

Chile

Institutions and Policies Underpinning Stability and Growth

Eliot Kalter, Steven Phillips, Marco A. Espinosa-Vega,
Rodolfo Luzio, Mauricio Villafuerte, and Manmohan Singh



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The following symbols have been used throughout this paper:

. . . to indicate that data are not available;

— to indicate that the figure is zero or less than half the final digit shown, or that the item does not exist;

– between years or months (e.g., 2003–04 or January–June) to indicate the years or months covered, including the beginning and ending years or months;

/ between years (e.g., 2003/04) to indicate a fiscal (financial) year.

“n.a.” means not applicable.

“Billion” means a thousand million.

Minor discrepancies between constituent figures and totals are due to rounding.

The term “country,” as used in this paper, does not in all cases refer to a territorial entity that is a state as understood by international law and practice; the term also covers some territorial entities that are not states, but for which statistical data are maintained and provided internationally on a separate and independent basis.

Preface

Most of the material presented in this occasional paper was originally prepared as a selected issues paper for discussion at the IMF Executive Board. These selected issues reviewed the institutions and policies adopted by Chile in the past two decades that have enabled it to reduce its vulnerabilities while benefiting from the ongoing process of globalization.

The idea of publishing these issues as an occasional paper arose from the Executive Board's suggestion that this collection could provide a unified source of lessons for countries that, like Chile, are committed to undertake sustainable improvements to their economic policies and institutions. Since the publication is intended as a reference, it also includes some forward-looking suggestions.

The authors are grateful to the Chilean authorities for extensive and open discussions as well as for their assistance in providing data and other source material, and to a number of commentators for their patient feedback: Governor Vittorio Corbo, Finance Minister Nicolas Eyzaguirre, Economy Minister Jorge Rodríguez, Executive Director Guillermo LeFort, Antonio Ahumada, Jaime Crispi, Luis Eduardo Escobar, Helmut Franken, Rodrigo Fuentes, Leonardo Hernandez, Luis Oscar Herrera, Esteban Jadresic, Igal Magendzo, Mario Marcel, Jorge Perez, Bernardita Piedrabuena, Luis Salomo, Claudio Sapelli, Klaus Schmidt-Hebbel, Rodrigo Valdes, and seminar participants at the Central Bank of Chile. Finally, the authors are grateful to Andrew Swiston, without whose invaluable support this occasional paper could not have been prepared; Carmen Sanabia and Gloria Bustillo for their assistance in the preparation of the manuscript; and Esha Ray of the External Relations Department for coordinating production of the publication.

The opinions expressed in this paper are solely those of the authors and do not necessarily reflect the views of the IMF, its Executive Directors, or the Chilean authorities.

I Overview

Eliot Kalter

Throughout much of the twentieth century, Chile's economic performance was marked by low economic growth and high inflation. In sharp contrast, in the last twenty years Chile has enjoyed a strong and stable economy while the economies of many of its Latin American neighbors have stagnated and suffered repeated financial crises.

The remarkable turnaround of the Chilean economy reflects the authorities' sustained implementation of a broad range of policies, enabling the country to take advantage of an increasingly global environment that has presented dangers to other, less well-prepared countries. As recently noted by Carlos Massad,¹ the widespread disenchantment of the Chilean people with the policies and outcomes of much of the twentieth century set the stage for a major shift in policies. The Chilean authorities took advantage of this historic moment by taking difficult decisions to form a solid foundation for the future.

This occasional paper presents the primary institutions and economic policies that have led to Chile's successful record of stability and growth. The paper highlights the institutional factors that have enabled the Chilean authorities to sustain good policies over a long and particularly difficult period for many of its neighbors. It is apparent that the core of this policy stance is the combination of fiscal discipline and an open trade policy regime, coupled with carefully sequenced financial liberalization within a strengthened regulatory framework. These policies have been sustained—despite external and domestic forces to the contrary—because of carefully designed institutional arrangements that encourage policies oriented toward long-term success, shielding policymakers from the temptation to look for narrow or short-term gains at the potential cost of long-term stability.

