Economic Reforms in Chile: an Overview.

Vittorio Corbo L.
ECONOMIC REFORMS IN CHILE:
AN OVERVIEW

Vittorio Corbo*

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1. INTRODUCTION

The Chilean economy is today the fastest growing economy in Latin America. What makes this performance the more remarkable is that in the early 1970s and in the early 1980s Chile experienced two mayor economic crisis. However, in between it initiated a profound structural transformation. The first crisis had an economic and a political dimension and followed the implementation of a populist program by the Allende government. The second crisis came after the military government, that took power in late 1973, had implemented deep structural reforms aimed at restoring a market economy and to integrate Chile to the world economy. By the time of the second crisis, reforms had already been implemented in many areas. One of the most restrictive trade regime among all middle-income countries had been transformed into one of the less restrictive with a uniform tariff of 10% and the elimination of all non-tariff barriers. Profound reforms were introduced also in the labor and financial markets as well as a host of reforms in institutions and regulations in support of a modern market economy.

The crisis of 1982-1983 was due to a combination of severe external shocks- a sharp increase in foreign interest rates, a sudden reduction in foreign financing, and a drop in terms of trade- and macroeconomic policy weaknesses. The latter emerged resulted from the fixing of the exchange rate with full backward wage indexation and weak supervision and regulation of commercial banks. To face the crisis Chile had to implement a sharp adjustment in financial and macroeconomic policies. After dealing with the crisis, Chile entered into a process of sustained growth.

A host of structural reforms were introduced in Chile in the period 1973-1992. The main purpose of these reforms has been to help to achieve macroeconomic stability and to increase the efficiency of the economy. The general direction of these reforms have been to increase the role of markets, to open the economy to foreign trade, and to give an increasing participation to the private sector in the economy. These reforms are discussed below.
The purpose of this paper is to review the overall Chilean adjustment program of the last 20 years with a view to drawing some lessons for countries that are initiating an adjustment program.

The rest of the paper is divided into four sections. Section 2 provides the background reviewing the overall economic conditions at the time that the transformation were initiated in late 1973. Section 3 presents the main reforms that were implemented in the 1974-1982 period. Section 4 analyses the main economic development up to early 1982. Section 5 presents the main developments in the post 1981 period. Finally section 6 presents the conclusions.

2. ECONOMIC SITUATION AT THE END OF 1973

As a consequence of the trade policies of the preceding 40 years, by the end of 1973 the Chilean economy was practically isolated from the world economy. As a result, it could not benefit from the efficiency gains that are obtained from the discipline of foreign competition. The average nominal import tariff was 105% with tariffs ranging from nil for some inputs and "essential" consumer goods to 750% for goods considered as "luxuries". There were also many non-tariffs barriers, including the requirement for a 90-day non-interest bearing deposit amounting to 10 times the import value, import and export quotas, prior approvals for all types of imports, and so on. Not surprising, the few imports that resulted were concentrated on intermediate goods, followed by capital goods, and a few "essential" consumer goods. Exports were mostly concentrated on copper, making export earnings highly dependent on the evolution of copper prices. During the Allende administration (November 1970-September 1973), international trade was taken over almost entirely by the government. By 1973, there were six widely different exchange rates, with the ratio between the highest and the lowest being 52 to 1. As a direct result of the protection system export

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activities were heavily taxed. Private capital inflows were almost nonexistent as the country risk was too high.

During the socialist administration of Allende, the government also directly or indirectly took control of a substantial part of production activities. The agrarian reform, that was initiated in the Alessandri administration (November 1958-November 1964), and intensified during the Frei administration (November 1964-November 1970) was drastically accelerated during the Allende government ending with practically all large estates. The banking system was nationalized. As the government could not pass the required expropriation law to take over the property of the banks from the previous shareholders, it offered attractive prices to buy the shares in the open market. This process took place mostly in 1971, and by 1972 almost all the banking system was in public hands. In other sectors of the economy, private business were taken over by the workers councils or the shares bought by the government to extend what was then called "the area of social property". Multinationals were expropriated and in some cases, as with copper enterprises, without payment of compensation. This bringing the government into many conflicts with foreign governments, especially with the US.

On the macroeconomic front, the Allende government started with an aggressive expansion of aggregate domestic demand. In 1971, current government spending grew by 12.4 per cent and the fiscal deficit reached 10.7 per cent of GDP. Pulled by the aggressive demand expansion, GDP grew 9 per cent in real terms in 1971(Table 1). In this first year, as the result of a large growth in high power money to finance a rising public sector deficit, the money supply grew by 66 per cent in real terms.

In 1971, measured inflation was relatively low but price controls and commodity and factor market rationing became widespread. During the following two years, the government continued with its expansionary policies and price controls were intensified. Consequently, the fiscal deficit rose from 2.7 per cent of GDP in 1970 to almost 25 per cent of GDP in 1973. As this deficit was
financed mostly by borrowing from the central bank and imports were controlled, pressures on domestic prices rose, which the government tried to contain by means of tighter price controls. Not surprising, active black markets developed where consumer goods were available at prices that were many times the official price. At the same time, enterprises faced a chronic shortages of basic inputs at the official prices. As a result black market also emerged for inputs. By August 1973 the government had run out of its foreign exchange reserves (Table 1). Therefore the drawing down of foreign reserves was not anymore an option for the financing of the current account deficit. As the populist policies pursued at the time made it very difficult to obtain foreign financing the stage was set for a major balance of payments crisis.

In short, the government that took power in September 1973 inherited an economy closed to international trade, dominated by the public sector, with severe macroeconomic imbalances in the form of accelerating inflation and a deteriorating balance of payments situation. Relative prices were severely distorted and the production and distribution of goods was mainly determined by bureaucratic rules. The labor market was dominated by a few unions which were fighting for political rather than workers objectives The country had practically no foreign exchange reserves and the budget had a deficit of 25% of GDP (Table 1).
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<th>Total Domestic Expenditure Real Growth</th>
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<th>Public Sector Deficit % of GDP</th>
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Column Sources:
(1), (2), (3), (5), (6), (7) and (8), Central Bank of Chile, *Indicadores Económicos y Sociales*.


