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LEADERSHIP, POLICY-MAKING PROCESS,
POLICIES, AND RESULTS**

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CHILE'S GROWTH AND DEVELOPMENT: LEADERSHIP, POLICY-MAKING PROCESS, POLICIES, AND RESULTS

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Organization for Economic
Cooperation and Development

Resumen

Este documento analiza la interacción entre el liderazgo, el proceso de diseño e implementación de políticas, las políticas propiamente tales y las instituciones, y los resultados en términos de desarrollo para Chile. Comienza con un modelo estilizado para la dinámica del desarrollo que deriva una relación tipo Kuznets entre crecimiento y distribución del ingreso, determinada por la calidad del liderazgo, el proceso de diseño e implementación de políticas, las instituciones y las políticas mismas. Este esquema se aplica a Chile, identificando los rasgos del proceso de diseño e implementación de políticas y del liderazgo que permitieron continuar las reformas pro crecimiento, con énfasis en los objetivos de equidad, a partir de la transición hacia la democracia. En tres décadas de reformas, Chile dio un salto cuántico en materia de crecimiento económico, el que se puede atribuir a reformas específicas. Sin embargo, la experiencia del país en cuanto a equidad es mixta: la pobreza se ha reducido en forma ostensible, pero el ingreso sigue estando altamente concentrado, resultado probable de fallas en la calidad de la educación y en el mercado laboral. El artículo revisa los principales riesgos que enfrenta el desarrollo futuro y delinea los principales desafíos que deberán abordar las autoridades en materia de reformas. El trabajo concluye con diez lecciones que se pueden extraer de la experiencia chilena.

Abstract

This paper analyzes the relations between leadership, the policy-making process, policies and institutions, and development results in Chile. It starts with a stylized model for the dynamics of development that derives a Kuznets-type relation between growth and distribution of income, determined by the quality of leadership, the policy-making process, institutions and policies. This framework is applied to Chile, identifying the features of the policy-making process and leadership that allowed for continuation of growth-enhancing reform, with a stronger focus on equity goals, since the transition to democracy. As a result of three decades of reforms, Chile has recorded a quantum leap in economic growth, which is traced down to specific reforms. Yet Chile's equity experience is much more mixed: poverty has declined massively but income remains highly concentrated, a likely result of shortcomings in the quality of education and in labor markets. The paper reviews the major risks to the country's future development pace and points out the main reform challenges faced by policymakers. Ten lessons from Chile's experience close the paper.

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1. INTRODUCTION

Chile's development experience reflects some idiosyncratic features, including growth-enhancing reforms adopted by an autocratic government, a smooth political transition to democracy, continuation of reforms under democracy with a stronger focus on equity goals. However, Chile's case shares sufficient common elements with other developing countries to offer valuable insights on the links between politics, policies, and development results. Therefore the objective of this study is to assess the relations between leadership, the policy-making process, policies and institutions, and development results in Chile.

Section 2 spells out a general framework for the dynamics of growth and equity, determined by the features and the quality of political leadership, the policy-making process, institutions, and policies. Section 3 applies the latter model to Chile, assessing the exercise of leadership and the features of the policy-making process under democracy, and reviewing the reforms of institutions and policies under autocracy and democracy. Section 4 reviews Chile's growth and equity performance. It focuses on the GDP growth record, its proximate causes and deeper policy determinants, and revisits the country's growth and distribution dynamics using the framework spelled out in section 2.

The key development risks and reform challenges faced by Chile are discussed in section 5. Ten lessons from Chile's experience, based on the previous sections, are derived in section 6. The paper closes with concluding remarks.

2. A FRAMEWORK FOR THE ROLE OF LEADERSHIP, THE POLICY-MAKING PROCESS, INSTITUTIONS, AND POLICIES IN SHAPING GROWTH AND EQUITY

2.1 Policy Hierarchy, Development, and Democracy

I start by distinguishing between three levels of the institutional/policy hierarchy: political institutions, economic institutions, and economic policies. This distinction is helpful in analyzing subsequently the links between a society's institutional/policy hierarchy and a society's main achievements: development and democracy. The three levels of the hierarchy are closely related to the new institutional development economics, as reflected for example in Acemoglu, Johnson, and Robinson (2001, 2002, and 2005) and Rodrik, Subramanian, and Trebbi (2002).

At the most basic level of the institutional/policy hierarchy are political institutions, comprised by legal and social organizations, laws, and regulations that define national values and individual rights, state organization, government functions, and the balance of power. Examples of political institutions include constitutions, laws and regulations, and state and government bodies.

Economic institutions are at a second level. They are comprised by constitutional principles and regulations that influence private-sector behavior and decisions, and by government institutions that take economic decisions and/or regulate and supervise private

markets and agents. Economic institutions are derived from or embedded in political institutions. Examples of economic institutions are the central bank charter and organization, tax codes, electric utility regulation and supervision, and social insurance laws.

At the hierarchy's third level are economic policies: the regimes and policy principles that shape and limit the contents and daily exercise of economic decisions by government authorities. They are based on, and conform to, economic and political institutions. Examples of economic policies include the choice of exchange-rate regime, price controls, and transfer programs to poor families.