Chile's long-term policy framework has protected its economy from the negative impact of "stop-go" capital flows that has accompanied financial global-

ization for many emerging market countries.² As a result, Chile has been able to take advantage of the increased growth prospects, stemming from its open external trade and capital markets without giving back these gains during financial crises.

Economic Performance

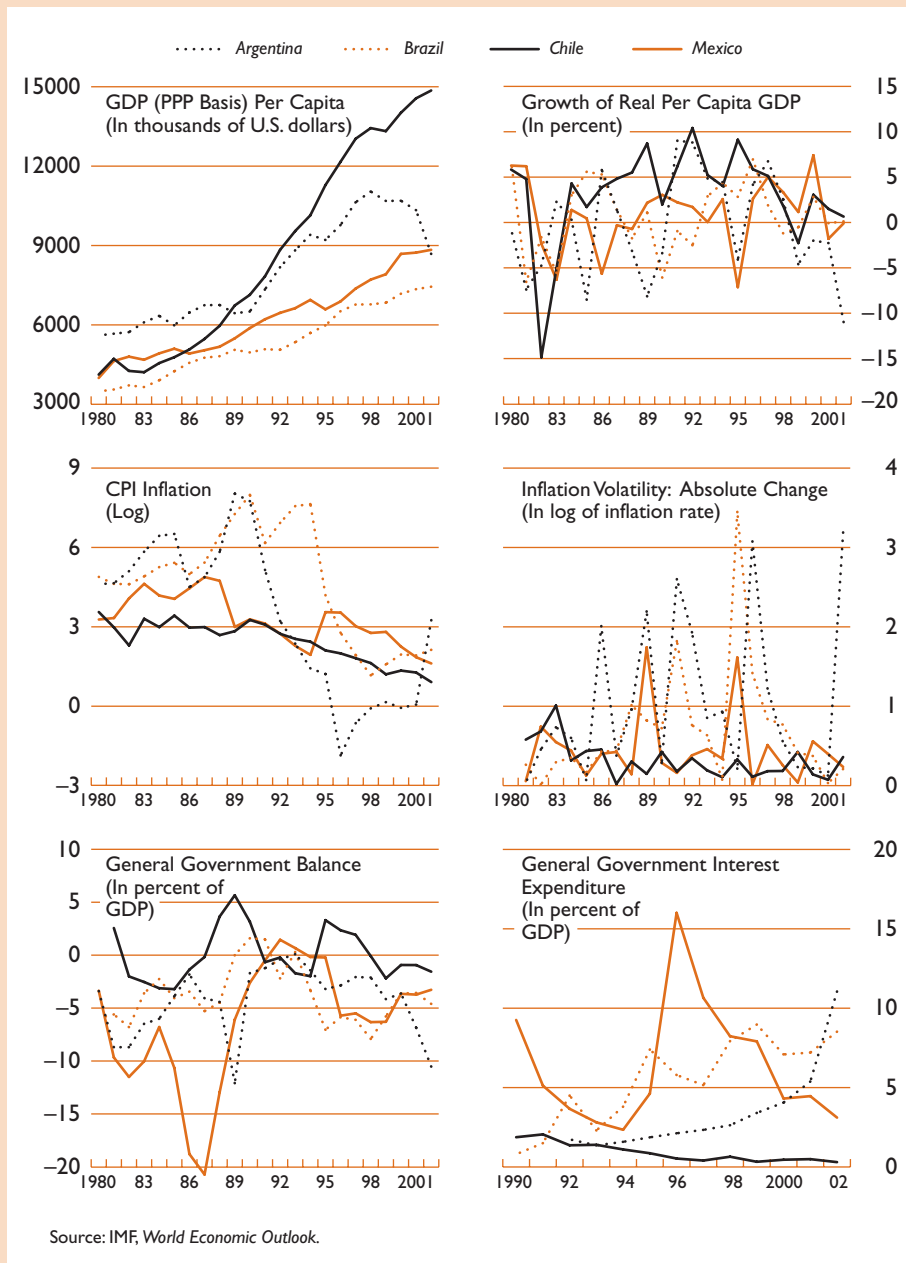
As Figure 1.1 illustrates, economic performance in Chile in the last two decades has been impressive in relation to other countries in the region.