* Computed with national account information at constant prices.
**Up indicates a real depreciation of the domestic currency.
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3. THE MAIN REFORMS

One of the main objectives of the military government that took power in September 1973, was to eliminate the severe and pressing macroeconomic disequilibria that it inherited and to reestablish a market economy. The reduction of inflation required a deep structural reform of the public sector to reduce the size of the public sector deficit. To restore the role of the market as the main instrument to guide economic decisions and the private sector as the most important agent of economic development it was necessary a profound revision of the public sector responsibilities, a drastic reduction in the size of this sector and in its participation in economic activities, and a deregulation of commodity, financial, and labor markets.

The initial 18 months of the new administration were spent in liberalizing prices and in initiating a deep fiscal reform. By 1975, there emerged within the government, a team of economists with very strong liberal ideas, which was dedicated to transforming Chile into a competitive, market oriented, open economy.

Towards this end, reforms were initiated in eight main areas: (1) a stabilization program to reduce an increasing inflation that was reaching a rate of 1000% per year; (2) public sector reforms to reach macroeconomic stability and to improve the efficiency of the public sector and of the economy as a whole; (3) trade reforms to provide appropriate incentives to export oriented and import competing activities; (4) a social security reform to change from a bankrupt pay-as-you go pension system into one based on individual capitalization; (5) financial sector reform to improve the efficiency of financial intermediation; (6) labor market reform to facilitate the industrial restructuring and the drastic reallocation of labor that had to take place from the highly protected import competing sectors towards the export oriented activities (7) a comprehensive privatization

program to get the state out of the activities that the private sector could undertake and to expand activities where the public sector has a central role to play as it is the provision of basic health, education, and nutrition for the poorest groups in the population; and (8) social sectors reforms to improve the incentive system in the production and provision of social services and to target the provision of social programs to the poorest groups in the population.

These reforms were preceded by a liberalization of markets in an effort to get the price system back in operation. When prices were liberalized, the repressed inflation became an open inflation close to 1,000 per cent a year. The explosion in open inflation prompted the initiation of a stabilization program in late 1973 which relied on the restructuring of the public sector and the elimination of the public sector deficit.

3.1 Stabilization Program

Chile has had a long history of inflation. In the 1960s, inflation reached a compounded annual rate of 21.1%. In the early 1970s, under the populist policies of the Allende government, inflation accelerated, reaching an annual rate close to 1,000% in August of 1973, the month before the fall of Allende. The monetization of a public sector deficit close to 30% of GDP was behind the acceleration of inflation of this period.

In the initial years of the military government inflation was attacked with a drastic reduction in the public sector deficit accompanied by a severe monetary discipline, however, in a heavily indexed economy (where most key prices were indexed to the Consumer Price Index) there was a very strong inertia in the evolution of inflation. Not surprising, inflation stayed at the three digit annual level well into early 1977. This was in spite of a large reduction in the public sector deficit that reached close to 21 percentage points of GDP between 1973 and 1974. Disappointed with the inflation figures, the government decided to reexamine the whole mechanism behind the slow pace of inflation reduction. In particular, one group of economist within the government
started to develop a view that as the Chilean economy was increasingly integrated to trade in goods and services. For this group, the tradable component of domestic inflation was the sum of international inflation and the rate of devaluation.³ As this view became more widespread in government circles, an important shift in stabilization policy started to take place around 1976 and especially in early 1978. At this time, the exchange rate started to be used to shape inflation expectations and through import competition to influence directly the evolution of tradable good (import competing and exportable goods) prices. Thus, in February 1978 the government instituted a system of preannounced rates of devaluation of the peso that culminated on June 1979 in a fixed exchange rate of 39 pesos per dollar, a rate that was maintained until June 1982.

Every economic system requires an anchor for the price level. The two typical candidates are the money supply and the exchange rate. However, the use of any of these two anchors has to be consistent with other characteristics of the economy. A system of full wage indexation, instituted by law and in existence in the late 1970s, that linked nominal wage adjustments to the increase of the CPI in the previous year, was, in the context of declining inflation with a fixed exchange rate, bound to result in a very slow pace of inflation reduction and therefore an appreciation of the real exchange rate. This was indeed the case, and a balance of payments crisis was postponed thanks to the easy access to foreign borrowing that the Chilean private sector had at the time. When in 1982 external financing was drastically reduced, the contractionary monetary policy that was followed raised real interest rates and reduced expenditures. As the fixed exchange rate and the indexed wage system impeded a real devaluation, a large recession resulted. The sharp

³An extreme version of this view was the one that given the equilibrium real exchange rate, domestic inflation-the denominator of the real exchange rate-was equal to the inflation of tradables. For this group the evolution of the nominal exchange rate was important not only in the determination of the evolution of the price of tradables but also for the dynamic of the overall price level. A very influential paper at the time that presented this view was later published as Sjaastad(1984).
external shocks initiated the process but the rigidities that had been build in made the adjustment just too costly.

As the government had to intervene to rescue the financial system, to support financially distressed firms and households, and to support the unemployed, the claim on public resources increased resulting in a large increase in the public sector deficit.

Following the crisis of the early 1980s, stabilization problems took the form of an unsustainable current account deficit. The adjustment required a sharp reduction in absorption and a real devaluation. A large fiscal adjustment - that included reduction in government expenditures and increase in taxation - and a flexible exchange rate (at the time that wage indexation had been suspended) were at the center of the post 1984 adjustment. On the other hand, the successful microeconomic reforms of the 1970s and the substantial open unemployment of the time had created the conditions for a large supply response to the real devaluation. The ensuing expansion in the import competing and exportable sectors pulled the dramatic recovery of the Chilean economy.

