Successes and Failures in Real Convergence: The Case of Chile[*]

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and

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Abstract

Between 1985 and 1997, Chile grew by a steady 7.3 percent per year, making it the period of highest economic growth ever. Also, during this time the country was one of the fastest-growing emerging market economies. And Chile is now among the few Latin American countries that have grown steadily in the aftermath of the Asian crisis –after a short recession in 1999–, albeit at a slower pace than before the crisis, a result that can be blamed on the global slowdown. This favorable result is partly due to the major overhaul of the economy that has taken place in the past thirty years. The combination of policy reforms and institutional buildup over the past three decades, set the basis for the country's rapid growth up to 1997, and supported the quick adjustment and recovery after the 1999 recession. This paper reviews the Chilean experience in terms of both macroeconomic performance and policy and institutional reforms introduced in the past thirty years. The aim is to draw some lessons on what worked and what didn't, so that the Chilean experience can be of help for other countries to accomplish similar results.

I. INTRODUCTION

Over the past 190 years the difference in per-capita income between rich and poor countries has widened notoriously. In fact, in 1830 the ratio of per-capita income between the poorest and richest countries was about 1:3; today the same ratio is about 1:500 (Maddison, 2001). Thus, through all these decades some countries—Australia, South Korea, and the US, among others—have experienced much higher rates of factor accumulation, productivity gains, or both, than others.

The literature on economic growth has been trying for decades to provide an explanation for this enormous difference in growth between richer and poorer countries. To

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do this, economic growth has been decomposed into factor accumulation and productivity gains (i.e., Solow's decomposition). Further, empirical evidence shows that improvements in total factor productivity (TFP) are as or more important than factor accumulation as a source of economic growth. However, in recent years the profession seems to have reached a near-consensus: the ultimate cause of economic growth is neither capital accumulation nor factor productivity *per se*, but the institutional setting in which such accumulation or productivity gains occur. According to this view, the institutional setting matters because adequate institutions and good policies—i.e., the rule of law, good governance, protection of property rights, a market-oriented economy—promote rapid innovation and technological progress, leading to faster capital accumulation, higher employment, and growing factor productivity. Conversely, poor policies and a weak institutional setting characterized, for instance, by widespread corruption, lax protection of property rights, low fiscal capacity, weak supervision and lax regulations, deter investment, innovation, employment and capital accumulation, ultimately slowing economic growth. Empirical evidence strongly supports this view (figures 1-4)[1].

The conclusion above is supported also by the Chilean experience over the past 30 years. During this period, the country's authorities implemented major reforms to the economy, moving from a high-inflation, centralized and protected economy, into a low-inflation, market-oriented economy highly integrated with the rest of the world. But that was not all. Important institutional changes were introduced, such as granting full independence to the Central Bank and upgrading banks' regulatory and supervisory framework to match international standards. In addition, the authorities privatized most of the state-owned enterprises (SOEs), adopted an individual capitalization —as opposed to a pay-as-you go— pension system, privatized pension funds, and introduced competition in telecommunications. Further, they rebuilt the infrastructure through an innovative build-operate-and transfer (BOT) framework, and targeted social spending toward the poor, among other changes that will be discussed in greater detail below. As a result, after the debt crisis and until the Asian crisis the country grew on average by about 7.3% on an annual basis, the longest period of rapid, sustained growth ever. Consequently, Chile's

[1] See Acemoglu, Johnson and Robinson (2001), Easterly and Levine (2003), Easterly (2002), and Rodrik,

social indicators have improved substantially, while the incidence of poverty has been reduced markedly. In parallel, the country has completed a successful transition to democracy.

This paper reviews the Chilean experience since 1973, the last year before the economic reforms were applied, until 2002-03. The rest of the paper is divided into five sections. Section II discusses the policies and reforms implemented –and the outcome thereof– in the period leading to the debt crisis years. Section III presents the reforms following the debt crisis years and until the Asian crisis, while section IV presents the reforms implemented in the aftermath of the Asian crisis. Section V presents a summary of the empirical evidence for the case of Chile. Finally, section VI summarizes and concludes.

II. 1974-81: STABILIZATION AND FIRST-GENERATION REFORMS; MOVING TOWARD A MARKET-ORIENTED ECONOMY

Until the economic reform process started, the Chilean economy was in complete disarray as the Government, since the end of World War II, had intervened increasingly in virtually every area of production and interfered in many economic decisions. Furthermore, fiscal deficits were rampant and the economy was isolated from the rest of the world through a complex battery of trade restrictions. In a nutshell, by 1973 inflation was running at above 500% per year, the fiscal deficit was about 30% of GDP (table 1), and the peso was artificially overvalued, as there were many capital and current-account restrictions aimed at containing the external imbalance (e.g., there was a multiple exchange rate system). In addition, the average tariff was about 105%, though effective protection varied across economic sectors due to a wide range of restrictions including non-tariff barriers, and many prices were set (artificially low) by the Government, creating a shortage of goods and services in many markets. Further, the State owned about 600 enterprises, accounting for about 40% of GDP, and financial repression in the form of controlled (negative) real interest rates and restrictions on credit allocation was widespread.

Subramanian and Trebbi (2002).

The military government that took power in late 1973 had to deal, early on, with an economy in complete disarray. The reforms that were initiated then, and the ones introduced by the ensuing three democratic governments, have contributed to make Chile's transformation one of the most successful economic experiences of the past 30 years.

In the early years of the military government, exchange rates were unified, prices were liberalized for most goods and services, and several enterprises, farms and banks that had been intervened and controlled by Allende's administration were returned to their previous owners. In addition, a major fiscal package comprising drastic cuts in public investment and subsidies, and a freeze in public wages, brought the fiscal deficit down to only 5% of GDP in 1974. The fiscal adjustment continued, bringing—helped by the economic recovery that followed—a 2% surplus only two years later.

But reforms went far beyond achieving stabilization and correcting macroeconomic imbalances. In 1975, for example, the sales tax was replaced by the value-added tax (VAT) at a flat rate of 20%, thus improving the efficiency of resource allocation. Over time, the VAT became the most important source of government revenue, amounting to about 50% of total taxes (table 2). Also, non-tariff trade barriers were lifted, while both the dispersion and the level of tariffs were unilaterally reduced for most goods. This process continued into 1979, when a flat tariff of 10% was set for most goods (only a few exceptions remained, like cars and luxury items such as fur and jewelry).

Major reforms were also introduced in the financial sector, where interest rates were liberalized, banks privatized, mandatory credit allocation abolished, entry restrictions lifted, and the scope of permitted activities broadened. But the end of financial repression was not preceded or accompanied by an upgrade—or even better, an overhaul—of the supervisory and regulatory framework, thus exacerbating moral hazard and adverse-selection problems. Indeed, after the financial liberalization process began, connected lending grew unchecked, partly motivated by the simultaneous privatization of banks and enterprises that had led to a high concentration of wealth. Along with over-borrowing, banks incurred in highly concentrated portfolios and under-provisioning of non-performing loans—the latter due to both low provisioning requirements and lax rules that allowed non-performing loans to be

rolled over. Also, bank borrowers incurred in huge currency mismatches in their balance sheets, a risk that was overlooked by both banks and the supervisory agencies. In addition, a *de facto* deposit insurance system precluded depositors to exert some kind of market discipline, further aggravating moral hazard problems. This financial fragility made the overall system prone to crisis and proved to be costly when the economy suffered severe shocks in the early 1980s.