Institutions and policies shape the two fundamental outcomes in a society: development and democracy. Development is defined here in a narrow sense, being reflected in a society's average income (or consumption) level and equity. Equity reflects a combination of the distribution of income (or wealth or consumption) among all members of a society, their opportunities for material progress, and the number of members of society afflicted by poverty. The latter definition of development – reflecting income and equity indicators – represents a widely accepted function of a society's material welfare and its distribution, but is different from even wider measures of ultimate happiness achieved by the members of a society.¹ This study focuses on the latter, more limited concept of development.

Following conventional usage, democracy is defined here as a form of government that combines three essential, interdependent principles: the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders, the existence of institutionalized constraints on the exercise of power by the executive, and the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation (from the Polity IV Project; see Marshall and Jaggers 2004).²

Political institutions, as key pillars of the organizational structure of a society, shape the form of government (democracy) and determine both economic institutions and economic policies (Diagram 1). Economic institutions, by shaping economic policies, have a major impact on development (growth and equity). The new institutional development economics underscores the importance of economic institutions for achieving higher growth, in contrast to previous views (i.e. the Washington Consensus, see Williamson, 1990) that focused more narrowly on economic policies and their reforms trigger for growth. Rodrik (2005) warns against the temptation of policymakers to map first-order (universal) economic principles into unique policy packages, recommending to consider carefully local opportunities and constraints in the design of policies and institutions.

¹ A small but growing economics literature focuses on the measurement and determinants of happiness, including Morawetz (1977), Di Tella et al. (2001), and Ferrer-i-Carbonell and Frijters (2004).

² Other aspects of plural democracy, such as the rule of law, systems of checks and balances, and freedom of the press, are means to, or specific manifestations of, these general principles.

Development and democracy interact positively (e.g., Przeworski et al., 2000). The dual challenge of development and democracy is to trigger sustainable reforms of political and economic institutions to break the vicious circle of underdevelopment and autocracy, in order to start a virtuous and sustainable path of high growth, improving equity, and broad-based political participation.

2.2 Leadership, Policy-Making Process, Institutions and Policies

The preceding framework scratches only at the surface of the links between institutions, policies, democracy, and growth. We have to dig deeper for a better understanding of the processes governing the relations between policy inputs and outcomes. This requires identifying more closely the roles and relations of three key aspects of policies: leadership, the policy-making process, and reforms of institutions and policies.

Leadership (L) – both political and economic leadership – is the ability of authority to initiate and sustain institutions and policies (IP) in support of development and democracy. L entails initiating and reforming IP in a way that translates into an effective policy-making process (PMP).

Leaders are shaped – that is, the quality of leadership is shaped – by:

- institutional and political constraints (i.e.: constraints on corruption)
- rules of the PMP
- interests and goals of groups or parties represented by the leaders
- incentive structure faced by leaders
- efficiency of the state
- economic and political results (elections and other expressions of political legitimacy).

The PMP comprises the ways and stages in the conduct of policies and the reforms of IP by the political leadership. The PMP is determined by following political-institutional factors:

- democratic organization of government
- government system
- electoral system and resulting party system
- state efficiency: government bureaucracy, judiciary (independence, efficiency), parliament (auditing and control).

The PMP is also shaped by social norms and implicit institutions and rules that characterize the political culture and social capital of a country. However, because they are difficult to define and measure, it is hard to identify causal relationships from these “soft” features to PMP.

I follow the political economy literature based on repeated games (Spiller and Tommasi 2003, applied by Aninat et al. 2006 to Chile) in identifying six features of the PMP that contribute to attaining cooperative outcomes among the main players (government and opposition, as well as other actors):

- (i) high degree of shared interests and views (consensus) among players,
- (ii) small immediate benefits from renegeing on agreements,
- (iii) small number of decision makers,
- (iv) repeated interaction among decision makers (repeated game),
- (v) easy observation of deviations from agreed-upon behavior, and
- (vi) availability of credible enforcement mechanisms.

Now let's turn to institutions and policies. The reform of IP – designing and putting in place effective IP – is key for development. Yet underdevelopment itself is often a hindrance to reform. Therefore the main triggers of adoption of programs of IP reform are:

- (i) domestic political crises or changes (ends of war, new governments) and domestic economic crises, and/or
- (ii) foreign triggers, including foreign aid conditionality, political or economic association with other countries, changes in international conditions (i.e., major international trade or financial shocks), demonstration effects of internationally successful policies (policy learning)

Sustainable reforms of IP go through the following stages:

- (a) negotiation among main actors and affected groups,
- (b) institutional or policy design,
- (c) experimentation,
- (d) full-scale implementation,
- (e) corrections, and
- (f) ensuring long-term sustainability.

Reforms could result in failure or reversal because of one or several of the following factors:

- bad technical design
- negative interaction with lack of reform in other areas (a form of bad design)
- poor implementation
- lack of democratic legitimacy and political sustainability (done under autocracy; benefit minorities)
- reform reversal due to growing influence of reform losers (which could be few but powerful).

On the other hand, the likelihood of reform success and sustainability is raised by one or several of the following conditions:

- strong influence of technocrats in reform design
- reforms represent interests of majorities (i.e., the “representative consumer”)
- if politically required, reforms allow for compensation of losers
- reforms are enacted democratically

- reforms are shaped by a PMP that favors cooperative outcomes.