4 On the stabilization program of this period see Corbo and Solimano (1991) and Fontaine (1989).
3.2 Public Sector Reforms

Public sector reforms included a tax reform, a sharp reduction in public subsidies and a policy of returning enterprises illegally seized to the previous owners. This was followed by a privatization program focusing on commercial banks and firms in the manufacturing sector. The privatization program is discussed in section 3.7 below. A major tax reform was introduced in 1974. That aimed at augmenting tax revenues in order to reduce the fiscal deficit. A value added tax was introduced to replace sales tax that suffered from the cascade effect of adding tax burden at each transaction stage. This tax became the main source of fiscal financing in the years to come.

The tax reform also sought to improve the incentives to work by reducing marginal income tax rates. On the expenditure side, public employment and public investment were drastically reduced. The fiscal adjustment was dramatic, the fiscal deficit was reduced from 24.7 per cent of GDP in 1973 to 3.5 per cent of GDP in 1974 (Table 1). In 1975 Chile suffered a severe terms of trade shock from a combination of a sharp drop in the price of copper --then Chile's main export-- and a sharp increase in the price of oil.

As Chile had its access to external financing severely curtailed, the lack of external funding forced a drastic reduction of expenditures to deal with the emerging trade deficit. This second fiscal adjustment was as severe as the first. A further 26% cut in real public expenditures, in the middle of a severe contraction, reduced the fiscal deficit from 3.5% of GDP in 1974 to a mere 0.9% of GDP in 1975.

The restitution to the owners of enterprises that had been seized by the workers during the Allende government also contributed to the fiscal adjustment. These enterprises were receiving large transfers from the fiscal budget to keep them in operation. The public sector deficit was reduced also by improving the efficiency of public enterprises and the privatization of some of them.

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The recession of 1975 did not slow down the retrenchment of the public sector. In 1976 the non-financial public sector reached a surplus of 0.6% of GDP, and inflation was 174.3 per cent. Current expenditures, in real terms, stayed at their 1975 value but revenues started to recover. From then on, the non-financial public sector surplus lasted until the eve of the crisis, reaching a peak of 4.5% of GDP in 1980 (Table 1). The non-financial public sector accounts deteriorated again during the crisis years with the deficit reaching 3.5% of GDP in 1982 (Table 1).

Improvements in the tax administration were implemented all through the 1970s and a radical reform to the pension system, that in the short run deteriorated the fiscal situation, was introduced in 1981. The latter reform is discussed in section 3.4 below.

3.3 Trade Reforms

The new government that took power in 1973 recognized, from the beginning, that for a small country like Chile, to achieve efficient levels of operation, growth had to be based on an export-led growth model. Trade reforms were required to make the production for the external market much more profitable. Trade reforms in the period 1974-1976 included the unification of the multiple exchange rate system, the replacement of non-tariff barriers for tariffs and the reduction of extreme tariffs.

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At this stage, the fiscal consequences of trade liberalization were minimal, as the higher tariffs were generally redundant—as no trade took place in those commodities—and the replacement of non-tariff barriers by tariffs provided additional revenues. A large devaluation, at the time of the unification of the exchange rate, together with the drastic fiscal adjustment helped to achieve a large real devaluation. As further progress was made in the reduction of inflation, the trade reform proceeded in parallel with other reforms. Aggressive nominal devaluations were introduced at the beginning to achieve the real devaluation required to accompany the drastic fiscal adjustment. Later on the rate of devaluation was paced with the slowdown of inflation and the change in the fundamental determinants of the real exchange rate (i.e., terms of trade changes, differences in productivity between tradable and non-tradable activities, the sustainable level of the trade balance). Within this framework, early on in 1975, following the first oil shock and a 45% reduction in real copper prices, a large nominal devaluation was introduced to go with the sharp fiscal adjustment used to reduce the trade balance deficit.

At the beginning of the trade liberalization, in the period 1974-1976, there was not a clear view with respect to the speed and the depth of the reforms. However, as a liberal economic team improved its position within the government the speed and depth of the reforms was increased. By 1979, the trade reform was completed when a uniform tariff rate of 10% was established with just one exception for car industry.

The exchange rate started to be use as an stabilization instrument in February 1978. This policy culminated in June 1979 when the peso exchange rate was fixed with respect to the U.S. dollar. The fixing of the exchange rate at a time when domestic inflation was still much above international levels, and when wages were indexed to pass inflation was going to create much trouble later on.

3.4 Social Security Reform
The old Social Security system existed from 1920 up to the Reform of 1980. At that time it covered 60% of the labor force and was formed by several institutions that coexisted at the same time. The type of benefits were similar across institutions but the prerequisites to obtain them and the amount were quite different among institutions.

It was a scheme based on a pay as you go system, meaning that retirement pensions were financed with contributions paid by active affiliates and, therefore, the survival of the system was subordinated to the prevailing active/passive ratio of the population at all times. In this type of system, the pensions received by the participants had no relation with the contributions made to the system during the active working period.

The system was financed by the contributions made by the workers, employers and the government. The government contributions increased over time, constituting during the last years of the system a subsidy equivalent to 25% of the social security payments. On the other hand, workers and employers contribution varied between 14% to 66% of the remuneration according to the institution.

Under the old system, all insured workers had access to the same kind of benefits. Nevertheless, the system was more favorable to white collar than blue collar workers. The differences between both kind of workers was reflected on different retirement schemes, unemployment subsidy, interests charged on loans for housing, etc. There was an absolute lack of equity, where the benefits obtained and the contributions had no relation. In such a scheme the most benefits were received by organized groups through political pressures.
With respect to the financing of the system, the inflows were determined by: a) contribution payments, evasions and arrears on the part of the employers, and b) a low return in their investments, which consisted of loans to their affiliates and investment on government debt. The outflows were affected by: a) anticipated retirements, b) duplication of pensions and c) administrative deficiencies. As a result of the different factors, in 1980 the deficit between the payments from the system and the revenues received amounted to 60% of the total payments.