The outcome of all the reforms above combined was a quick economic recovery and a sharp reduction in both the fiscal deficit and the inflation rate (table 1; figures 5, 6 and 7). Indeed, after a sharp recession in 1975, that resulted from the fiscal stabilization program, the first oil shock, and the fall in the price of copper in the world market, GDP grew on average by about 6.8% per year during 1976-81 (7.5% in 1977-81). Similarly, inflation reached the two digit level just a few years into the stabilization program, although it remained around 30% until 1980 and was slightly below 10% only in 1981, while the fiscal balance was in surplus through the entire 1976-81 period.

But three major imbalances arose during this period; first, the real exchange rate appreciated significantly, especially after the nominal exchange rate was pegged to the dollar in mid-1979 in an attempt to accelerate the reduction of inflation[2]. Second, because of a private sector spending boom, the current account deficit went steadily from a small surplus of 1.5% of GDP in 1976, to a large deficit of 14.3% of GDP in 1981 (figure 8; table 1). And third, the financial sector weakened as major risks and vulnerabilities grew unchecked (unmatched currency liabilities, weak asset classification system, under-provisioning, and the like), leading to weak portfolios and undercapitalized banks, many of which accumulated potential losses several times their capital base.

All in all, the second oil shock in 1979, the appreciation of the US dollar (to which the peso was pegged) vis-à-vis other major currencies in the early 1980s, along with the sharp

[2] The real exchange rate appreciation was partly caused by the widespread use of backward indexation mechanisms, especially in wage setting –the latter had been institutionalized in a new labor code introduced in 1979. But it was also partly the result of the large capital inflows—which, in turn, were motivated by the incentives in place in the financial system—that financed a growing current-account deficit.

rise in international interest rates that followed Paul Volcker's appointment to the Fed, and the fall in commodity prices caused by the global slowdown, created an external situation that was very difficult to sustain. As the country had become increasingly dependent on foreign capital, especially debt, the whole situation ended in a balance of payments crisis when private capital inflows came to a halt in 1982. The external crisis forced the abandonment of the nominal exchange rate peg just two months before Mexico stopped servicing its foreign debt in August of 1982. The real depreciation that ensued further aggravated the financial situation of corporations and banks because of their large balance sheet currency mismatches, leading to a deep financial crisis and economic recession (figure 7; tables 1 and 3).

III. 1984-97: THE GOLDEN PERIOD AND SECOND-GENERATION REFORMS

The economic and financial crisis of the early 1980s, with a cumulative fall in real GDP during 1982-83 of about 16.4%, caused a setback on some of the policies and achievements of previous years. Indeed, the Government had to intervene and take over 19 financial institutions, whereby it ended up controlling about half of total bank credit (several of the intervened institutions were either merged or shut down later on). Along with this, the Government took over several enterprises and non-bank financial intermediaries (e.g., insurance companies, mutual funds and the like) that belonged to the conglomerates whose flagship banks were near collapse and had been intervened. In addition, the Government was forced to provide guarantees on most of the foreign debt incurred by the private sector, *de facto* socializing the country's foreign debt, while import tariffs were raised –albeit temporarily– to help the fiscal adjustment. All of this represented a major setback to the market-oriented economic model implemented since 1974, and forced the Government to incur in a fiscal deficit and allow higher inflation rates (in addition to tariffs) to finance it.

But important lessons were learnt that led to a reshaping of the institutional framework in the aftermath of the debt crisis, thus improving the capacity of the economy to absorb shocks and better aligning incentives. However, before proceeding with the discussion of all the changes made during this period, it is important to single out two reforms that were

implemented just before the debt crisis, and which played a major role in the subsequent period: the new Constitution of 1980, and the pension system reform of 1981.

The new Constitution of 1980 is important not only because it set the timetable for the return to a democratic regime in Chile, but also because it granted the power to allocate government spending exclusively to the executive branch, thus closely linking expenditures with revenues. Prior to this legal change, the legislative branch shared the power to allocate public money, but was not required to provide the necessary funding, thus exacerbating the bias toward having a large fiscal deficit for political reasons. Today, the Chilean Congress can either pass or reject the budget law presented to it by the Government, but cannot amend such law. This has proven to be an important factor for maintaining fiscal discipline. In addition, in the new Constitution the Central Bank was prohibited from buying securities issued by the Government, thus precluding the monetization of the fiscal deficit. It was also given the explicit mandate to pursue the stability of prices (or of the currency), the stability of external payments, and the stability of the domestic payment system. Finally, it was granted full independence by the way its authorities would be designated[3] (although the latter came into effect only in 1989).

The pension system reform of 1981 consisted of the phasing out of the bankrupt pay-as-you-go system and the creation of a fully funded capitalization system run by private, competing entities. In the new system, workers make mandatory monthly contributions into personal savings accounts, which are managed by specialized private entities, and whose balances cannot be withdrawn before retirement. This reform led to an increase in total savings and, at the same time, contributed to the development and deepening of the domestic capital markets, thus indirectly helping to raise total factor productivity. In fact, as the private entities managing these funds have become large lenders to both banks and corporations, over the years they have induced an improvement in corporate governance (figure 9).

[3] Pursuant to the law, the Central Bank is run by a Board composed of five members, each one appointed for a term of ten years: every two years a new member is appointed. The members are nominated by the Government but need approval of Congress. The Governor is then chosen among the five board members by the country's President for a period of five years. The Deputy Governor is chosen by vote among the other members of the Central Bank Board.

Thus, in the aftermath of the debt crisis, the Government focused its policies on two areas: redoing some of the work of previous years—privatizing banks and enterprises taken over during the crisis, continue reducing the budget deficit and inflation—and overhauling the institutional framework to correct the problems and regulatory shortcomings that had been diagnosed during the crisis. The most important institutional changes and policies are discussed below, albeit briefly, in chronological order.

A new tax law was enacted in 1984, which provided special incentives for saving and investment. For instance, profits became non-taxable if reinvested (taxes accrued only when profits were distributed in the form of dividends) and the corporate tax rate was reduced. At the same time, double taxation on dividends was abolished by giving shareholders a tax credit, to be used in their personal income tax, equal to the proportional corporate tax paid by the company. This way the tax-induced bias in favor of corporate borrowing to finance investment was eliminated (Modigliani-Miller's modified proposition, 1963). In addition, special incentives were provided for the issuance of equity. Buyers of new shares, IPOs, received a tax credit, equal to a fraction of the new investment, which would last for as long as they held on to the new shares.

Also, new banking and bankruptcy laws were enacted in 1986. The new banking law granted more powers to the supervisory and regulatory agencies, while updating specific regulations to keep up with international standards and best practices. For instance, stringent restrictions were imposed on loans granted to related parties and on the reporting of non-performing loans, thus significantly reducing the scope for connected lending and bad loans roll over. Furthermore, new rules governing asset rating by banks and minimum capital requirements were put in place, closely following international standards –i.e., the BASEL capital accord was adopted. With respect to bankruptcy procedures, the new law set forth clear steps for the liquidation and closure of banks. Also, clear seniorities were established for the payment of debts to creditors, while bankruptcy procedures were expedited.

Other important institutional changes included the privatization of SOEs, comprising not only banks and other firms taken over during the debt crisis, but also utilities formerly owned and operated by the Government such as electricity generation and distribution, long-distance and local telephone companies, and the setting of a framework for controlling and monitoring monopolistic practices. The privatizations undertaken during this period, as opposed to those implemented during 1974-81, were designed to spread ownership among a larger group of investors, so that the high concentration of wealth that had resulted before could be avoided. For this purpose, tax and other incentives, such as low-cost loans, were provided to individuals for them to buy the shares of the privatized companies. The new privatization program brought the share of SOEs in GDP down from 24% in 1983, to only 13% in 1989. In addition, an antitrust law was passed, and specific rules were approved for the setting of prices of natural monopolies, such as electric companies, and in other industries such as public transportation.