The main features of reforms of IP are reform strength or depth (shallow or partial vs. deep or comprehensive), speed (gradualism versus cold turkey), timing (when), and sequencing (in relation to other reforms). A significant analytical literature has developed since the 1970s on the latter reform features, focusing on positive and normative (welfare) aspects of reforms, as well as on their political economy. Most of the latter literature focuses on particular reforms (like macroeconomic stabilization, pension-system reform or anti-poverty programs) or on partial aspects of comprehensive reform programs (e.g., sequencing of trade and financial liberalization, speed of macro stabilization).

Not many sturdy inferences can be derived from the latter literature, due to its largely partial and restrictive focus.³ The latter is largely unavoidable due to the complexity and country-specificity of reforms. Among the exceptions to the latter conclusion are a few lessons on optimal reform sequencing.⁴ More recently, Hausmann, Rodrik, and Velasco (2005) have developed a framework of “growth diagnostics” that complements Rodrik’s (2005) “growth strategies”. Their novel approach focuses on deriving a country’s key policy priorities from identifying the most binding constraints on economic activity. While their framework is based on an explicit general-equilibrium model that embeds economic and political constraints, its practical application is untested yet.

My inference from the world experience and literature on IP reforms since the 1970s is that effective leadership and the quality of the policy-making process are more important for successful adoption of better IP than reform features like optimal timing, speed, or sequencing of reforms. Timing, speed, and sequencing should not be fine-tuned. As long as good L and PMP are in place, and reform capacity and willingness are not strained beyond their limits, the sooner, the quicker, and the more good reforms of IP are designed, executed, and followed through, the larger will be their development impact.⁵

Now we turn to the complex relations between reform efforts (or the quality of IP) and development results (growth and equity). While there has been analytical and empirical

³ Sturzenegger and Tommasi (1998), Agénor and Montiel (1999), and Agénor (2004) review the positive economics and the political economy literature on reform gradualism and sequencing. My reading of the latter reviews is that specific conclusions yielded by the analytical models on reform speed and sequencing are highly model-dependent. Results are hard to generalize because the underlying models assume specific forms of initial and/or non-removable distortions. Often the models abstract from general-equilibrium features and from interactions between positive economics and political-economy aspects. Finally, most models abstract from country-specific conditions that shape reforms in the real world.

⁴ One general conclusion is that macroeconomic stabilization should not come after sector and microeconomic reforms, and that trade liberalization should precede financial liberalization (Agénor and Montiel 1999, Agénor 2004).

⁵ Hausmann et al. (2005) contradict this conclusion, arguing that “Do as much as you can, as best you can” is faulty in its logic because of second-best arguments (not every reform is welfare-improving, given other distortions) and because of the differential welfare impact of different reforms. However, second-best measures of reforms are hard to consider in practice (and should not be used in practice, as suggested by Hausmann et al.) and differential welfare impacts of reforms – considering adequately their positive economic and political costs – are also very hard to come by in practice.

progress in better understanding the latter relations, they are still largely a black box. Among the many possible reasons, I selectively list some of them next:

- Lack of deep macroeconomic foundations that link IP to economic outcomes (particularly true for “soft” institutions, like transparent government, central bank independence or bankruptcy legislation)
- Feedback effects from results to IP (e.g., bad economic results may trigger election losses or, if political institutions are weak, to coups d’etat, leading to further changes in IP)
- Non-linearities and threshold effects between IP and results; critical mass of political will/capability, leadership, human resources in government required for effective reform (e.g., between IP and growth, between IP and democracy)
- Non-monotonocities between economic results (e.g., between equity and growth: the Kuznets curve)
- Path dependence (initial conditions matter both for IP and their reforms, and for economic results)
- Multiple equilibria (similar initial conditions can lead to widely different development paths, depending on particular components of IP and exogenous shocks (good luck, neighborhood and demonstration effects)
- Interaction effects between institutions and policies in different areas: key to consider by governments at reform design and implementation stages
- Interaction effects between institutions and policies in different areas: key in estimation of results (e.g., growing empirical evidence for growth performance).

Without forgetting about the latter difficulties, Diagram 2 makes an attempt to depict the complex relations between IP and economic and political results. It represents the key role of L, PMP, and the conditions for attaining cooperative outcomes, as a result of the quality of IP, with feedback effects from the quality of leadership. Social norms and the political culture of a society also shape the PMP and the leaders’ own interests and incentives, conditioned by the efficiency of the state, also affect the quality of leadership.

The PMP determines the contents and quality of policies and reforms of IP, and the latter impinge on economic and political outcomes. Good IP lead to good outcomes, with positive feedback for political stability. In contrast, badly designed, implemented or enforced IP lead to bad results. The latter are rejected by the population, leading to electoral rejection and a democratic change in government if political institutions are strong and democracy is entrenched. When political institutions are weak, bad results may lead to political crises, armed domestic conflict, and violent overturn of government, in turn leading to further change in L, PMP, and IP. Hence the challenge of development and democracy is to get societies on a virtuous path of improved L, PMP, and IP, leading to high growth, better equity, and a stronger democracy.

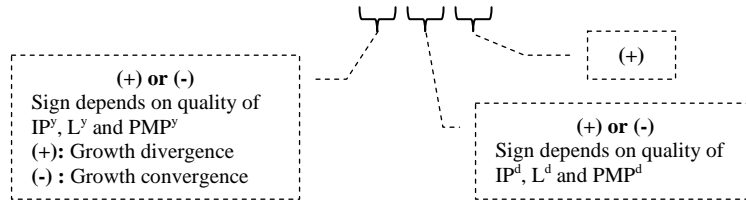
2.3 A Simple Dynamic Model of Growth, Distribution, IP, L, and PMP

In this section I present a simple stylized model for the dynamic relation between the quality of institutions and policies (IP), leadership (L), and the policy making process

(PMP) in determining the growth of a society's average level of income (or output) and the change in a measure of society's distribution of income among its members.

