 1970s. To identify the impact of import liberalization more precisely, we will examine the behavior of the different production branches.

The close relationship between the domestic industrial sector and foreign trade can be seen first in the global evolution of exports and

TABLE 3.5. Manufacturing Output: Chile and the World Economy, 1974–82 (1973 = 100)

	Total Value-Added				
Year	Industrialized Countries (1)	Developing Countries (2)	Chile (3)	Value Added per Capita of Chile (4)	Industrial Employment (5)
1974	100.1	106.3	99.1	97.5	97.5
1975	91.8	108.1	73.0	70.6	88.8
1976	100.1	116.7	74.9	71.4	86.1
1977	103.7	125.3	79.9	75.1	87.1
1978	107.9	133.6	85.0	78.8	88.8
1979	113.3	139.7	91.0	83.1	88.2
1980	112.3	146.8	93.3	83.9	88.8
1981	112.8	147.0	92.1	81.5	87.3
1982	108.5	149.6	72.8	63.4	71.0

Sources: For Chile, calculations based on Central Bank data; Jadresić 1986; and Marcel and Meller 1986. For developing and industrialized countries, United Nations' *Monthly Bulletin of Statistics*, May 1983.

imports of manufactured goods. Exports grew significantly from 1974 until they totaled 10 percent of the gross value of the sector's output in 1981, while imports rose to 35 percent. The respective figures for 1969–70 were 3 and 17 percent. It is well known that in the real world the behavior of exports is not univocally tied in a unique way to import policy; in fact, export promotion can be fully consistent with a policy of selective import substitution, as the East Asian countries have demonstrated beyond any doubt.[17] Because of this, the effects of import and export policies on domestic production can be analyzed separately.

Information broken down into twenty-nine groups (International Standard Industrial Classification [ISIC], rev. 2, three digits) compares the 1969–70 average to 1978, that is, a year before the freezing of the exchange rate in 1979. The composition of consumption, output, and trade changed substantially during the decade (see Vergara 1980). First, trade was dynamic in the sense that exports increased in sixteen groups while imports rose in eighteen; both imports and exports grew in ten of these groups, implying that, at three-digit information, there was intra-industrial specialization. There were drops in output and consumption in seventeen groups each, while in fourteen of these branches both output and consumption decreased. This suggests that domestic demand decisively influenced output in this period.

At the level of disaggregation at which we are working, many of the groups include goods whose production processes and marketing channels are quite diverse. Notwithstanding this heterogeneity, the data allow us to advance some conclusions (Foxley 1983, chap. 3; Vergara 1980).

First, only two groups show output growth that is associated with exports (wood and paper); in two other groups, exports play a significant role (food and industrial chemicals), even though their role is not as dominant as in the preceding groups.[18] When the data are broken down still further, it can be shown that a large share of export expansion was concentrated in only five groups: pulp and paper, wood, molybdenum oxide, fish meal, and semimanufactured copper. After a sizable diversification in the period 1974–76, the share of these products fell in 1976 to 58 percent of industrial exports, but in 1978 it rose to 64 percent and in 1981 to 66 percent.

For imports, diversification was greater, as was shown earlier. This diversification is also reflected in the large number of groups for which imports became significant. Three groups were strongly affected by

17. An account of different country experiences appears in Bhagwati 1978, chap. 8; see also Sachs 1987.

18. The main exported food products are fish meal, fish oil, and frozen seafood. The most important exported chemical substance is molybdenum oxide.

imports: electrical machinery, transport equipment, and professional equipment. In the first two groups, the rise in domestic demand ameliorated the negative impact of imports on output, while in the third group a receding domestic demand exacerbated the negative impact. In six groups, opening to trade together with a significant reduction in domestic demand led to a decline in output (textiles, clothing, leather, oil derivatives, pottery and china, and nonelectrical machinery). In four other groups (footwear, printing and publishing, nonmetallic minerals, and iron and steel), the determinant variable in declining output prior to 1978 seems to have been the decrease in domestic demand. One group (other chemical products) showed remarkable increases in consumption and production with low levels of trade. Finally, miscellaneous "various industries," predictably, showed significant growth in production, consumption, imports and exports. Data on the other groups are more difficult to interpret, as the results depend largely on which years are compared and the methodology used to estimate the change of each variable.