In 1989, a new Central Bank law was enacted, whereby the Central Bank's sole objectives are the stability of prices, the stability of the domestic payment system, and the stability of Chile's external payments. This new charter led the Central Bank, now autonomous, to adopt in 1991 a monetary policy scheme based on inflation targeting and a widening exchange rate band. The exchange rate band was abolished later on (in 1999), leading to a free-floating regime in which the Central Bank rarely intervenes, that is, only when the exchange rate market becomes dysfunctional. As a result of all these changes, the inflation rate in Chile today has converged to the Central Bank's steady-state target, a range of 2 to 4 percent per year, a level that nobody thought feasible just a decade ago[4] (figure 6; tables 1 and 4).

Also, new legislation allowing the participation of the private sector in infrastructure development was passed in 1991. According to it, roads, airports, seaports and other infrastructure projects may be developed by the private sector under build, operate and transfer (BOT) arrangements. As of 1998, 21 projects for a combined total of about US$3.6 billion had been developed under this arrangement. And in 1994, a new law was passed

[4] Thus, an inflation that started to develop in 1860 was finally controlled by the late 1990s.

permitting free entry to the—until then monopolistic—long-distance telecommunications market, the so- called “multi-carrier” system. This change has shaped a highly competitive market and caused a drastic fall in long-distance call prices.

Finally, it is important to mention that during this period the country successfully transited from an authoritarian to a democratic regime. Despite all the uncertainties surrounding this transition, the change was smooth in part because the new Administration quickly adopted most of the market economy elements already in place, while concentrating on a social agenda. This way the institutions created in previous years were validated and in many cases strengthened, so that uncertainty vanished. For instance, early on in 1990 the new democratic government deepened the opening up process by reducing the maximum import tariff from 15% to 11%. In fact, all three governments that have been in power since 1990 have strengthened the market economy model, accelerated the opening up process, consolidated the fiscal position and improved regulations, while, at the same time, they have emphasized social policies and implemented new programs to alleviate poverty.

All the reforms listed above resulted in the highest growth rates ever in the country’s history, and for the longest period. During 1985-97 the country’s real GDP grew on average by 7.3 percent annually —while, at the same time, and because of the adoption of inflation targeting, inflation fell steadily from about 27% into the one-digit range. In addition, the current-account deficit was reduced from about 9% to the 3%-5% range, while international reserves increased from about 10% of GDP in 1985, to about 22% of GDP in 1997, and the government balance was quickly turned into a surplus and remained there for ten consecutive years. Also during this period the savings and investment rates reached the highest levels seen in a long time (19.6% and 21.5% of GDP, respectively) and unemployment fell to a record low for the last 30 years (5.3%; table 1; figures 5, 6, 7, 10, 11 and 12). The country risk rate decreased steadily and today is the lowest among emerging-market economies.

IV. 1998-2003: REFORMS IN THE AFTERMATH OF THE ASIAN CRISIS

The Asian crisis hit the country through a sharp drop in the terms of trade and through contagion in financial markets. But because of the sound fundamentals—especially a very strong and highly capitalized banking system—permanent effects were rather limited. In other words, as opposed to other emerging market economies, the Asian and Russian crises of 1997 and 1998, respectively, had no systemic effects in Chile.

However, at the height of the turmoil, in the first and third quarters of 1998, the market pressure on the exchange rate was contained by sharply raising domestic interest rates. This policy response was motivated mainly by two reasons; first, the need to restrain aggregate spending (a necessary adjustment that was not properly supported by fiscal policy), and second, because of a concern with the potential inflationary impact and balance-sheet effects of a large depreciation of the currency—or worse, an overshooting. This response, along with the global slowdown and the drop in terms of trade, led to a short-lived recession in 1999. But the recession had a minor impact in banks' portfolios—non-performing loans remained below 2% (figure 13)—although the sharp increase in interest rates in 1998 caused some distress in small and medium-sized enterprises whose effects have taken a while to fade away. All in all, the economy quickly recovered and resumed growth in 2000, though the average growth rate in the past three years has been much lower than during 1985-97 (about 3%; table 1; figure 7) mainly attributable to the global slowdown.

But during this latter period the Government has continued introducing policies and institutional changes to further consolidate the market-oriented economic model, and to improve the resilience of the Chilean economy to shocks. Thus, in 1998 a law was passed unilaterally reducing the import tariff by one percentage point every year, stopping at 6% in January 2003. Furthermore, in 2002 Chile signed free trade agreements with the European Union, and in 2003 with Korea and the United States, thus consolidating the process of integration with the world economy. Also, in 2001 the Government committed to achieve and maintain a 1% *Structural* Fiscal Surplus. Under this commitment, government expenditures are set to be 1% of GDP less than the Government's *structural revenues*,

which are defined as the revenues that would occur in steady state. In other words, expenditures are 1% less than the revenues that would occur if the economy were on its long-term path (after eliminating cyclical variations in taxes and other key variables such as the price of copper and the level of international interest rates). This rule is intended to guarantee that the Government will remain solvent in the long run. Also, during this period regulatory and tax changes were introduced, aimed at increasing the efficiency of capital markets and providing incentives to save. Among these are: the tax on capital gains in the stock market was abolished; voluntary (tax-free) contributions into the personal retirement savings accounts were allowed; the tax on interests paid to foreign investors in peso-denominated bonds was reduced from 35% to 4%; some regulations affecting mutual funds and insurance companies were lifted.[5] And as already mentioned, during this period the exchange rate band was abandoned, consolidating both the inflation targeting and the free float regimes. Finally, in 2003 three new laws were passed that (i) established a clearer career path for public servants, based on merits, by significantly reducing the scope for the Government to appoint political allies in senior positions; (ii) provided public funding for political parties; and (iii) regulated private donations to political parties and candidates. These three laws should increase transparency, reduce the scope for corruption, and allow the public sector to attract more qualified people. The benefits derived from all the reforms above are expected to materialize in the future in the form of a higher and more sustainable economic growth, when the world economy recovers from the current slowdown.

V. Growth and Institutions: Empirical Evidence on Chile

In the past three decades, the Chilean economy went from suffering a high degree of government intervention, being isolated from world markets, and running large macro imbalances, to a stable market-oriented economy where the private sector plays the main role in deciding what and how to produce. In this setting market prices are the main device used for resource allocation decisions. In addition, self-correcting mechanisms have been put in place and market discipline has been strengthened, so that large imbalances are less likely to occur. Among these mechanisms are a floating exchange rate, limited deposit

[5] Capital Markets Reform I.

insurance, more stringent disclosure standards for banks, risk-rating agencies, a structural fiscal balance rule, and an inflation targeting regime administered by an independent Central Bank. This economic transformation has led to a much more dynamic and fast-growing economy than in the past, supported by solid institutions, as well as adequate economic policies.

As argued in the introduction, empirical studies show that large jumps in the rate of growth are mainly driven by changes in total factor productivity, as opposed to only greater usage of resources or factor accumulation. The main factors affecting the former are openness to trade, financial development, quality of governance, degree of corruption, quality of the labor force (education), government size and degree of bureaucracy, among others. It can be argued that Chile, after stabilizing its economy in the early 1970s, focused precisely on strengthening and improving the quality of its institutions, although some mistakes were made and corrected along the way, particularly after the debt crisis years. This whole process is still ongoing, but the country has already benefited from it.