The Reforms

Starting in 1974, the government carried out numerous modifications to the existent scheme, oriented towards simplifying, unifying, and making the system more equitable. Furthermore, the rate of employees and employers contributions were reduced substantially. Furthermore, the system of family allowances and of unemployment compensation were simplified. The criteria for adjustment of pensions, retirement age, and years of contributions were all unified. Besides, a minimum pension for the non-contributing poor was created. By 1979 all these reforms had been implemented and special treatment for some groups were eliminated. The reforms permitted an important reduction in the rates of contributions, which went from 33% to 20% of wage payments.

The Capitalization System\textsuperscript{7}

The new pensions system was created on November 13, 1980, and it is based on three basic principles: (1) Solidarity with the poor: there exists a (low) guaranteed minimum pension for every Chilean citizen, irrespective of his contributions to the system; (2) Individual Capitalization: the benefits obtained by the affiliates are directly related to the amount of their contributions

\textsuperscript{7}On the new pension system see Cheyre (1988)
during their working life; and (3) Private and Competitive Administration of the Pension Funds in order to promote efficiency in Fund's management.

In this capitalization scheme, the contributions made by the affiliate are deposited into an individual, non-transferable account, with a minimum of rentability and security guaranteed by the state (administrators ought to have a minimum amount of capital and a minimum rentability), thus generating a Pension Fund.

The Pension Funds grow with the affiliate contributions and the return of the flow of investment during the contributing period of the affiliated (net of administrative commissions) and decrease with pension payments and other permitted outflows. The state supervision is executed by an autonomous entity that supervises and controls the pension administrators. The approval, modification and rejection of the classification of different financial instruments in which the administrators can invest, is done by a Risk Classification Commission.

In the new system, contributions, based on taxable income, are substantially lower than in the old system. The affiliate has also the right to transfer its funds from one administrator to another searching for a better service and rentability. The amount of the pension can be adjusted by increasing or decreasing the voluntary contribution. The amount of the contribution is tax deductible at the time that it is made but the income from pensions is taxable.

The process of transferring from the old to the new system was made possible through the creation of a public debt instrument called Recognition Bond ("Bono de Reconocimiento") that was equivalent to the total amount of monthly contributions the affiliate had made to the former system throughout his working life. This bond is indexed to the evolution of the CPI and yields a 4% real interest rate up to the time of retirement. In that moment, the government pays this bond adding it up to the affiliates pension fund.
3.5 Financial Sector Reforms

In 1974 the process of privatization of financial institutions began, as nominal interest rates were gradually liberalized. However, the lack of appropriate regulation and supervision was to create later on major difficulties in this sector.

In 1977, a mid-size bank, that had been privatized, and which belonged to a financial conglomerate, entered into bankruptcy, and it was taken over by the regulators. This action signaled to depositors and bank's owners that there existed *de facto* deposit insurance and the stage was set for the exacerbation of unsound banking practices. For the financial conglomerates this action provided an incentive to take further risk than otherwise, as risk was not properly supervised and the existence of *de facto* deposit insurance discouraged the incentive of holders of bank liabilities to carefully evaluate bank risks. In this framework, the financial conglomerates could lend, almost without limit, to their own enterprises as the higher risk due to the concentration of its portfolio in their own enterprises was not being considered by the regulators when assessing the risks of bank's portfolios.

The existence of *de facto* deposit insurance without the required prudential regulation and banking supervision also encouraged the banks to take undue currency risk. The latter created a major distortion in the pricing of credit in different currencies. The stage was set for a large financial crisis when severe external shocks hit the country in 1982.

3.6 Labor Market Reforms

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8This is an area of reform that became central to interpret the developments that followed. On this topic see also McKinnon (1988) and Valdés (1992).
By 1973, the labor code was very restrictive giving a high degree of rigidity to labor market operations. Rigidities took the form of labor immobility, unlimited compensations for labor dismissal, minimum wages etc. In the initial years of the reforms, individual work legislation in Chile as in the rest of the world, was geared towards the protection of the worker. Nevertheless, with the passing of time it turned into a mechanism to grant benefits to pressure groups within the workers, in detriment of unorganized labor and the overall efficiency of the economy.

Many trade unions enjoyed special working and salary conditions, as did organized labor in the copper, petroleum, railroad, steel, electricity, and communication sectors. All privileges and licenses were eliminated starting in 1974, and this process ended with the law #18,018 of 1982, which revoked some privileges that still persisted. Reforms of labor regulations can be grouped into three categories: wage policy, layoff and severance payments regulations, and trade unions and the right to strike.

**Wage Policy**

Traditionally in Chile the state intervened not only regulating wages in the public sector but also in the private sector. The government used to intervene through minimum wage laws (first introduced in 1956) and by introducing periodic legislation determining the required adjustment of private sector wages. Starting in 1971, there was an aggressive policy to improve income distribution through compulsory large increases in wages. Minimum wage and private and public sector wages and salaries were adjusted by law in levels much above the changes in the Consumer Price Index an any reasonable estimate of productivity gains.

Wage policy was also changed starting in 1973. In the early years up to 1979, collective bargaining was suspended and with the exception of the minimum wage and public sector wages, the government did not intervene much in the determination of private sector wages. However, as public sector wages were periodically adjusted for the inflation of the previous period, this policy
was usually extended also to private wages. In 1979 was enacted the New Labor Code. This new code introduced collective negotiations at the firm level. However, surprisingly enough the law also established that the minimum wage offer had to be equal to the previous level of wages adjusted for by the CPI inflation since the last contract.

**Layoffs and Severance Payments**

Layoffs were severely restricted in Chile. The structural transformation undertaken in the 1970s required a relaxation of layoffs practices to permit the restructuring of the economy. Layoffs were restricted by setting a set of preconditions, and by imposing high severance payments. During the 1970s preconditions were made less restrictive including the right to terminate a contract when economic reasons required an adjustment but the employer should pay a compensation equivalent to one month wage for each year of continuous service, with a maximum of 5 months. However, the labor law of 1981 restricted again the conditions for layoffs.