As shown, the behavior of domestic demand had a determinant effect on the level of output. To a certain degree, this effect makes it difficult to evaluate the impact of import liberalization, while depressed domestic demand contributed to increased exports of items in excess supply in the local market. Naturally, to the extent that domestic demand recovered subsequently, the relative weight of different variables changed; thus, after 1978 the effects of import liberalization gained importance vis-à-vis aggregate demand as an explanatory factor of the poor performance of manufacturing. It was clear that by 1978 the effects of import liberalization had not yet been fully felt. At that stage, the trends shown by the data indicated that export growth was losing speed, while imports, particularly of consumer goods, were rising fast. This trend was at work in 1978 and 1979, before the nominal exchange rate was fixed. Subsequently, the sharp real appreciation of the peso that followed reinforced the lagged effects of import liberalization. Consequently, the trade reform had detrimental effects on manufactured output, which went beyond the implementation period. The negative impact of nontraditional imports increased compared to changes in domestic demand and the positive effects of exports. Aggregate demand became more intensive in imported components, the quantum of non-resource-based exports ceased growing in 1980, and imports (especially of consumer durables, as shown in table 3.3) rose in 1980–81 notably faster than in the previous two years.

The sector adjusted to foreign competition in three ways. Some went into bankruptcy or closed down plants. In other cases, firms began

to specialize within the industry in two ways: merging with other firms and suspending lines of production within a firm. Finally, some firms also began to import goods that they marketed in place of those they had previously produced.

Marketing imported products enabled firms affected by import liberalization to capitalize on the relative advantage they had because of their sales outlets and knowledge of demand. This adjustment mechanism had several interesting effects. First, in this case production and importing were not independent functions but were managed by the same decision unit; thus, for a while foreign competition would be operating in a more limited fashion than is assumed by orthodox theory. Second, a larger percentage of businesses leaned toward commercial and financial activities rather than producing goods. The extent of this bias is shown by changes in the composition of GDP recorded in the national accounts (see table 2.1). The resulting growing current account deficit, which was created by the asymmetrical response of producers in sectors hurt by new trade policies and in sectors favored by them, was financed by an increase in foreign debt. Third, although some producers defended themselves by switching to marketing imports, this change negatively influenced employment; in fact, as is obvious, productive employment decreased per unit of sales and even per unit of output.[19]

Elements for an Evaluation

In these concluding remarks, we will look first, briefly, at the global effects of trade policy on the balance of payments. Next some points will be raised about the effects that those policies could have on the efficiency, dynamism, and competitiveness of the Chilean economy. The macroeconomic implications are covered in detail in chapters 5 and 6.

Balance of Payments and the Current Account

Practically all components of foreign trade expanded during the period under study, especially the categories of nontraditional imports and exports. The export quantum registered a most dynamic behavior. After an abrupt jump and diversification in 1974–76, exports continued to

19. This is a *microeconomic* increase in productivity. However, it has negative social and economic consequences (1) when it implies a greater reduction in employment than in production, instead of a greater increase in production than in employment; and (2) when it takes place within a framework of widespread unemployment and worsened income distribution, as was the case.

increase until 1980. The key factors for this development were an initially depreciated exchange rate, better availability of imported inputs, a recessive domestic economy, and the development of an "export mentality." Undoubtedly, exports became the dynamic productive sector of the Chilean economy. They even provided some dynamism to the highly depressed agricultural sector. But the net effect was limited since, after the "disciplinary adjustment" of the agricultural sector in 1974, growth reached merely 2 percent between 1974 and 1981. The dynamic agricultural exports, consisting mainly of fruit and forestry products, shared the sector with traditional agriculture, which decreased spectacularly (especially in grains, sugar beets, and oil seeds).