- *Trend economic growth was faster in Chile (top left panel).* From 1984 to 1997 economic activity in Chile grew at an annual rate exceeding 7 percent, and was much faster in Chile than in other countries on average. Back in 1980, per capita income (adjusted on the basis of purchasing power parity) in Chile had been significantly below that of Argentina, essentially the same as Mexico's and not much above Brazil's. Two decades later, Chilean income was far ahead of the others' (twice that of Brazil, and over one and a half times those of Argentina and Mexico).
- *Economic growth was also smoother in Chile (top right panel).* Only Chile avoided a major episode of output contraction in the last 20 years. Chile's last crisis episode, in 1982, was however the worst of the group—only Argentina's decline in 2002 comes close. As discussed in Section II, this 1982 crisis proved a watershed for Chile, playing a critical role in reorienting economic policies and institutions.
- *Inflation was lower—and also less volatile—in Chile (middle panels).* From 20 percent in 1990, annual inflation declined steadily, down to 6 percent in 1997, and reaching the low single digits a few years ago.

¹Massad (2003).

²Calvo and Reinhart (2000).

Figure I.1. Chile and Other Latin American Economies: Selected Indicators



Policies Underpinning Success

Several economic and financial policies and institutional arrangements seem especially key to Chile's success:

- *Fiscal discipline has been strong in Chile.* Looking over the last two decades, only in Chile were

years of fiscal deficits roughly offset by years of surpluses; most Latin American countries displayed a bias toward deficits. As also shown in Figure 1.1, the reward has been a vastly lower debt-servicing burden for Chile, as fiscal discipline resulted not only in lower government debt but also in lower real interest rates.

- *The financial regulatory framework was strengthened and a deepening of domestic capital markets was encouraged.* Financial liberalization was a mainstay of policy reform in Latin America in the 1990s, mainly focusing on deregulation and privatization. However, supporting regulatory frameworks remained inadequate. Chile took strong actions to try to strike the right balance of market discipline and sound banking supervision.
- *Trade integration, in conjunction with a broad financial opening, was significant.*
 - Chile’s export sector, one of the most open and diversified in Latin America, has proven an important buffer against current account shocks. In general, Latin America’s trade sector is relatively small, and exports are often concentrated in a few commodities. This has increased the region’s vulnerabilities to current account shocks due to the high ratio of foreign debt to exports and the large real exchange rate depreciation needed to have a significant impact on the economy.
 - Chile’s growth potential likely gained from its high degree of trade integration. Numerous empirical studies indicate that countries with open trade regimes have grown more quickly than those with a lower degree of international integration.³
- *Institutional arrangements were set to create a more certain macroeconomic environment.* Sound economic policies and reforms have been carried out within an incentive-based institutional framework to avoid their reversal when they become inconvenient or costly in the short run. The institutional arrangements, inter alia, have reduced the incentives problem that elsewhere have led to a chronic lack of fiscal discipline, complex and distorted trade policies, and runaway moral hazard in the financial system.

Four Thematic Areas of This Paper

With a view to enhancing our understanding of the Chilean experience—including both accomplishments and areas for potential improvement—the contributions of this paper are grouped in four thematic areas: the macroeconomic and institutional framework; recent developments in financial markets; an assessment of the domestic position of the public sector and the country’s external position; and the role of

exports in economic growth. While recognizing that one country’s route to success is not fully transferable to other emerging market economies, the paper presents what may be a useful reference on the Chilean experience in these four areas.

Macroeconomic and Institutional Framework

A sizable literature has documented Chile’s sound economic policies over the last decade, but less attention has been given to the factors behind the adoption and continuation of such policies.⁴ Section II of this paper takes a long view of Chile’s reform experience and considers the role played by institutional factors in Chile’s economic policies and performance. It presents a deeper view of the Chilean experience by considering how institutional arrangements may have helped policymakers to identify and implement, and then maintain, sound policies.