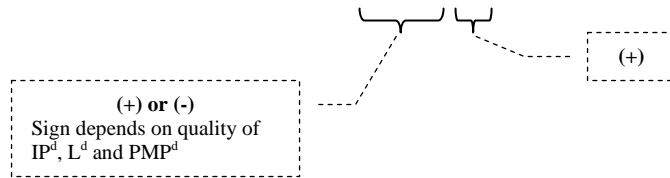
Per capita GDP growth (\dot{y}) is specified as a function of y , the current level of per capita GDP; d , a measure of income distribution; and X , a vector of relevant growth determinants:

$$\dot{y} = f(y, d, X, \dots) \quad (1)$$



The change in income distribution (\dot{d}) is specified as a function of y , d , and Z ; a vector of relevant determinants of a better income distribution:

$$\dot{d} = g(y, d, Z, \dots) \quad (2)$$



where IP is a vector of measures of the quality of institutions and policies, comprised by three subvectors: $IP = [IP^y, IP^d, IP^0]$, L is a vector of measures of the quality of leadership, comprised by three subvectors: $L = [L^y, L^d, L^0]$, and PMP is a vector of measures of the quality of the policy-making process, comprised by three subvectors: $PMP = [PMP^y, PMP^d, PMP^0]$.

The three sub-vectors in each vector represent sets of key determinants of the sign of the corresponding partial derivatives. The sub-vectors denoted by super-index y comprise variables within IP , L , and PMP that are key in determining the sign of the influence of income levels on growth (equation 1). The sub-vectors denoted by super-index d comprise variables that are key in determining the sign of the influence of the level of distribution on growth (equation 1), as well as the signs of the influence of both y and d in the change of income distribution (equation 2).

High levels of quality of income-relevant institutions and policies (IP^y), leadership (L^y), and policy-making process (PMP^y) contribute to high growth and hence, growth convergence to the international income frontier. In the latter case, the partial derivative of GDP growth to the GDP level is positive. By contrast, low levels of quality of the latter three sets of variables lead to growth stagnation or low growth – “divergence, big time”

(Pritchett 1997). In this case, the partial derivative of GDP growth to the GDP level is positive. Similar arguments apply to the role of the quality of distribution-relevant IP^d , L^d , and PMP^d in determining the corresponding partial derivatives.

There are many combinations for the dynamics of income growth and income distribution changes, depending on the signs of the corresponding partial derivatives, determined by the levels of the income-related and distribution-related components of IP, L, and PMP. Here I focus only on three possible combinations, selected for their relevance for the international development and growth experience, and for Chile's case discussed below.

The first case (Case A, depicted in Figure 1) reflects a low income and equity trap, determined by the low quality of IP, L, and PMP, reflected in the corresponding partial derivatives of the growth and distribution equations summarized in Figure 1. The steady-state equilibrium represents economies trapped at low income levels. Any deviation from the stationary equilibrium will lead to either oscillatory dynamics around the steady-state equilibrium or a diverging (explosive or implosive) path for GDP and distribution.

Case B (Figure 2) reflects stable development dynamics that are consistent with growth convergence and deteriorating (improving) income distribution when income is below (above) the steady-state equilibrium. Growth convergence (the negative partial derivative of GDP growth to GDP levels in the growth equation) is caused by the better quality of IP^y , L^y , and PMP^y , in comparison to the low-income and distribution trap of Case A.

Case C (figure 3) reflects a second scenario of stable development dynamics, which now are consistent with growth convergence and improving (deteriorating) income distribution when income is below (above) the steady-state equilibrium. The latter distribution dynamics (the negative partial derivative of the change in distribution to the GDP level) are caused by the better quality of IP^d , L^d , and PMP^d , in comparison to the two preceding cases.

Now let's combine the three preceding cases into one development story that is coherent with the Kuznets (1955) interpretation of a non-monotonic (quadratic) relation between per-capita income levels and the distribution of income.⁶ Figure 4 embeds the dynamics of cases A, B, and C. Case A reflects those countries that are trapped at low levels of income and income distribution, as a result of the very poor quality of their institutions, policies, leadership, and policy-making process. With improving IP, L, and

⁶ Several explanations have been provided for an inverted U-shaped relation between inequality and income, including the development transition from agriculture to manufacturing (Kuznets 1955), the existence of European settlers and the transition from subsistence agriculture to commodity exports and to manufacturing (Easterly 1993). However, the evidence on the existence of the Kuznets curve is disputed. For example, Barrios and Strobl (2005) provide supportive evidence while Anand and Kanbur (1993), Adams and Page (2003), and Kustepeli (2006) reject the existence of an inverted U curve in cross-country data. Results seem to be dependent on the country sample, methodology, choice of inequality measure, and the time horizon selected in empirical work.