The expansion of manufactured and total imports was much larger than that of exports, causing a growing trade deficit that increased markedly between 1976 and 1981 (see table 3.6). Because of "abnormal" levels of significant trade components, the content of trade flows must be examined more closely. Two components that deviate most from "normal" values were imports of equipment and machinery, whose share of total imports lost ten percentage points, and the copper price,[20] which recorded a level one-fifth lower than the normal price.[21] Nevertheless, foreign exchange proceeds from copper exports increased as a result of two factors. On the one hand, investments made between 1967 and 1970 made it possible for copper production to increase by 50 percent immediately after "discipline" was imposed. On the other hand, the 1971 nationalization of the large mines allowed the government to capture a greater share of the economic rent derived from the rich Chilean copper deposits. These two positive effects were "permanent," while the low price was assumed to be "transitory."

The current account deficit in 1981, which was 1.2 times all exports, was covered with extraordinarily large capital inflows. These inflows, which were primarily caught by the private sector, not only financed the current account deficit but allowed the accumulation of international reserves (table 3.6). In the meantime, external debt grew significantly, leading to the debt crisis that exploded in 1982 (see chaps. 5 and 6).

In the face of the evolution of the sector, the authorities held on to two valid assertions, though with a faulty interpretation of their significance. It was stated that if the exchange rate were to be liberalized by the Central Bank the rate would strongly appreciate. This evidently would

20. A third component that shows a notable change is the price of molybdenum, a copper byproduct whose real price increased sixfold during the 1970s. The higher value of this export was equivalent to 46 percent of the increased expenditure on oil imports in the same period.

21. See a methodological discussion of the "normal" copper price in Ffrench-Davis 1973, chap. 4; and Ffrench-Davis and Tironi 1974.

TABLE 3.6. Balance of Payments, 1973–82 (U.S.$ millions 1977)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
I. Current account	−442	−256	−535	160	−551	−960	−925	−1,361	−3,213	−1,600
1. Trade balance	32	434	76	693	34	−376	−276	−527	−1,817	43
Exports (f.o.b)	1,968	2,612	1,734	2,282	2,185	2,171	2,984	3,250	2,605	2,573
Copper	1,577	1,971	947	1,330	1,161	1,076	1,469	1,467	1,180	1,170
Non-copper	391	641	787	952	1,024	1,096	1,515	1,782	1,425	1,403
Imports (f.o.b)	1,936	2,179	1,657	1,588	2,151	2,547	3,260	3,777	4,422	2,529
2. Nonfinancial services	−328	−478	−313	−212	−295	−214	−186	−269	−476	−385
3. Financial services	−165	−225	−310	−352	−365	−432	525	−642	−994	−1,334
4. Unrequited transfers	20	13	11	30	75	62	62	78	74	76
II. Net capital inflows[a]	507	94	305	143	669	1,589	1,740	2,220	3,259	791
III. Balance of payments	65	−163	−230	303	118	628	815	859	45	−809

Source: Calculations based on data from Central Bank of Chile, *Balanza de Pagos.*
Note: The figures were deflated by an index of external prices (see Ffrench-Davis 1984).
[a]Includes errors and omissions.

have happened, confirming that foreign exchange flexibility under a capital surge tends to exacerbate imbalances (see chap. 10 and Harberger 1985). A lesser evil had been the fixing of the exchange rate at $39, but the most efficient policy would have been to moderate capital inflows and give way to a real devaluation in order to enhance a positive restructuring of production. The other weak point was the assumption that the excess of imports would slow down spontaneously. Slowing did tend to occur but with a lag. On the other hand, as the exchange rate continued to appreciate until 1982 it stimulated a fast-rising expenditure on imports, which crowded out domestic output and savings. These effects left indelible footprints on the Chilean economy over a prolonged time span. As underlined in other chapters, the deficit on the current account of 21 percent of GDP in 1981 revealed an impressive and absolutely nonsustainable disequilibria.

Efficiency, Dynamism and Competition

The theoretical foundation of reforms asserted that the market, free of government interference, would allocate resources according to a sort of unmistakably identifiable "comparative advantage." Actually, market comparative advantages depend on the level and stability of the exchange rate, the degree of activity in domestic and world markets, international price fluctuations, and many other factors (such as the availability of long-term funding, infrastructure, and trained labor). Market and social comparative advantages tend to diverge because of the disequilibria and distortions characteristic of developing economies.[22] The differences between the two can be striking in a country facing a radical change in economic policy, with high unemployment, and with a public sector that abruptly abandons its guiding role in stimulating productive activity and maintaining the consistency of reforms. The resulting disequilibria and distortions can be significantly more costly than the inefficiencies of an active public sector, as the recent Chilean experience suggests.