**Trade unions and the right to strike**

During the 1973-1979 period the activities of trade unions were severely restricted. They could not elect their leaders and could not hold meetings without permission. With the labor code of 1979, the activities of trade unions were much liberalized. The new labor code sanctioned four types of unions: (1) unions at the enterprise level, (2) inter-enterprise unions, (3) unions of independent workers, and (4) unions of temporary workers.

Trade unions affiliation is voluntary, and workers contribution to a union can only be deducted from the payroll with the written authorization of the worker or when the absolute majority of the trade union agree so.
In what concern to strikes, they were much restricted in the 1973-1979 period. The labor code of 1979 established a maximum limit of 60 days for the duration of a strike, passed that period, the workers were considered as resigning, loosing their rights to a severance payment.

3.7 Privatization

In the period 1974-1982 Chile initiated a privatization process. During this period, almost all the enterprises taken over during the Allende government were restored to their legitimate owners, and all non traditional state enterprises that were producing goods and services that traditionally are produced by private enterprises- were privatized, with the exception of the big copper companies large steel company, ENAP (Petroleum National Company), the railroads and public utilities: electricity, telephone, water and sewerage.

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9On this topic see Hachette and Luders (1993).
Privatization effort was done in two stages

a) the first one was in 1974, when the administration of those enterprises that had been illegally taken over during the Allende years was given back to its owners. In this stage, 325 enterprises were returned under the condition of refraining from initiating lawsuits against the State. In some special cases additional conditions were imposed in order to secure the maintenance of employment levels, the competition between related industries, and a certain level of new investment to be undertaken by the original owners.

b) the second stage consisted mainly in the transfer to the private sector of approximately US$ 1200 millions in assets corresponding to 207 enterprises. These included financial institutions, manufacturing enterprises and other corporations that had been taken by the public sector throughout the years.

As a result of the privatizations undertaken in this period employment in the state enterprises sector, was drastically reduced from 5.6% to 3.2% of the labor force. Nevertheless, only part of this decrease can be attributed to the privatization process, the rest is due to the government efforts in trying to increase Public Sector efficiency.

Privatization were carried out using a variety of methods. These included:

- Liquidation; due to operational losses, which could not be reduced through efficiency improvements, many firms had to close down and their assets had to be auctioned.

- Open bidding; the government Development Corporation (CORFO) introduced an auction system to sell the enterprises, CORFO had the right to reject the offers, as well as to negotiate better prices and/or conditions with those who bid the highest offer. The bidding's main objective was to maximize the sale price of the public assets. For this purpose, most often blocks of shares providing a controlling interest were sold. The
concentration of the property of financial institutions and some key manufacturing enterprises in the same hands, was later on to create some difficulties in the financial system.

- Direct Sale; this procedure was applied to smaller firms, where the cost of organizing a bidding process was considered larger than the expected sale price of the firm.

On the other hand, from the total of agricultural land that had been expropriated by the Agrarian Reform Corporation (CORA), 28% of the irregularly expropriated total was returned to their legitimate owners; 52% was divided in 52,603 farms which then were sold, in very favorable terms to the previous workers of the expropriated lands; and the rest was sold in public auctions. It is estimated that the privatization of farms that had been taken over by CORA amounted to US$ 800 million dollars in assets.

3.8 Social Sector Reforms

The reforms carried out in the seventies also included reforms to the social sectors, such as education, health and nutrition, and housing. These reforms were intended to improve efficiency in the production and distribution of social services, as well as, to target subsidies in these sectors to the poorest groups in the population.

1. Educational Reforms:

The purpose of the educational reforms initiated in 1980 was to increase public education efficiency and expand opportunities. In particular, opportunities were created for private sector participation in the production of educational services.
The old system, where public funds were given directly to schools and universities, was replaced by one where resources were distributed in proportion to the number of students enrolled.

Up until 1980 the supply of educational services was almost completely centralized in the Ministry of Education. This bureaucratic system was very inefficient and it had few incentives to attract and keep the students. Not surprising the quality of education was poor. No major reforms were taken between 1973 and 1980.

In order to correct these problems, the government carried out an important curricular, administrative and financial reforms of the education system in period 1980 - 1981. The curricular reform modified the educational plans trying to give more flexibility and facilitating its adaptation to local needs.

Among the administrative and financial reforms the most important ones consisted of: (1) The transference of public schools (pre-school, primary and secondary) to the municipalities and the vocational secondary schools to non-profit private organizations, with the purpose of improving their administration, increasing the number of students and raising the quality of education. (2) The participation of the private sector in the production of free education was promoted with a subsidy system. This subsidy, that consisted of a payment for each student enrolled, were received by the private subsidized schools as well as the schools transferred to the municipalities. Unfortunately, later on the amount of subsidies were reduced in real terms with a negative effect on the quality of the education.

Major reforms were also introduced in higher education. Up until 1980, the higher education system consisted of two public universities and six private universities. All of them, including the private ones, relied mainly on public funding, with approximately the same proportion of their expenses financed by the state. In that year, universities receive more than 30% of the total
public expenditures in education. On the other hand, it was understood that the marginal rate of return was the highest for primary education, followed by secondary and finally higher education.

The existing higher education system faced many problems since the vacancies were limited, and the decision of the government to concentrate the resources in primary and secondary education threatened its possibilities of expansion. The first step taken was to eliminate the existent prohibition to the entrance of the private sector to produce higher education. The allocation of the state subsidy was also in need of adjustment. Further steps taken in this area consisted of the decentralization of large national universities, to give formal rank of higher education to non university alternatives, and to change the funding of universities from general grants to a payment per student and the introduction of a student loan program.

2. Reforms in Health and Nutrition

In the early years of the Pinochet government, reforms in this sector were concentrated in improving the access to health of the poorest groups in population. Later on, a major restructuring took place with the purpose of improving efficiency and of targeting the subsidies to the poorest groups in the population. To accomplish these objectives a two-tear system was been created. Middle income and upper income groups have access to privately produced health services. Public resources has been concentrated in the provision of health services to the groups that can not afford the private system. To implement this system, a normative was created to allow the development of private health plans.