The review of Chile’s institutions focuses on four policy objectives which make up the core areas of IMF work and where it is widely acknowledged that Chile has been particularly strong: sustaining fiscal policy discipline; policies to maintain price stability; policies that promote financial stability; and an open and stable trade policy regime. Among the numerous institutional arrangements discussed, the constitutional features that have promoted fiscal discipline—including budget process rules and the tight constraints on subnational governments—and effective central bank independence have been especially important.

In recent years, and building on its institutional foundations, Chile has refined its macroeconomic policy framework. Having exited its exchange rate band arrangement without a crisis, Chile opted for a floating exchange rate system. In addition, the country gradually settled into a full-fledged inflation-targeting framework and a fiscal rule.

Section III of the paper describes the main elements of the inflation-targeting framework in Chile, which currently consists of (1) a prespecified continuous inflation target band; (2) a preannounced “policy horizon”; and (3) timely communication of the authorities’ inflation forecast, the rationale for their policy decisions, and the reasons for any temporary deviations from the inflation target. The paper argues that an important supplement to this framework is the absence of an exchange rate target. Chile’s exchange rate policy calls for zero exchange intervention, with the possibility of intervention only under exceptional circumstances. When intervention does take place, the authorities announce the event, reveal

³For example, see Dollar and Kraay (2003).

⁴For example, see Schmidt-Hebbel (1999) and the references therein.

the amount of the intervention, and most importantly do not target a specific exchange rate.

Section III also explains the mechanics of the fiscal rule. This mechanism has increased transparency and accountability by defining a specific medium-term fiscal policy path that removes policy discretion while not suppressing automatic stabilizers. The use of expert panels to determine cyclical adjustments to meet the rule has enhanced transparency and credibility.

Recent Developments in Financial Markets

The privatization of pension funds' management, capital market reforms, and macroeconomic stability have worked to deepen capital markets in Chile.

Section IV reviews the development of domestic capital markets and corporate financing in recent years and draws on remaining policy challenges going forward. The analysis underscores the role of macroeconomic policies and structural reforms as the driving factors underpinning the development of local securities markets in the 1990s. The presence of a well-developed and large institutional investor base has also played a fundamental role as a stable and growing source of domestic finance. While equity markets expanded rapidly in the early 1990s, the domestic corporate bond market has experienced a remarkable resurgence since 2000 as large corporate firms, in particular, sought to time the market following the sharp drop in domestic interest rates.

Despite this progress, the future development of domestic capital markets faces key challenges related to the low liquidity in equity and corporate bond markets and the high degree of ownership and investor concentration. Recent changes in financial regulation and legislation have sought to address concerns about the relative depth of capital markets and effectiveness of corporate governance while improving capital market regulation. Policymakers have thus been actively working to improve financial market infrastructure, seeking to establish appropriate incentives to harness market discipline and self-regulation. As demonstrated by the recent reforms, the authorities have underscored the role of bridging missing markets, promoting liquidity and transparency, and providing incentives to wider access to investment resources.

The banking system has been another key player in the allocation of credit to the private sector. For the last twenty years, the Chilean banking system has had access to fairly strong technology to evaluate consumers' creditworthiness. And since the mid-1980s, it has enjoyed a reputation for stability and strength, while continuing to evolve.

Section V provides an update on the Chilean banking system, indicating that it continues to remain robust, and also highlighting structural features

and recent developments. In particular, the section documents the recent "Inverlink" case, in which a corrupt private financial company fell, after having sold stolen government securities to the market. This case originated outside of, but nevertheless had repercussions for, the banking system. The section discusses the responses of the authorities to this episode, both the immediate actions to address liquidity needs, as well as forward-looking measures to improve financial security. It also describes key factors behind the active role played by banks in the allocation of credit to the private sector.

The Domestic Financial Position of the Public Sector and the Country's External Financial Position

The assessment of the public sector finances is favorable. Since risky balance sheet structures have been avoided, exposure to currency and interest rate risks is limited. The analysis in Section VI suggests that as long as the government's fiscal structural balance target continues to be met, the public finances will remain sustainable.