Indeed, empirical analyses of the Chilean experience show that of the average annual growth of 7.3% during 1985-97, more than one third can be explained by gains in total factor productivity (see figure 14). Furthermore, the gains in total factor productivity that appear when comparing the 1990s to previous decades, can be explained mainly by the institutional changes and structural reforms of the 1970s that were deepened and improved during the 1980s (table 5). For instance, Gallego and Loayza (2002) conclude that the bulk of the total difference in annual growth between 1970-85 and 1986-98, can be explained by structural macro policies and the institutional build-up (table 6). Finally, it should be mentioned that part of the rise in total factor productivity during the 1990s, when compared to the 1970s and 1980s, can be attributed to the change in political conditions, that is, the return to a democratic regime (Jadresic and Zahler, 2000).

VI. CONCLUSIONS AND OVERALL POLICY LESSONS

The empirical literature on growth has highlighted the importance of establishing sound and solid institutions, without which investment and employment creation do not take place and, most importantly, technological changes and productivity gains do not materialize. Indeed, countries that show higher and more sustainable economic growth are those that enjoy low corruption, good governance, strong and modern supervision and regulation that enhance market discipline, the rule of law, and more stable legislation, among other elements.

Although building a sound and stable institutional framework is a far-reaching project, which usually takes much longer than, say, implementing a successful stabilization program, the pay-off is high and benefits start materializing even before the process is complete. Actually, the institutional build-up is an ongoing process and institutions have to be constantly updated and improved.

Chile's recent economic history vividly illustrates the importance of institutions in reaching higher and more sustainable economic growth and, equally or even more important, in enhancing the economy's resilience to shocks. In fact, in the past thirty years the Chilean economy changed swiftly from one suffering from high inflation, large fiscal deficits, multiple exchange rates, financial repression, shortage of goods and services, and high degree of government intervention, into a market oriented one with low inflation, a solvent fiscal position, a floating exchange rate, and open to both trade and financial flows. As a result, the economy experienced a period of rapid economic growth and decreasing inflation between 1985 and 1997, the longest period of fast growth ever. Also, the high growth and targeting of government spending towards the poor has resulted in marked improvements in social indicators as well as in a drastic reduction in poverty levels. But beyond that, during this period no major imbalance arose and the economy muddled through the Asian and Russian crises relatively unscathed (at least when compared to other emerging market economies).

But the institutional build up process has not been free of trouble. The debt crisis years in the early 1980s was partly the result of inadequate institutions, in particular those needed to contain moral hazard and adverse selection problems in financial markets. And recent problems regarding operational and settlement risks in capital markets—the Corfo-Inverlink affair—show that a lot remains to be done, especially at the micro level. But the difficulty of the reform process cannot be an excuse not to do it; the sooner the process gets started, the better for the economy as a whole. In fact, since financial integration and the advances in communications and IT are here to stay, countries can hardly avoid getting their economies in order, both at the macro level—by putting in place mutually consistent fiscal, monetary and exchange rate policies—and at the institutional level, by reforming their laws and institutions to provide the right incentives and promote stable rules.

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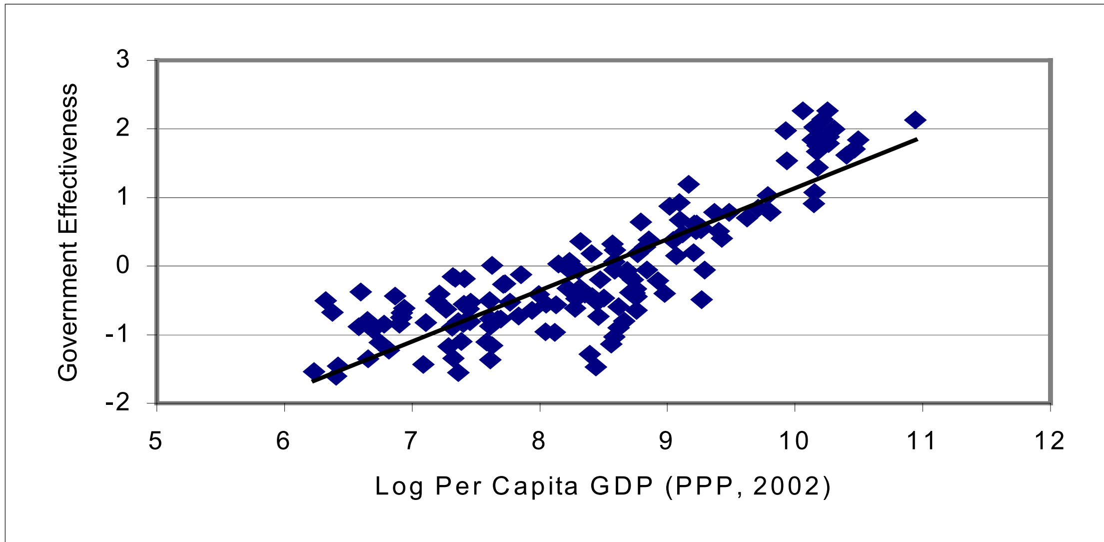
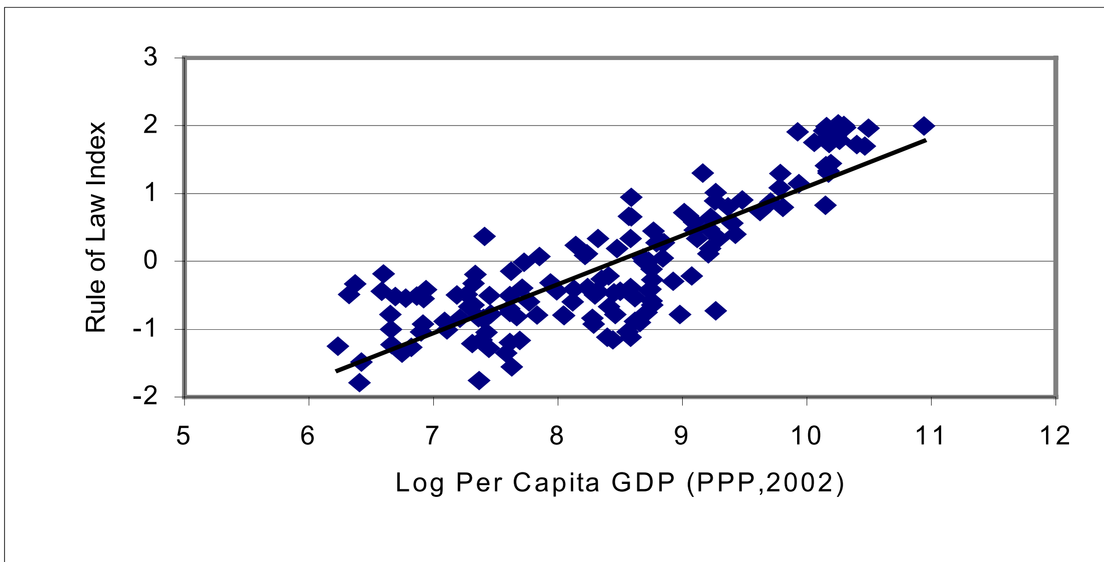
Figure 1
Government Effectiveness Index and per-capita GDP
(150 countries, 2002)