Among the institutional and financial reforms, taken to improve the efficiency of the public health and nutrition systems, are the following: the separation of the production from the distribution of health services with the creation of a financial institution for the funding of health services for the groups in the population that could not afford the private health services; the decentralization of the National Health Service; and the reinforcement of the role of the Ministry of
Health as a supervisory, normative an evaluating entity instead of a producer of health services. In 1981 was started the transfer of the primary attention services and its infrastructure to the municipalities, at that time the possibility to choose between public and private health insurance plans, was introduced.

To target health and nutrition expenses to the poorest groups in the population, the services of preventive and primary health care were focused to the most vulnerable groups among the poorest (i.e. mothers and small children). These services were extended and improved. More emphasis was given to primary health attention. Nutrition subsidies were gradually channeled toward the most needed basically by three ways: the distribution of nourishing supplements only through health establishments and conditioned to the attention of the healthy child and to mother's examination; the creation of rehabilitation centers for preschool programs for undernourished children; and the implementation of nutrition programs in schools.

Although the financing of this programs amount only to around 0.6% of GDP, it is well accepted internationally that they have accomplish much in improving the social welfare of the poorest groups in population.

3. Housing Reforms

From 1975 on, there was a change in the subsidy policy toward the poorest sectors of the population that were not home owners, creating programs more adequate to their needs and their economic capacity.

Starting in 1974, housing policies were governed by two general principles, on the one hand to direct subsidies only to those who cannot afford a dignified place to live; on the other hand to give direct and transparent subsidies.
Subject to the accumulation of a minimum amount of savings, a direct subsidy for the
down payment was introduced replacing the former indirect subsidy, which consisted in low
interest rates or a lower house price.

The role of the public sector in construction, financing and urbanization was reduced to
providing and selecting the beneficiaries of the direct subsidy. With the new reforms the private
sector is in charge of the urbanization, the supply of basic services, the construction and financial
intermediation.

4. MAIN ECONOMIC DEVELOPMENTS UP TO 1982

The growth of the Chilean economy was modest in 1974, and was followed by a deep
recession in 1975. Thereafter the economy recovered and grew rapidly.

The recession of 1975 had three major causes. First, was the large drop in the terms of
trade with the copper prices falling by about 45 per cent in real terms and the price of oil rising a
factor of three. A second factor was the restrictive fiscal and monetary policy that sought to stop
inflation and to reduce an emerging current account deficit that could not be externally financed.
Another cause for the output decline was the sharp change in trade incentives which forced some
import competing sectors started to shrink. The latter was an unavoidable short-term cost of the
restructuring called for by the trade liberalization policies.
In 1976, the economy was still experiencing high inflation, 174.3 per cent per year, high unemployment, 15%, low international reserves, US$ 107.9 millions (less than one month of imports), and a non-financial public sector surplus of 2.3 per cent of GDP (Table1). The main problem was high inflation, and bringing it down was the top priority for the economic team. The reduction of inflation was a very slow process. As the reform were progressing and their credibility was enhanced, the economy started to growth. Real GDP grew 3.5 per cent in 1976, 9.9 per cent in 1977 and 8.2 per cent in 1978. (see Table 1).

However, by early 1978 the economic team became impatient with the slow progress in the reduction of inflation, and decided to use the exchange rate as a key policy tool to accelerate the reduction of inflation. This policy culminated in June 1979 when the exchange rate was fixed. During this period a conflict started to emerge between the objective of achieving a stable real exchange rate, consistent with the fundamentals, and using the exchange rate as an anchor for the price level. This change in policy had deep repercussions in the macroeconomic front and was one of the main causes of the boom that developed in the following years as well as in the deep recession that followed. The boom resulted from the drastic reduction in the cost of foreign borrowing that followed the slowdown in the rate of devaluation. The bust came when following the drastic reduction of foreign borrowing a sharp depreciation of the currency was called for. However, the fixed exchange rate of the time required a price deflation to accommodate the real depreciation. When the deflation route was selected in late 1981 early 1982, the recession became severe.

The fixed exchange rate policy contributed to the economic boom of 1979-1981. With the introduction of the preannounced formula for the evolution of the nominal peso/dollar exchange rate, the cost of foreign borrowing decreased substantially. It went from 22.6 per cent per year in the fourth quarter of 1977 to 10.2 per cent per year in the first quarter of 1978 and became negative from there on until the last quarter of 1980. This reduction in the cost of foreign borrowing unleashed a large increase in foreign borrowing which caused domestic real interest rates to fall.
Inappropriate regulation and supervision of the banking system facilitated the increase in foreign borrowing. The drop in real peso and dollar interest rates and the large increase in real credit fueled a large increase in real domestic expenditures which rose by 10.5 per cent in 1979, 9.3 per cent in 1980, and 10.9 per cent in 1981. GDP growth reached 8.3 per cent in 1979, 7.8 per cent in 1980, and 5.5 per cent in 1981. (Table 1).

The widening gap between the rate of growth of real domestic expenditures and real GDP, that resulted from the increase in foreign borrowing, founds its way into a larger trade balance deficit and demand pressures in the market for non-tradable goods. The consequent trade balance deficit, as a percentage of GDP, rose from 3.2 per cent in 1978 to 5.2 per cent in 1979, 6.7 per cent in 1980, and 12.9 per cent in 1981. Whilst increased expenditures in tradable goods caused imports to rise and exports to fall, the rise in expenditures on non-tradable goods resulted in a rise in their prices; thus appreciating the real exchange rate, which amounted to 25% between 1978 and 1981. (Table 1).