The Macroeconomic Framework and Efficiency

The efficiency of any economic policy depends on the context in which it is applied. The generally recessive domestic economic situation of this period was relatively conducive to export promotion, but on the other hand it constituted one factor that increased the transition costs of import liberalization.

22. See Ffrench-Davis 2000, chaps. 1 and 2, on the implications of *incomplete* markets and multiple equilibria for investment allocation.

The expansion and diversification of exports provided an outlet for excess production that otherwise would not have had a market. In fact, the sharp contraction of domestic demand (in particular, during the period from mid-1974 to 1976) left a significant share of industry with underutilized installed capacity. The depreciated exchange rate, access to the Andean market, and the efforts of PROCHILE (the government export promotion agency) supplied a market abroad for many firms with excess capacity. Later, productive capacities were expanded, and nontraditional and traditional natural resources were exploited, enhanced by investment during the 1960s in the forestry, fruit, and fishing industries, the still depreciated exchange rate, and the accelerated liberalization of imported inputs. Dynamism was reversed in the early 1980s, when growing exchange rate appreciation induced a generalized drop of exports. In general, the expansion of nontraditional exports promoted efficiency in the allocation of resources, principally through an increase in the rate of utilization of capital and labor and the use of natural comparative advantages.

For imports, the situation was the opposite. In fact, if a trade liberalization process goes too far, is too rapid, or is undertaken at the wrong juncture, it will provoke premature and unnecessary plant shutdowns, the underutilization of capital and labor, and a decrease in investment. Therefore, to evaluate the effects on the Chilean economy we must distinguish between the different stages of the liberalization process and take into account the macroeconomic context in which it was implemented.

In phase 1, clearly redundant levels of protection were eliminated. But the first tariff reductions served to limit national producers' capacity to set monopolistic prices. In phases 2 and 3, the additional tariff reductions, which lowered the maximum nominal protection from 120 to 10 percent, had a much greater effect. The most painful part of import liberalization was carried out rapidly, and its negative effects were reinforced by exchange rate revaluations. This policy was implemented during a time in which (1) wages were deteriorating, (2) domestic demand was very depressed, (3) investment was low, and (4) open unemployment was remarkably high. These four factors must be closely examined to evaluate the effects of lifting tariffs.

First, wage repression acted as an artificial protection mechanism that, although it was obviously regressive, compensated for reduced tariffs on imports. In fact, in 1976 the ratio of wages to the exchange rate was less than half that of 1970, and in 1979 it had recovered to only 64 percent (see table 4.3).

Second, given the depth of the recession, recovery rates for demand and production were bound to be high. Since tariff liberalization took place during recovery, a superficial examination of the data has led many

to the wrong conclusion that the liberalization process encouraged the increase in output. As was demonstrated earlier, however, exactly the opposite occurred. The implementation of free trade contributed to maintaining the recovery of domestic production at a level lower than that of the recovery of aggregate demand; output and aggregate demand became increasingly import intensive. The recession itself negatively affected the efficiency of the process. The underutilization of productive capacity and the extremely high interest rates (averaging 38 percent between 1975 and 1982; see chap. 5) tended to raise the average cost of production to domestic producers, making it more difficult for them to face foreign competition.

Third, the widespread underutilization of installed capacity discouraged domestic investment (see Servén and Solimano 1993 and Ffrench-Davis and Reisen 1998). The low level of investment was also associated with the high real interest rates, which distorted relative prices and the "comparative advantages" observed in the market. This depressed investment ratio was clearly insufficient to facilitate a symmetrical or positive adjustment between the sectors that contracted and those that expanded in response to the curtailment of effective protection of importables. A high unemployment rate and abnormally low investment implied a low probability of achieving an effective reallocation of resources. These factors also suggest that the opportunity cost of resources freed by the sectors negatively affected by reform was lower than their market price.