PMP, low and middle-income countries that are on a growth-convergence-but-distribution-deteriorating dynamic equilibrium move along the D1–D2 dynamic path toward a steady-state equilibrium that is consistent with case B. Finally, middle-income countries that are on a growth-convergence-and-distribution-improving dynamic equilibrium move along the D3–D4 dynamic path toward a steady-state equilibrium that is consistent with case C. The latter stationary equilibrium is depicted in Figure 4 as consistent with the high income and good-distribution condition that characterizes industrial countries.

The shift from, the dynamics of case B to those of case C is caused by better IP, L, and PMP conditions, beyond a threshold level. In other words, when the quality of IP, L, and PMP attain a certain level, growth convergence continues but income distribution, instead of deteriorating, starts to improve, taking middle-income countries on a virtuous development path. The latter is coherent with the Kuznets' view of development, reflected by the shift in dynamics embedded in the full D1 – D2 – D3 – D4 development path.

Finally consider a simple exercise of comparative dynamics that affects the world's growth and income distribution levels and dynamics. The ongoing integration of China and India into the world economy doubles the world's supply of unskilled labor, depressing the world's unskilled wages and raising the returns on skilled labor and capital (Freeman 1995, 2005). This leads to a deterioration in the world's average level of distribution and a higher average level of world income, both in the short term and in the very long term. The corresponding downward-right shift in the Kuznets curve is depicted in Figure 5 as a shift in the D1-D2-D3-D4 development dynamics, leading to a new developed-country stationary equilibrium of higher GDP ($\bar{y}_1 > \bar{y}_0$) and worsened distribution ($\bar{d}_1 < \bar{d}_0$). The short-term impact goes in the same direction, as suggested by recent world evidence.

3. LEADERSHIP, POLICY-MAKING PROCESS, AND REFORMS IN CHILE

In this section I apply part of the framework presented in section 2 to Chile, assessing the features and quality of leadership, policy-making process, institutions, and policies, as well as their links. This requires distinguishing between two very different periods: autocracy and democracy, briefly reviewed below. The subsequent analysis focuses largely on Chile's development under democracy, because leadership and the policy-making process under autocracy is unique to that regime and hence devoid of lessons for the future.⁷

3.1 Autocracy and Democracy

The period of autocracy or dictatorship (1973-1990) started with a military coup against the Allende government. Its initial conditions were characterized by deep political and economic crisis. The military regime introduced profound changes in institutions and policies, many geared at consolidating the new political regime, while others aimed at a radical overhaul of economic institutions and policies. Structural changes in the economic sphere embodied a revolutionary shift toward a deregulated and open market economy

⁷ Aninat, Landregan, Navia, and Vial (2006) and Chumacero, Fuentes, Lueders, and Vial (2006) present very valuable assessments of Chile's politics, reforms, and results.

based on private ownership, away from a highly-regulated closed economy dominated by state property and government control. The reforms adopted during the 1970s and 1980s aimed primarily at attaining macroeconomic stabilization and high growth, with a moderate focus on poverty alleviation and showing little concern for the distribution of income and wealth.

The exercise of dictatorship implied that the PMP under autocracy encountered few constraints, with little need of negotiation and consensus building. Political opposition was suppressed by legal means and large-scale violation of human rights.

Economic leadership was exercised without the constraints imposed by democracy, making adoption of deep reforms of institutions and policies easier, but at the risk of major blunders and biases in the reform process. Examples of the latter were the policy mistakes that led to the 1982-1983 recession and a bias in reform benefits toward the governing elite (reflected for example in the way privatization of state-owned enterprises was conducted). However, macroeconomic stabilization and structural reforms adopted during autocracy were largely geared at raising income growth of the “representative citizen”, laying the foundations for Chile’s high-growth path attained since the mid-1980s. This achievement stands in stark contrast to most other contemporary autocratic regimes in Latin America and Africa, which saw little growth-enhancing reforms of institutions and policies.

Due to its autocratic context and origin, the future sustainability of reforms – beyond the military regime – was far from assured. In fact, due to the lack of democratic context and legitimacy, the deep reforms of economic institutions and policies represented a highly risky strategy, prone to the likelihood of major reform reversal after transition to democracy.

The latter transition from military autocracy to democracy took place in 1990, under exceptionally favorable conditions that contributed to its smoothness and success. Autocracy allowed an endogenous transition to democracy, complying with its own rules of electoral rules of the game. The centre-left opposition to dictatorship accepted the latter rules and formed the broad-based *Concertación* coalition. The historic moment of transition was marked by the collapse of communism and the Soviet Union, contributing to the shift of thought of socialists toward social-democratic positions and formation of the *Concertación*. Finally, the reforms adopted by the military government were starting to bear their fruits, contributing to their legitimization and acceptance by the incoming democratic government.

The first and subsequent *Concertación* governments had two fundamental goals. Their main political objective has been the removal of autocracy’s constitutional constraints on full democracy, which has been largely attained by a sequence of legal reforms, the last one enacted in 2005. The *Concertación*’s initial and ongoing socio-economic objective is to lay the ground of a development path of high growth with improving equity. The accent on growth led to continuation and deepening of many growth-enhancing reforms that were adopted under autocracy. However, the focus on equity implies a significant departure change from autocracy, as a response to the conditions of widespread extensive poverty and unequal income distribution observed around 1990. The dual focus on growth and equity,

shaped by the interests of the *Concertación*'s electoral base, marks the reforms of economic institutions and policies enacted since 1990.