With the emergence of a large trade deficit and unfavorable external shocks in 1981 (drop in terms of trade and a sharp increase in international interest rates), there arose doubts about the sustainability of the policies, in particular, about the continuation of the fixed exchange rate policy. Compared to the average for the period 1977-79, the external shock amounted to a positive shock of 1.2 percentage point of GDP in 1980, a negative shock equivalent to 0.5 percentage points of GDP in 1981, and a negative shock equivalent to 3.8 percentage points of GDP in 1982 (Table 2). In the face of these trends, not only capital inflows started to slowdown, but in fact a period of capital flight was initiated.
With no external financing available for the existing trade balance deficit the Chilean policy makers faced in 1982 the question of how to engineer a sharp reduction in the trade balance deficit without causing an undue increase in unemployment. When the international debt crisis broke in August 1982 capital inflows all but disappear and the speed of reduction in the trade balance deficit had to be accelerated.
<table>
<thead>
<tr>
<th>Year</th>
<th>Total External Effect</th>
<th>Terms of Trade Effect</th>
<th>Real Interest Rate Effect</th>
<th>Price of Exports</th>
<th>Price of Imports</th>
<th>Average Real Interest Rate of Foreign Debt</th>
<th>Foreign Debt to GDP Ratio</th>
<th>Exports to GDP Ratio</th>
<th>Imports to GDP Ratio</th>
</tr>
</thead>
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<tr>
<td></td>
<td>TXE</td>
<td>TTE</td>
<td>RIRE</td>
<td>PX</td>
<td>PM</td>
<td>RIR</td>
<td>FD/GDP</td>
<td>X/GDP</td>
<td>M/GDP</td>
</tr>
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<td>1977-79</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>1.0000</td>
<td>1.0000</td>
<td>-0.0018</td>
<td>0.4104</td>
<td>0.2149</td>
<td>0.2415</td>
</tr>
<tr>
<td>1980</td>
<td>1.20%</td>
<td>1.04%</td>
<td>0.16%</td>
<td>1.1049</td>
<td>1.0501</td>
<td>-0.0056</td>
<td>0.4020</td>
<td>0.2282</td>
<td>0.2698</td>
</tr>
<tr>
<td>1981</td>
<td>-0.52%</td>
<td>-0.55%</td>
<td>0.03%</td>
<td>0.9424</td>
<td>0.9715</td>
<td>-0.0026</td>
<td>0.4761</td>
<td>0.1642</td>
<td>0.2675</td>
</tr>
<tr>
<td>1982</td>
<td>-3.80%</td>
<td>-1.87%</td>
<td>-1.92%</td>
<td>0.7437</td>
<td>0.8495</td>
<td>0.0451</td>
<td>0.7047</td>
<td>0.1936</td>
<td>0.2125</td>
</tr>
<tr>
<td>1983</td>
<td>-3.37%</td>
<td>-0.88%</td>
<td>-2.49%</td>
<td>0.7175</td>
<td>0.7849</td>
<td>0.0590</td>
<td>0.8816</td>
<td>0.2404</td>
<td>0.2132</td>
</tr>
</tbody>
</table>

**NOTE:** The indicators TXE, TTE and RIRE were calculated with the following formulas:

- \( TXE = TTE + RIRE \)
- \( TTE = \left( \frac{PX}{PX_0} - 1 \right) \frac{(X/GDP)_0 - (PM/PMeo - 1)}{(M/GDP)_0} \)
- \( RIRE = - (RIR_t - RIR_o) \frac{FD/GDP}{FD/GDP_o} \)

where the period \( o \) is the average 1977 - 1979.
5. ECONOMIC DEVELOPMENTS IN THE POST 1982 PERIOD.

By early 1982, the Chilean economic situation could be summarized as follow:

- In the previous few years prices had been liberalized and profound reforms had been carried out in the areas of, trade policy, labor regulations, financial and public sector reforms.

- The fiscal deficit had been practically eliminated, the stock of public debt had decreased, capital inflows had been liberalized, and the inflation rate had been reduced to below 20% per year for the first time since the late 1960's.

- With respect to nominal prices, Chile had its currency pegged to the U.S. dollar with a fixed parity, wages were indexed to previous inflation, and many non-tradable goods and almost all financial contracts were indexed to the consumer price index.

- During the preceding years there had been a large increase in private spending financed by international capital inflows. The trade deficit reached 12.9 per cent of GDP in 1981 and external debt rose by the end of that year to almost 75 per cent of GDP, or 4.6 times the value of annual exports. International reserves reached US$ 3.775 millions, at the end of 1981, amounting to about 1.8 times the money stock (measured as M1 in December 1981).

- A large part of the banking system had taken undue currency risk and commercial risk. In particular there was a high concentration of credit, mainly in enterprises related with the bank's owners.
As a consequence of the trade liberalization and the sharp appreciation of the period 1978-1981 the tradable producing sectors had been subject to severe foreign competition. Substantial industrial restructuring took place to face this competition and the surviving tradable producing sector was very efficient.

The sharp reduction in external financing required a sharp reduction in total domestic expenditures, the mechanism to achieve the latter was a sharp increase in real interest rates and a credit crunch. When domestic expenditures started to fall instead of the prices of non-tradable goods to go down, the output of non-tradable goods started to take a large drop. The rigidity in real wages -due to the backward indexation mechanism- and the fixed exchange rate policy made very difficult to achieve a real depreciation. Eventually, in the middle of a severe recession, that so in 1982 a 14.1% drop in GDP, and a more than 10 percentage points raise in the unemployment rate, the fixed exchange policy had to be abandoned, wage indexation was eliminated, and a series of nominal devaluations -accompanied by a short period with a floating exchange rate- were introduced to generate a large real devaluation.

At the trough of the 1982-1983 slump, the liberalization policies of the previous 8 years were attacked from every front, entrepreneurs associations were asking for protection for import competing sectors in the form of differentiated import tariffs, worker unions were asking for employment policies to decrease unemployment. Highly indebted families and firms were asking for debt relief. Banks were asking for a bail out to solve their problem of mounting non-performing loans. Finally, even within the government dissenting views about the causes of the recession and the way to come out of it started to emerge. Not surprising the Pinochet government was ready to try any policy to pull the economy out of the recession.