Consequently, a drastic dismantling of tariff protection, instead of a gradual and more comprehensive reform, including all ingredients for productive development (see Ffrench-Davis 2000, chaps. 1 and 2), should not have been undertaken in a macroeconomic environment such as the one predominant in the Chilean economy. Some proponents of this policy argued that if the policy had not been implemented so rapidly it would have been impossible to carry it out at all. The answer to this argument is threefold. First, it would have been better not to undertake tariff reductions as drastic as those performed since 1975 (covering phases 2 and 3) rather than attempting to impose them in the midst of a depression. It is evident that "corner" solutions were not the optimal choice. Second, foreign exchange appreciation should not have been allowed during tariff liberalization. This misstep also flagrantly contradicted the government's repeated assertions. Third, unemployment, low investment, and depressed demand generated a real environment that differed substantially from the theoretical framework on which the arguments in favor of free trade were based. As a consequence, the corresponding desubstitution of imports, predictably, was higher than naturally necessary and therefore was inefficient in many cases.

Neither excessive protection nor extreme liberalization was the appropriate solution. It should be kept in mind that it was also claimed that with free trade and a privatized economy Chile would be better equipped to face an external crisis. Nonetheless, in 1982 Chile suffered the worst crisis in all of Latin America. Economic dogmatism had left the Chilean economy more and not less vulnerable.

Dynamism and Efficiency

The conclusions of the preceding paragraph are reinforced when dynamic aspects are incorporated into the analysis. The discussion will be confined to three interrelated points concerning the degree of symmetry of the adjustments, the investment rate, and the "dynamic comparative advantages." The speed of adjustment in the sectors that were hurt and those that were favored by the change in trade policy was asymmetrical. Presumably, the message to reallocate resources was clearer for sectors that were hurt by liberalization. This phenomenon was reinforced by the widespread depression of aggregate demand and by high real interest rates, which made it difficult for affected firms to continue to stay in business, whether or not they were efficient under "normal" or socially optimum conditions. All of these factors made it hard for potential investors to identify those productive areas with a comparative advantage.

A remarkably low level of gross domestic investment contributed to the asymmetrical character of the adjustment. It is obvious that reallocation is easier in an economy with a high rate of capacity utilization and sustainable growth. The stagnation exhibited by the national economy during the period made it necessary for many of the hurt sectors to reduce absolute output in order for the relative adjustment to take place. Limited sectoral and regional mobility of resources and the reduced rate of investment were obstacles to the effective reallocation of freed resources: it was predominantly the expansion achieved in the export sector that compensated, partially, for the resulting lack of dynamism in the economy. As I have stated elsewhere (Ffrench-Davis 1979b), a growing proportion of the scarce domestic investment was channeled to the export sector. This investment was mainly concentrated in activities intensive in natural resources. It was less significant in products intensive in value added to a natural resource base and in "acquirable" comparative advantage. In fact, available background information supports the hypothesis that it was easier to identify comparative advantages that possessed a defined base of natural resources or were already acquired. The many changes taking place in the Chilean economy, depressed domestic demand, unstable and outlier interest and exchange rates, and strategic incomplete markets made it difficult to identify the whereabouts of potential and acquirable comparative

advantages. The diffuseness of comparative advantages was presumably one factor explaining the low rate of investment.

Competition and Efficiency

One result the government's economists expected from import liberalization was increased "competitiveness" in the domestic market. This would be achieved by means of the effective or virtual presence of foreign importables, which would put an upper limit on the domestic price. It is undeniable that this did happen to a significant degree. What also happened, however, was that there were important deviations from the types of relationships that were supposed to characterize a "competitive" economy.

First, a significant proportion of nontraditional imports belonged to categories in which product differentiation played a decisive role. Consequently, competition among suppliers of these products was based on product differentiation to a larger degree than on pricing. The segmentation of the capital market (one example is the persistent gap between domestic and foreign interest rates) also introduced an element of competition based on the terms of suppliers' credit. These factors provoked effects quite distinct from those that "competition" should have generated according to orthodox theory. Second, marketing channels were not completely open to every competitor; for instance, in a number of cases the producer of import substitutes became an importer of "competitive" goods. Third, the abrupt-cum-appreciation opening to trade promoted greater concentration in the ownership of domestic productive activities. This phenomenon was reinforced by the depression in aggregate demand and by the manner in which the capital market operated. These factors gave a significant advantage to economic groups that were linked to financial activities and had access to foreign credit.