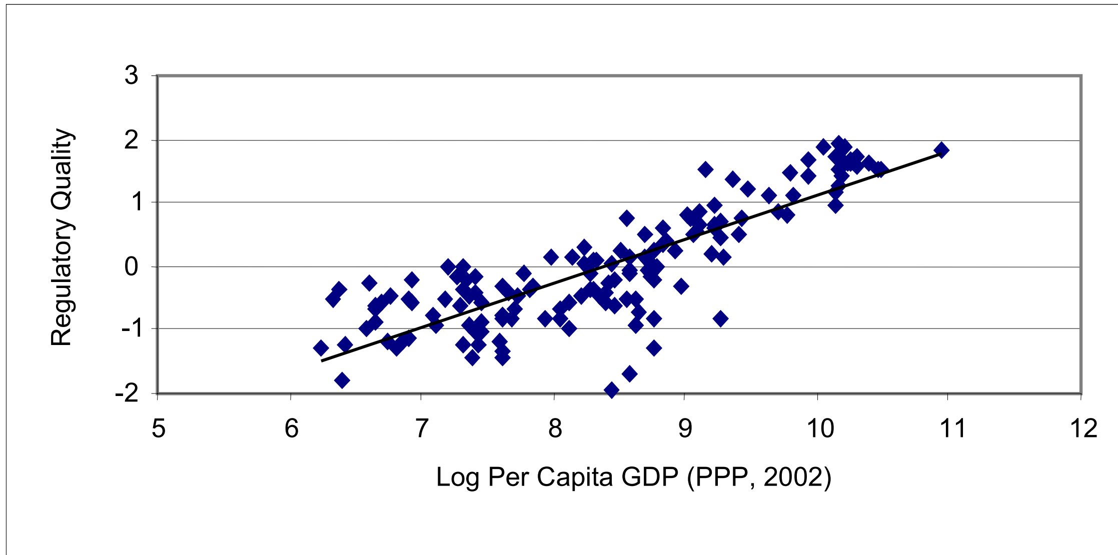
Source: Government Effectiveness Index from Kaufmann et al (2003); per-capita GDP from the World Bank.

Figure 2
Rule of Law Index and per-capita GDP
(150 countries, 2002)



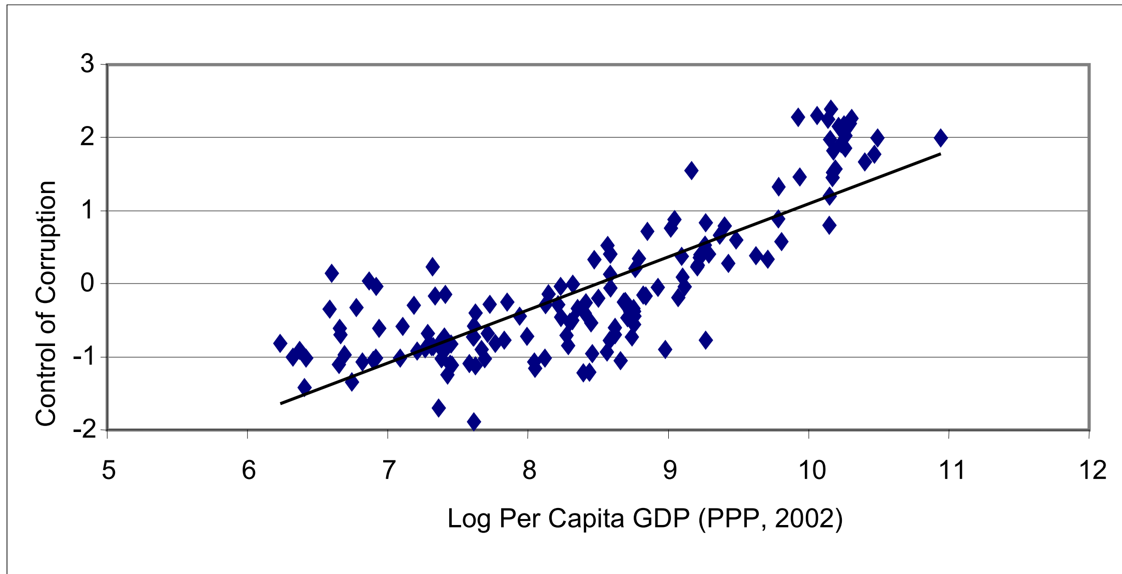
Source: Rule of Law Index from Kaufmann et al (2003); per-capita GDP from the World Bank.

Figure 3
Regulatory Quality Index and per-capita GDP
(150 countries, 2002)



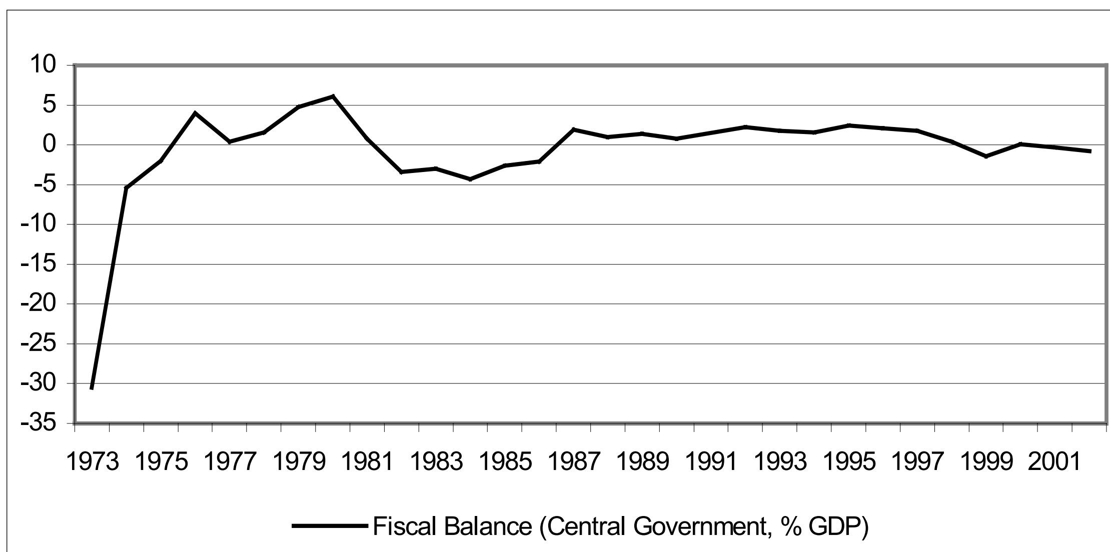
Source: Regulatory Quality Index from Kaufmann et al (2003); per-capita GDP from the World Bank.