As the government was being attacked from many directions, it had to adjust some of its policies. However, the main trust of the policies was kept. The pressures for protection were accommodated by raising the maximum tariff to 20% but the request for as differentiated tariff
structure was turned down. Free access to foreign exchange was never curtailed for remittances associated to direct foreign investment neither for the service of the foreign debt. Furthermore, from the beginning the government developed a strategy of renegotiating the foreign debt but with the ultimate objective of serving it in full with the final objective of eventually reestablishing it access to international capital markets. On this point, Chile took a route very different to the one taken by most developing countries.

An area where much had to be done was on the renegotiation of domestic debt and the rescue of the banking system. During the period of the sharp recession, and to avoid widespread bankruptcies, the government introduced a comprehensive program to rescue financially distressed institutions. This rescue program was financed by a large increase in the external debt of the Central Bank. The public sector deficit as a percentage of GDP also increased in these years as social programs were introduced to assist the unemployed and tax revenues suffered from the recession. As shown in table 1, the public sector deficit reached 4.3% of GDP in 1984, while the unemployment rate peaked at 19.8% of the labor force in 1983 (If we count the workers engaged in the public works emergency programs as unemployed, the total unemployment rate was close to 30% of the labor force). The size of the non-financial public sector deficit does not tell the whole story with respect to the size of the overall public sector deficit, as the Central Bank was also incurring heavy loses from its programs to rescue financially distressed financial institutions and private sector borrowers. These Central Bank loses were of a fiscal nature. In 1985 alone these losses have been estimated as high as 5% of GDP.

An attempt to accelerate the recovery, using expansionary aggregate demand policies had to be abandoned early on as the reduction in the size of the trade surplus that resulted made the balance of payments untenable. Soon the expansionary policies were abandoned and a new Minister of Finance, that had been a junior member of the liberal economic team of the 1974-81 period, was appointed. This new Minister presided over the second restructuring of the Chilean economy attempted in early 1985.
After 1984, the government designed and implemented a comprehensive adjustment program aimed at restoring macroeconomic balances in a situation of restricted access to foreign borrowing. An aggressive devaluation policy was combined with severe monetary and fiscal discipline to achieve a large real devaluation and an increase in competitiveness of the trade oriented sectors.

As a result of the large nominal devaluations and the supportive macroeconomic policies of the time, the real exchange rate was depreciated 89.1% between 1981 and 1986. (from column 8 in Table 1). The large real depreciation was also accompanied by periodic decreases in the maximum import tariff level that were started in March 1985. This new policy changed incentives drastically in favor of export oriented activities initiating a period of export-led growth. As the export-led process gained momentum, large increases in efficiency started to be achieved in the export oriented sectors through improvements in quality control, better marketing and the adaptation and production of technology.

Following this adjustment program, Chile entered into a period of export led growth that had lasted well into the 1990s. GDP growth reached 6.3% in 1984, 2.4 in 1985, and 5.7 in 1986. In the same years inflation reached 23.0% in 1984, 26.4% in 1985, and 17.4% in 1986 (Table 1 columns 1 and 6). In the meantime, the unemployment rate that had reached close to 20% in 1982, without including the workers in the public work programs, was reduced to 10.8%.10

In the post 1986 period growth continued, furthermore, as the debt crisis was left behind, the positive results of the policy reforms of the previous 12 years started to emerge. With the model by now delivering growth above 5% per year and with the unemployment rate coming down rapidly, the public support for the economic policies started to increase. When the new coalition

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10For economic performance during this period see Corbo and Solimano (1991).
government came to power in March 1990, it kept the general market oriented open economy policies. Its main departure from the policies of the previous government has been on its concern for improving the access to education and health for the poorest groups in the population. To accomplish this objective, early on it negotiated with the opposition a tax reform aimed at raising government revenues in around 2.8% of GDP to finance a similar increase in expenditures in the social sectors.

6. LESSONS FROM THE CHILEAN REFORM PROGRAM

As it happens with most successful stabilization and adjustment program, there is not a single reason for the ultimate success. Furthermore, it is never clear when the adjustment stage is completed and when the sustainable growth stage take over. The case of Chile is not an exception. However, some negative and positive lessons can be derived from the experience reviewed above.

First, on sequence of reforms. Structural reforms aim at restoring the basic macroeconomic balances need to be put in place early on. Furthermore once the basic internal and external balances have been restored it is very important to keep them under control otherwise important efficiency enhancing reforms at the best could be neutral or even could be welfare deteriorating if they have low credibility\(^1\). Part of this happened in 1981-82 when the large current account deficit created pressures to reverse the trade reforms of the previous six years and opened the way for large capital outflows. The crisis of the time created strong political pressure to close the economy and to reduce the role of market forces in favor of government intervention.

\(^1\) On the potential welfare effect of incredible reforms see Calvo (1989).
A second lesson that one can derive is that for the efficiency enhancing structural reforms one needs to move in many fronts at the same time, otherwise, the expected effects of specific reforms is substantially reduced. In the case of Chile, the trade reform had to be accompanied by a deregulation of ports, internal transportation and the labor market. The rigidity introduced with backward wage indexation made the adjustment to the trade reform much more difficult.

A third lesson, is that the private investment response to the reforms take a long time. The private sector needs to be able to predict where incentives are going to be in the medium term before undertaking irreversible investment decisions. This is an area where predictability of policies including tax treatment, basic property rights and evolution of economic incentives can do much to accelerate the investment response, but not much more can be done\textsuperscript{12}.

A fourth lesson is that before any major deregulation of the financial system, it is of crucial importance to develop and implement an appropriate system of regulation and supervision. Otherwise, unduly risk taking by financial intermediaries could result ultimately in problems with a macroeconomic dimension.

\textsuperscript{12}See Dornbusch (1990), and Serven and Solimano (1992).
REFERENCES


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