3.2 Leadership and the Policy-Making Process under Democracy

The quality and performance of Chile's political leadership under democracy are largely determined by the following legal and political constraints and traditions:

(i) Enforcement of institutional and political constraints imposed on abuse and corruption. There is generally low tolerance of the polity to abuse and corruption at the highest government levels. However, corruption tends to be observed at some of the lower and more decentralized levels of government.

(ii) Rules of the PMP. Chile has a highly legalistic approach to the PMP in the tradition of the French legal system, with strong weight attached to formal procedures enshrined by law.

(iii) Interests and goals of government coalition in power. With a strong emphasis on coalition programs and long-term holding of power, the *Concertación* coalition has a longer-term political horizon than parties or coalitions centered around strong charismatic leaders.

(iv) Incentive structure faced by leaders. Political reputation tends to dominate financial returns from holding power at high government levels, attracting able leaders that are paid only moderate wages.

(v) Central government bureaucracy efficiency. On average (but with a significant dispersion) the bureaucracy of the central government is well trained and provides relatively efficient services to both the leadership and the general public.

(vi) Sensitivity to economic and political results. Leadership is significantly influenced by economic and political performance (including opinion polls and elections), yet avoiding populism most of the time.

Chile's policy-making process under democracy is determined by the following political-institutional factors:

(1) Democratic organization of government. With the return to democracy, Chile attained a high level of democratic rule, which was further improved in subsequent years (Table 1). Political leadership is strongly bound by the constitutional rules of the game.

(2) Strong presidential system. The government system is rooted in a presidential system with strong executive dominance in the policy-making process, reflected in government veto points and government initiative in several domains of lawmaking.

(3) State organization. Chile has a unitary (non-federal) state organization that endows the central government with all relevant decision-making powers regarding regional policies.

(4) Binominal electoral system. Chile's "two-past-the-post" electoral system results in a stable party system dominated by two party coalitions (the government *Concertación* coalition and the opposition *Alianza* coalition), avoiding the veto powers of small parties outside the two coalitions.

(5) State effectiveness / efficiency. Adjusted for the country's income level, Chile's state and government powers and functions display reasonably high levels of efficiency (see below).

(6) Negotiations and policy agreements. The policy-making process relies frequently on government negotiation and policy agreements with the opposition, responding to both constitutional constraints and the need of policy-making legitimacy.⁸

Following Spiller and Tommasi (2003), I identify next the main features of Chile's PMP that contribute to attaining cooperative outcomes:

- (i) A high degree of shared interests and views (consensus) among players, as a result of:
 - collective memory of the costly high-conflict period (1969-1988)
 - large, unprecedented influence of professional economists in politics and in policy design and implementation
- (ii) Small immediate benefits to the government of the opposition obtained from reneging on agreements
- (iii) Small number of decision makers: two large coalitions and diminished role of other actors (armed forces, trade unions, Catholic Church, business associations)
- (iv) Repeated interaction among key decision makers (repeated games based on reputation)
- (v) Deviations from agreed-upon behavior are easily observed, due to increasing role of transparency of political agreements
- (vi) Existence of credible enforcement mechanisms.

3.3 Reforms of Institutions and Policies

Reforms under autocracy took place under very different conditions than under democracy, for the reasons that were spelled out above. Yet it is revealing to review the

⁸ This was particularly the case until 2005, when the opposition controlled parliament due to constitutional constraints inherited from autocratic rule. With the 2005 constitutional change, the government coalition controls parliament, reducing the latter's need for attaining lawmaking agreements with the opposition.

main domestic and foreign triggers of reforms that were adopted during the full reform period, starting in 1973:

- (i) Domestic factors:
 - Major 1970-1973 political/economic crisis (1973 hyperinflation – see Figure 6) and 1973 coup d'état crisis: leads to comprehensive programs of macroeconomic stabilization and structural reforms
 - 1990 return to democracy: continuation of economic reforms and stronger focus on equity goals
 - Moderate political crisis in early 2000s triggered by corruption scandals: leads to negotiated program of reform of the state.
- (ii) Foreign factors:
 - recurring external crises in the 1970s and 1980s trigger domestic crises and subsequent reforms (e.g.: persistent loss in terms of trade since 1975 – see Figure 7; strong cycles in capital inflows)
 - since the 1980s: demonstration effects of successful reform and growth experiences in the UK (1980s), East Asia (since the 1980s), Central and Eastern Europe (since the 1990s), and small OECD countries (including Finland, Ireland, and New Zealand).

The stages of Chile's reforms of institutions and policies during democracy display the following features:

- a) The first stage of preparation of large reforms under the current Bachelet administration has been entrusted to special presidential commissions responsible for preparing reports with background analysis and specific technical recommendations about the contents of the reforms. The latter commissions (listed in section 5 below) are comprised by a variable number of sector specialists, economists, and interest-group representatives; some commissions have issued public documents with substantial and detailed recommendations.
- b) The second stage of preparation of reforms is at the cabinet level, involving technical commissions under the responsibility of one or several ministers.
- c) Government negotiation of reforms with the opposition is highly variable, depending on the needs of parliamentary votes and political legitimacy.
- d) Government negotiation with negatively affected groups (reform losers) is highly variable, ranging from nil (example: privatization of public enterprises in the 1990s) to moderate (example: free-trade agreements), and to very large (teachers' union representatives in 2006 Education Reform Commission; workers' vetoes to 2007 public port privatization).
- e) There is generally no or little compensation of reform losers (one exception: workers of state coal mines closed down were significantly compensated for job losses in the late 1990s).