Section VI makes use of newly available balance sheet data on the debt and financial assets of the Chilean public sector. Much of the analysis centers on the finances of the central government. Taking into account the government's structural balance target, it is difficult to see debt sustainability problems emerging, as long as this target is met (or fiscal policy otherwise remains restrained). The section also examines the central bank's balance sheet, including its tendency to run a modest operational deficit. It notes the considerable strength of the central bank in terms of foreign exchange and liquidity positions. Though the bank's deficit has been fairly stable and has not interfered with its monetary policy objectives, the section suggests some steps, including a capital injection from the government, that could be taken to improve its financial position. The situation of the public enterprises appears sound, especially in light of their overall profitability and limited debt.

An assessment of the country's external financial position also requires a close look at the external position of the corporate sector, including the relationship with parent companies. An important source of vulnerability for many countries is their external financial position. How resilient a country is to external liquidity squeezes on the balance of payments will determine, in many instances, whether a country encounters a bump on the road or a full-fledged crisis.

Section VII assesses Chile's external position, integrating information on the country's international investment position and structure of external debt. The analysis considers the possibility of an external liquidity shock on the balance of payments while

testing for potential solvency problems. The approach combines the standard IMF debt sustainability analysis framework and alternative tests using data on Chile's international investment position. The analysis focuses on (1) the external debt dynamics; (2) the sensitivity of gross external financing requirements to specific shocks; and (3) the implications of Chile's international investment position for external vulnerability.

The analysis underscores the strength of Chile's aggregate external position. In a standard debt sustainability framework, various hypothetical shocks would lead to a substantial, though temporary, increase in the external debt-to-GDP ratio. However, the risks of these standardized shocks seem remote, given the strength of Chile's current policy framework. Liquidity problems are not expected given the country's significant liquid foreign assets, held by both the public and private sectors. Chile's large foreign asset–liability structure is another source of strength. The large foreign direct investment in Chile helps explain the observation that foreign-owned Chilean resident firms hold more than half of Chile's total external debt. Sensitivity analysis using the net international investment position also shows the dampening effects of the large direct investment on the country's aggregate net liability.

Export Specialization and Economic Growth

Not all countries have benefited equally from globalization. Furthermore, there is some economic literature suggesting a negative relationship between natural resource exports and long-term growth. Chile is well known for its early, often unilateral, aggressive trade liberalization efforts. Therefore it is worth looking into Chile's experience.

Section VIII suggests that Chile has benefited from increased integration with the global economy. Chile's export sector has promoted competitiveness, positive spillovers, and economic growth. The section's conclusions are based on the analysis of the role, past and prospective, of exports in the growth of the Chilean economy with a focus on export specialization: in the Chilean case, following comparative advantage often has meant exporting goods that are natural resource based. The section offers a critical assessment of the notion that such exports are necessarily stagnant and have a negative impact on a country's rate of growth. In the case of Chile, these exports have been associated with positive spillovers leading to the creation of new products, emphasizing the need to promote human capital accumulation in order to take advantage of these spillovers, increase productivity, and continue diversifying the Chilean export basket.

References

- Calvo, G., and C. Reinhart, 2000, "When Capital Inflows Suddenly Stop: Consequences and Policy Options," in *Reforming the International Monetary and Financial System*, ed. by P. Kenen and A. Swoboda (Washington: International Monetary Fund).
- Dollar, D., and A. Kraay, 2003, "Institutions, Trade, and Growth," *Journal of Monetary Economics*, Vol. 50, No. 1 (January), pp. 133–65.
- Massad, C., 2003, "The Chilean Experience from the 1990s," CSIS Report (Washington: Center for Strategic and International Studies).
- Schmidt-Hebbel, K., 1999, "Chile's Takeoff: Facts, Challenges, Lessons," in *Chile, Recent Policy Lessons and Emerging Challenges*, ed. by G. Perry and D. Leipziger (Washington: World Bank).