Figure 4
Control of Corruption Index and per-capita GDP
(150 countries, 2002)



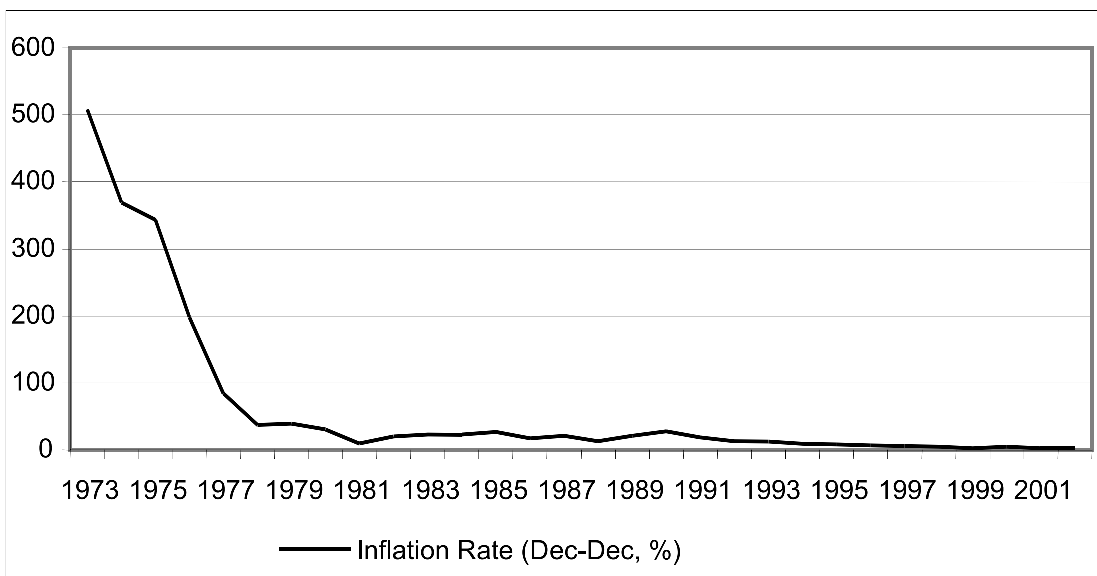
Source: Control of Corruption Index from Kaufmann et al (2003); per-capita GDP from the World Bank.

Figure 5
Fiscal Balance (Central Government), 1973-2002
(% GDP)



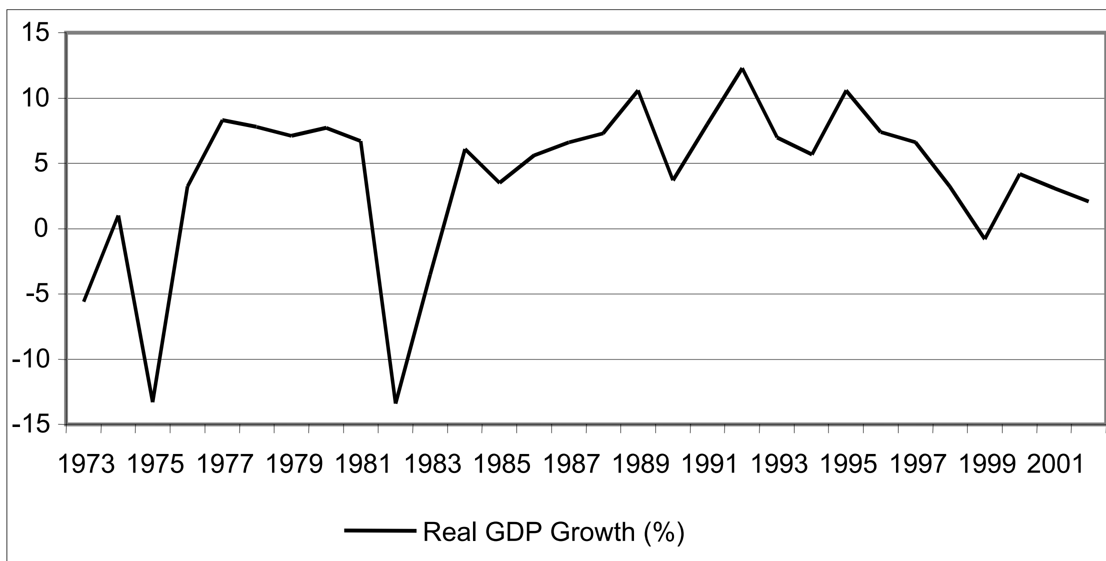
Source: Central Bank of Chile.

Figure 6
Inflation Rate (Dec-Dec), 1973-2002
(%)



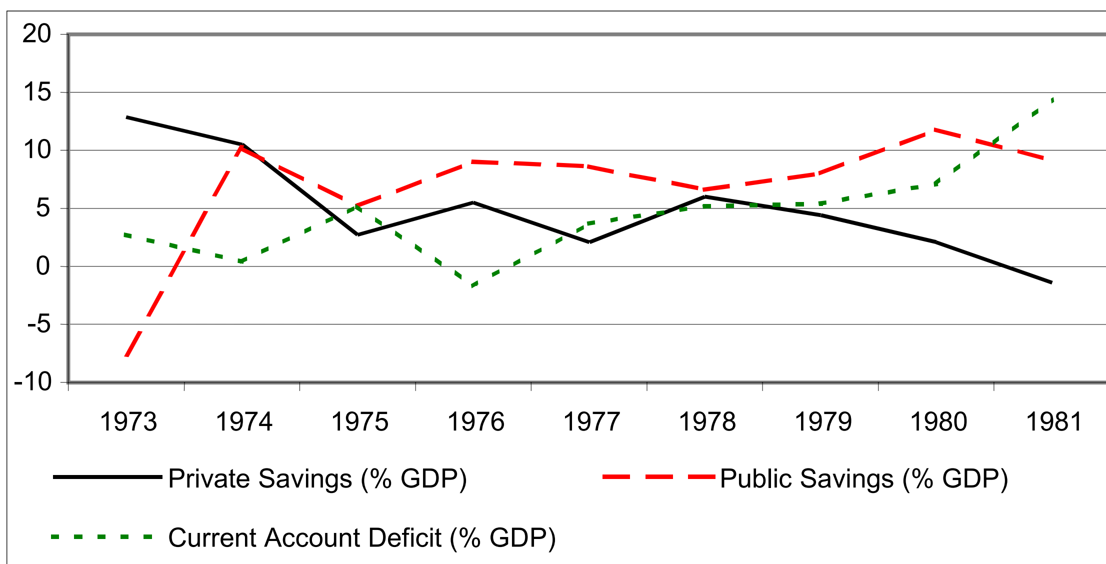
Source: Central Bank of Chile.

Figure 7
Real GDP Growth, 1973-2002
(%)



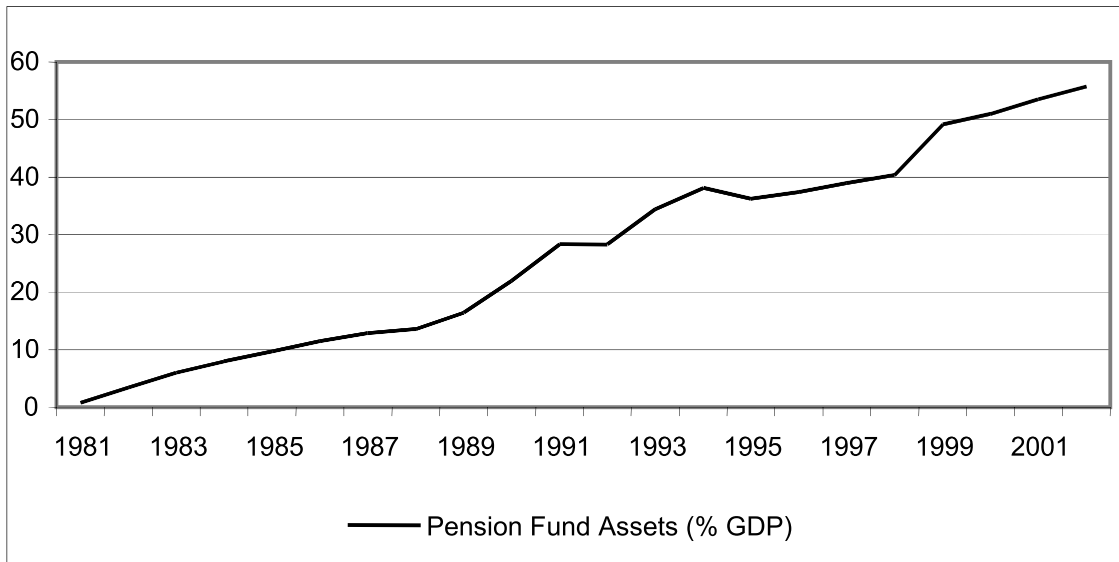
Source: Central Bank of Chile.