f) Institutional or policy design of reforms is heavily influenced by technocrats in general and economists in particular. For example, the latter are highly represented in the presidential reform commissions of the current Bachelet administration.

g) Reform experimentation ranges from nil to very little. For example, there are very few cases of experimentation of new social policies in small communities and pilot cases.

h) Full reform implementation is generally well executed and accords with reform blueprints. A major exception is the badly implemented (and designed) 2007 Santiago public transport plan.

i) Corrections and fine-tuning of complex reforms are introduced frequently, ranging from design to implementation (examples: pension system reforms and electric utility pricing and regulation).

j) Long-term reform sustainability is generally ensured by good design, ability to introduce corrections, and political legitimacy of reforms.

Chile's success in reforming economic institutions and policies has been the result of the following features:

- Chile has been and is at the world design and implementation frontier in many reform areas (e.g. pension systems, public-private partnerships, free-trade agreements, inflation targeting, fiscal policy rules – see Figures 8 and 9)
- Radical economic reforms undertaken under autocracy were legitimized and often improved upon under democracy
- Subsequent reforms under democracy are legitimized by democratic implementation
- Reform design generally represents the interests of majorities (or the “representative consumer”)
- Positive interaction and threshold effects with reforms in complementary areas have reaped (as discussed below)
- Low likelihood of reform reversal due to weak influence of reform blockers/losers
- Large national consensus on reform needs (e.g. candidates' programs in 2005 presidential elections were largely shaped and written by economists)
- Policies and institutions are perfected by learning from mistakes (e.g. financial reforms and the role of bank regulation and supervision, exchange-rate regimes)
- Competent bureaucracy (in some key government institutions) support effective reform implementation
- Public-enterprise privatization and public-private partnerships are complemented with government regulation and supervision in new areas (e.g., pensions, infrastructure concessions)
- Rules versus discretion: Chilean reforms tend to favor adoption of rules and regulations, limiting the scope for government discretion (e.g., monetary, fiscal, and exchange-rate policies; government pricing, regulation, and supervision of private firms in natural monopolies).

Regarding reform features – including reform depth, speed, timing, and gradualism – Chile’s experience since the 1970s points toward three conclusions:

(1) Reforms have often been deep and broad in scope, and cutting across different reform areas. According to a measure of structural reform progress in different areas, many reforms took place in the late 1970s, were somewhat reversed in the early 1980s, and have continued at a more moderate pace since the mid-1980s to date (Figure 10). Deep and broad reforms have included macroeconomic policy reforms (leading to high levels of macroeconomic stability and credibility; Figures 8 and 9), domestic financial and capital-market reforms, international trade and financial reforms (leading to free and full integration into the world economy; Figures 11 and 12), and pension system reform, among others.

(2) Many reforms have been very gradualist. For example, Chile adopted the most gradualist inflation stabilization experience in world history: it took 28 years to reduce inflation from 1000% in 1973 to 3% in 2001. Regarding trade openness, import tariffs were reduced from a 100% average tariff rates in 1974 to a flat 11% in 1991 to an average 2% in 2007 (the average of a flat 6% for non-FTA imports and 0% of FTA imports).

(3) Little attention has been paid by reforming governments to optimal timing and optimal sequencing of reforms. Reforms were adopted because of conviction of political leadership, taking into account their perceived reform support and the restrictions and features of the policy-making process that were discussed above.

4. CHILE’S DEVELOPMENT RESULTS: GROWTH AND EQUITY

This section reviews Chile’s growth and equity performance. It focuses on the GDP growth record, its proximate causes and deeper policy determinants. Then the mixed performance of equity is revised, mentioning some of its likely determinants. Finally, Chile’s growth and distribution dynamics are revisited, making use of the framework developed in section 2.

4.1 Growth

As a result of the reforms started in the 1970s, Chile made a quantum leap in its growth performance. After an average annual per-capita GDP growth of 1.5% per year during the 180 years since its independence (1810-1990), per-capita growth rose to 4.1% in 1991-2005 (while the world recorded 1.4% average annual per-capita GDP growth of 1.4% in 1991-2005) (Figure 13). Chile’s accelerated growth path reduced its relative income gap with industrial countries and put it at a distance with most developing economies, except the high-growing East Asian economies (Figure 14).

In comparison to its own history, Chile’s improvement in the first moment of growth was matched by an improvement in the second moment, as growth volatility fell after 1990 to its lowest level recorded since the early nineteenth century (Figure 15). The standard deviation of per capita GDP growth declined from 6.6% in 1810-1990 to 3.1% in 1991-2005.

What is behind Chile's growth spurt? Conventional growth-accounting exercises focus on the proximate sources of growth: capital, labor, and total factor productivity (TFP). Larraín, Fuentes, and Schmidt-Hebbel (2006) show that the growth gains recorded since 1990 have been due to larger capital investment and aggregate efficiency gains reflected in higher TFP growth (Figure 16).⁹ The latter growth decomposition also shows that average efficiency payoffs from the 1973-1989 reforms were on average nil during the later period, materializing with a substantial time lag, since 1990.