Finally, two types of problems arose in cases in which the domestic price was in line with the external price. One problem was that foreign suppliers dumped into Chile leftovers from the previous season abroad; this happened, for instance, with powdered milk and textiles. The other problem was linked to the sizable fluctuations in international prices, as occurred, for example, in the cases of wheat and sugar. The elimination of redundant protection and the absence of antidumping mechanisms and other stabilizing nontariff barriers expedited the transmission of instability from international markets to the domestic economy. The sensitivity of domestic output to occasional dumping and the fluctuations of international prices induced a reallocation of resources that tended to be inefficient for the national economy. Subsequently, in 1984 there was a substantial policy reversal that reintroduced price bands for agriculture and an antidumping mechanism (see chap. 6).

A crucial argument for free trade policy refers to the benefits that competition allegedly brings to consumers, with the availability of a wider variety of goods, lower prices, and greater efficiency. Within the framework of orthodox consumer theory, the opening to foreign trade is seen as positive because it allows demanders to equalize their marginal utility with the marginal cost of importing (which is assumed to be the same as the international price for a "small country"). The diversification of consumption is seen as welfare increasing, as it would increase the freedom of choice of the consumer.

Ceteris paribus this is perfectly true. However, it is appropriate to add two comments, one concerning the indirect effects on consumers in their role as producers and the other concerning the impact on overall efficiency and the level of economic activity.

First, the "desubstitution" of imports served, during the adjustment process, to directly generate unemployment and delay the recovery of aggregate economic activity. This latter factor indirectly discouraged investment, which in turn had a negative impact on the creation of new job opportunities. Therefore, low-income consumers (who suffered the highest levels of unemployment), in their roles as producers (workers), bore much higher costs than the contingent benefits derived from the diversification of the basket now available in the market to those with purchasing power.

Second, the diversification of consumption enabled a small, high-income sector to rapidly assume the consumption patterns of the well off in the richest economies. The notorious increase in inequality that took place during these years manifested itself more in a noticeable differentiation of lifestyles than in higher savings rates and productive investment. The collapse in national savings supports this hypothesis (it dropped to 8.2 percent of GDP in 1981 and to 2.1 percent in 1982, in current prices of each year). Finally, from the point of view of economic activity, freeing imports in a rather sudden move contributed, as said, to a fragmentation of demand for those types of goods for which product differentiation is significant. Naturally, abrupt liberalization made it difficult for domestic producers to take advantage of economies of scale and contributed to the rise of average production costs.

The Chilean experience definitely taught heterodox lessons. The national economy in 1973 had excessive margins of protection for numerous import categories; therefore, a significant trade liberalization was required. However, trade liberalization was excessive and ill-timed; it was not coordinated with exchange rate policy and disregarded the need to *complete* factor markets. A gradual procedure should have been adopted and a deliberate search for a dynamic complementation between import substitution and export promotion should have been undertaken in the

East Asian style (see Sachs 1987; and Ffrench-Davis 2000, chap. 3). Positive export expansion would have been essentially consistent with a more pragmatic tariff policy than the one adopted. It could have involved a greater conversion of import substitutes into exportables and a more diversified export basket that would have been more intensive in value added.

What was lacking, as in other fields of economic policy, was the adaptation of theoretical concepts to the specific nature of the Chilean economy. On the other hand, it appears that the overall economy and the industrial sector had some capacity to adjust to changes in relative prices, even under the unfavorable conditions that the domestic market suffered. At the same time, it is clear that part of the capacity to respond, particularly in the export sector, was based on the industrial development previously achieved through import substitution and the development of "nontraditional" natural resources (including forestry, fresh fruit, and fisheries). Finally, the conventional hypothesis that an unrestricted opening to trade would promote the expansion of labor-intensive tradables and result in a contraction of capital-intensive activities was at least partially contradicted by the characteristics of changes that occurred in the productive structure. This performance was directly linked to the framework in which trade was liberalized, to the excessive intensity and lack of selectivity of the reform, to the passive role that was imposed on the public sector, and to the absence of a comprehensive national development strategy.