Figure 8
Private Savings, Public Savings and Current Account Deficit, 1973-1981
(% GDP)



Source: Central Bank of Chile.

Figure 9
Pension Fund Assets, 1981-2002
(% GDP)

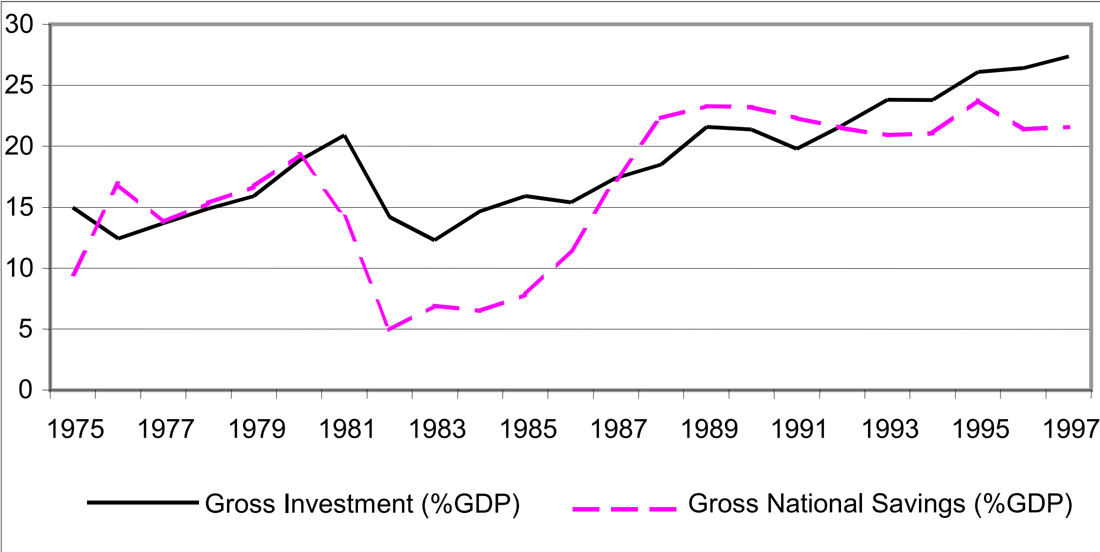


Source: AFPs Superintendency.

Figure 10
Unemployment Rate, 1975-2002
(%)

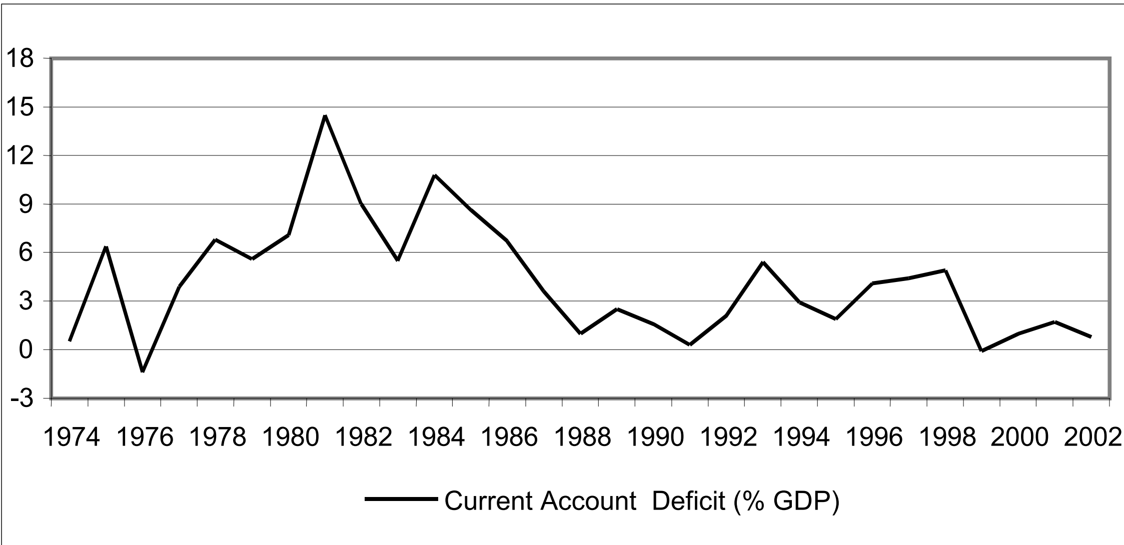
Source: Central Bank of Chile.

Figure 11
Gross Fixed Capital Formation and Gross National Savings, 1975-2002
(% GDP)



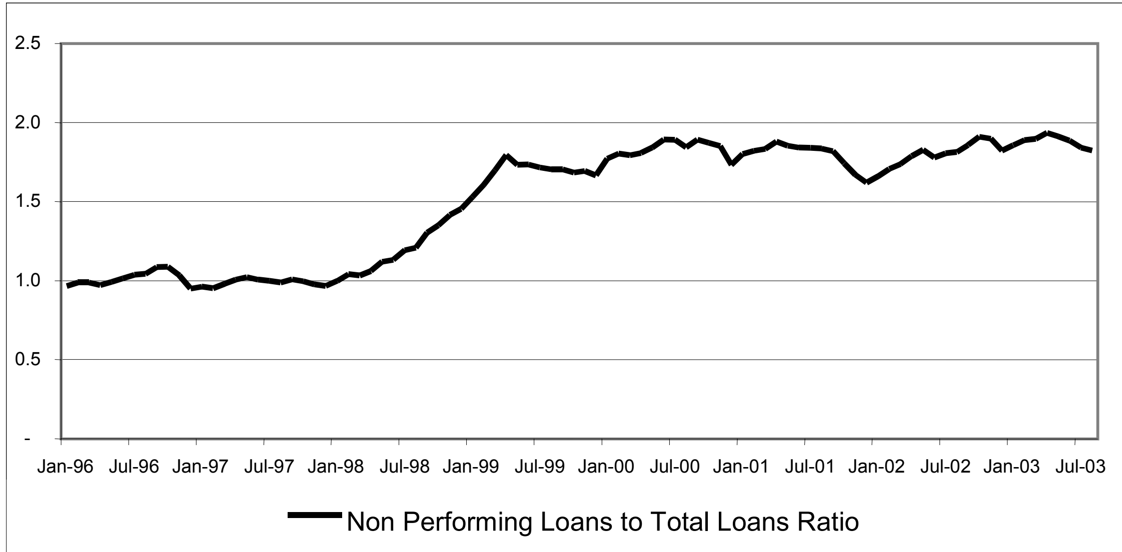
Source: Central Bank of Chile.

Figure 12
Current Account Deficit, 1973-2002
(% GDP)



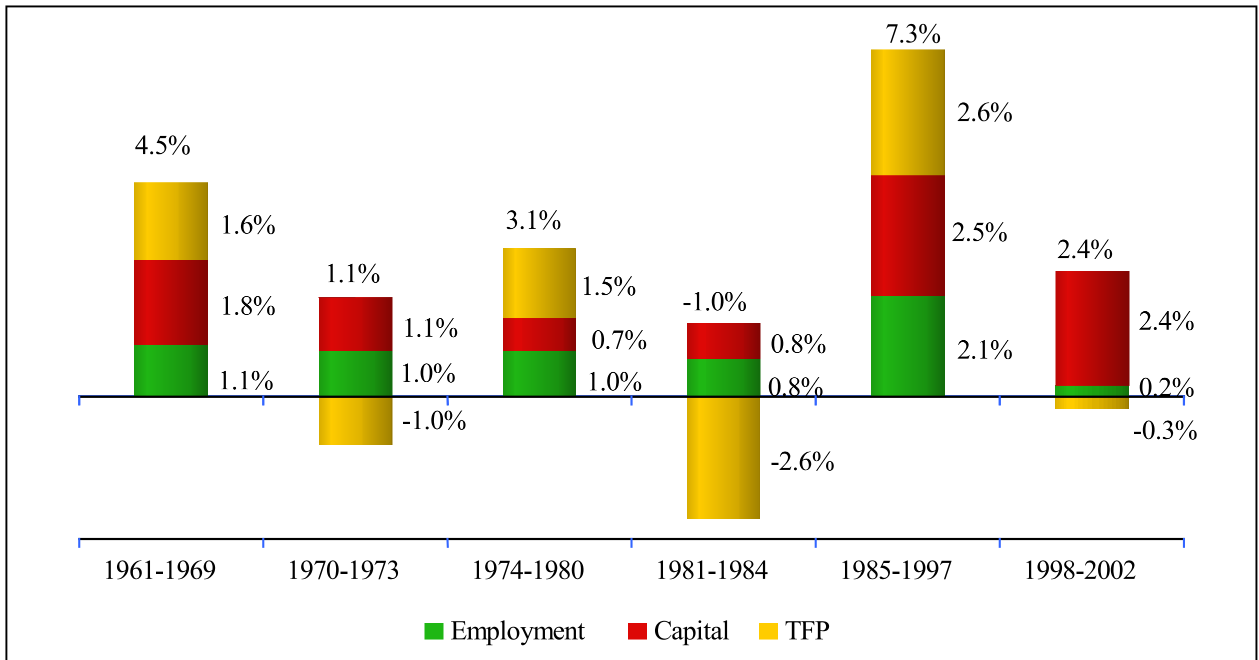
Source: Central Bank of Chile.

Figure 13
Non Performing Loans to Total Loans Ratio, 1996-2003



Source: Central Bank of Chile.

Figure 14
Solow's Decomposition of Economic Growth



Source: Authors' estimations.

Table 1
Chile: Main Macroeconomic Indicators, 1973-2002

	Inflation (Dec-Dec, %)	Real GDP Growth (%)	Fiscal Balance* (% GDP)	Current Account Deficit (% GDP)	Unemployment Rate (%)	Gross Fixed Capital Formation (% GDP)	Gross National Savings (% GDP)
1973	508,1	-5,6	-30,5				
1974	369,2	1,0	-5,4	0,5		17,0	
1975	343,3	-13,3	-2,0	6,4	14,9	15,0	9,5
1976	197,9	3,2	4,0	-1,4	12,7	12,4	16,9
1977	84,2	8,3	0,4	3,9	11,8	13,7	13,8
1978	37,2	7,8	1,6	6,8	14,2	14,9	15,3
1979	38,9	7,1	4,8	5,6	13,6	15,9	16,7
1980	31,2	7,7	6,1	7,1	10,4	18,8	19,3
1981	9,5	6,7	0,8	14,5	11,3	20,9	14,2
1982	20,7	-13,4	-3,4	9,0	19,6	14,2	4,9
1983	23,1	-3,5	-3,0	5,5	14,6	12,3	6,9
1984	23,0	6,1	-4,3	10,8	13,9	14,7	6,5
1985	26,4	3,5	-2,6	8,6	12,0	15,9	7,8
1986	17,4	5,6	-2,1	6,7	10,4	15,4	11,5
1987	21,5	6,6	1,9	3,6	9,6	17,4	17,3
1988	12,7	7,3	1,0	1,0	8,0	18,5	22,3
1989	21,4	10,6	1,4	2,5	7,1	21,6	23,3
1990	27,3	3,7	0,8	1,6	7,4	21,4	23,2
1991	18,7	8,0	1,5	0,3	7,1	19,8	22,3
1992	12,7	12,3	2,2	2,1	6,2	21,7	21,5
1993	12,2	7,0	1,8	5,4	6,4	23,8	20,9
1994	8,9	5,7	1,6	2,9	7,8	23,8	21,1
1995	8,2	10,6	2,4	1,9	6,6	26,1	23,8
1996	6,6	7,4	2,1	4,1	5,4	26,4	21,4
1997	6,0	6,6	1,8	4,4	5,3	27,4	21,6
1998	4,7	3,2	0,4	4,9	7,2	27,0	21,2
1999	2,3	-0,8	-1,4	-0,1	8,9	22,2	21,0
2000	4,5	4,2	0,1	1,0	8,3	23,0	20,6
2001	2,6	3,1	-0,3	1,7	7,9	22,9	20,0
2002	2,8	2,1	-0,8	0,8	7,8	22,7	21,0

* Central Government
Source: Central Bank of Chile.

Table 2
Fiscal Revenues Composition, 1987-2002
(%)

	1987	1989	1996	1999	2002
Income Tax	14.5	18.2	23.6	22.6	27.7
Value-Added Tax	45.1	45.9	47.9	48.4	48.4
Specific Taxes (alcohol, tobacco, gas, etc.)	15.5	11.8	11.0	14.1	13.7
Legal Acts Tax	7.0	8.2	3.8	4.2	4.4
Trade Taxes	14.5	14.8	11.9	9.2	5.7
Others	3.4	1.0	1.8	1.4	0.2
Total	100	100	100	100	100

Source: Budget office, Chile (2002).

Table 3
Past Due Loans over Total Loans (%), Banks and Financial Companies

Year	%
1979	1.6
1980	1.1
1981	2.3
1982	4.1
1983	8.4
1984	8.9
1985	3.5

Source: Held (1989).

Table 4
Actual Inflation and Inflation Target
(%)

Year	Inflation Target (%)	Effective Inflation (%)
1991	15-20	18.7
1992	13-16	12.7
1993	10-12	12.2
1994	9-11	8.9
1995	9	8.2
1996	6.5	6.6
1997	5.5	6
1998	4.5	4.7
1999	4.3	2.3
2000	3.5	4.5
2001	2-4	2.6
2002	2-4	2.8

Source: Central Bank of Chile.

Table 5
Determinants of the Jump in TFP Growth during 1990-1998

	Compared to:		
	1961-69	**1970-79**	**1980-89**
Total to be explained	2.5	4.6	4.5
Structural Reforms	2.5	1.7	0.6
Fall in Inflation	0.7	4.5	0.4
External Conditions	-0.1	-3.2	0.9
Political Rights	-0.7	1.6	2.3
Others	0.2	0	0.3

Source: Jadresic y Zahler (2000).

Table 6
Contribution to the Change in Growth, 1986-1998 v/s 1970-1985

Total difference in growth to be explained		4.74%
Unexplained		1.11%
Explained		3.63%
	Initials conditions	0.14%
	Human Capital	1.45%
	External Conditions	-1.44%
	Structural Macro Policies	0.99%
	Institutions	1.23%
	Policy Complementarities	1.26%

Source: Gallego y Loayza (2002).