Splitting the 1990-2005 performance into two reveals very different sub-periods (Figure 17). GDP growth declines from an average 7% in 1990-1997 to only x% in 1998-2005. While the absolute contribution of capital investment remains high during the latter sub-period, TFP growth declines by half and employment levels declines. This reflects the fact that the massive deterioration in growth and its determinants observed since 1998 has a large cyclical component. In fact, more recent figures for 2004-2007 (5.4% average estimated GDP growth) point toward a significant recovery of growth, employment, and TFP. Yet it is highly uncertain how much of the growth decline since the late 1990s is due to cyclical conditions and how much comes from lower trend growth – an issue to which I will come back below.

Now let's turn to the contribution of deeper growth determinants, those that are behind higher growth of reproducible factors of production (physical and human capital) and higher efficiency gains. Using cross-country growth regressions that highlight the contribution of institutions and policies to growth, Calderón and Fuentes (2006) contrast Chile's 3.6% average annual growth gain between 1981-1985 and 1996-2000 to that observed in major world regions and identify its largest determinants (Table 3). The major factors behind Chile's growth rise are improvements in institutions (contributing 0.9%), trade and financial opening (1.1%), macroeconomic stabilization (0.9%), the lower ratio of government spending to GDP (0.8%), and human capital accumulation (0.5%). In comparison to other regions, the role of better institutions and macroeconomic stabilization in raising growth is particularly large in Chile.

Focusing on the determinants of TFP growth in Chile during a longer time horizon (1963-2005), Fuentes, Larraín, and Schmidt-Hebbel (2006) identify the massive improvement in institutions and policies (measured by the structural reform index measured depicted in Figure 10) as explaining much more than 100% of the improvement in TFP growth during the last four decades (Table 4). The latter improvement much more than offsets the very negative effect of the major terms-of-trade loss suffered by Chile during the same time span.

Hence there is significant statistical evidence that better institutions and policies – brought by the reforms started in the mid-1970s and continuing to date – are the main

⁹ The three periods 1960-1973, 1974-1989, and 1990-2005 were selected by Larraín et al. (2006) because they reflect similar business-cycle conditions as the breaking points (years 1973-1974 and 1989-1990) exhibit relatively low unemployment rates. Hence average growth and factor accumulation rates in each period are relatively unbiased by cyclical growth.

driving factor behind Chile's quantum leap in GDP (and TFP) growth. Gallego and Loayza (2002), using a somewhat different methodology, complement the latter results. They estimate that circa 1% of Chile's growth acceleration can be explained by reform threshold effects and interactions of progress in different institutional and policy reform areas. This result underscores the importance of Chile's experience in advancing in different reform areas, ranging from legal and economic institutions to macroeconomic stabilization, and from sector reforms to improved social programs.

Which is a reasonable estimate for Chile's potential (or trend) GDP growth rate? Chile's actual average annual GDP growth, during the recent cyclically balanced period that extends from 1990 to 2007, has been 5.4%, equivalent to a 4.2% annual average per-capita GDP growth. However, as an unobservable stochastic variable, potential growth cannot be measured – it can only be inferred from empirical estimates and simulations. Current estimates for potential or trend GDP growth are close to 5% (Schmidt-Hebbel 2006). The latter figure is confirmed by the most recent estimates of the independent panel of experts consulted by the Ministry of Finance for the 2008 budget for the structural budget surplus rule (Ministry of Finance 2007). The panel's median estimate for the medium-term (2008-2012) GDP growth projection is a flat annual 5%.

4.2 Equity

Chile's equity experience is much more mixed than its growth record. On the positive side is the massive and systematic reduction in poverty levels. The population share living in poverty (extreme poverty) has declined from 28% (17%) in 1987 to 11% (3%) in 2006 – a two-decade poverty reduction that is matched by only a few other development cases.

On the negative side is income distribution. Household survey data show that income is highly concentrated in Chile and the relative income distribution remains largely unchanged between 1990 and 2003 (Tables 6 and 7). The same survey data indicate that consumption expenditure levels have become somewhat more equal across households. The last survey (for 2006) shows an improvement in income (and consumption) distribution, reflected by a significant reduction in the aggregate income Gini coefficient from 0.57 to 0.54. However, it is obviously too early to infer if the latter improvement marks the start of a trend improvement or reflects a single outlier of a generally stagnating distribution in Chile.

In contrast to income distribution, Chile is internationally well positioned in quality-of-life and human-development indicators. This reflects the major progress in the incidence of poverty. For example, while child malnutrition was considered a major public health concern in Chile during the 1960s, child obesity – particularly among low and middle-income groups – is considered a public health epidemic in Chile today (Mardones 2006).

Regarding government's social and anti-poverty programs – including general and targeted social government spending and transfer programs – they have helped in reducing poverty but have had little impact on overall income distribution in Chile. The tax system does also not alter much the pre-tax distribution of income (Engel and Galetovic, 1999).

Poverty has declined largely because of high growth, less because of government programs (which is consistent with Eyzaguirre and Larrañaga 1991).

Why is income so unequally distributed in Chile? Beyond ultimate historical and socio-cultural factors, some studies have identified Chile's labor-market features that contribute to the high concentration of income and wealth. They include the low quality of education (Contreras 1999), a high average unemployment (Larrañaga 2001), and a low female labor force participation (Larrañaga 2001).

4.3 Dynamics of Growth and Income Distribution in Chile

Now I turn back to the relation between average income levels and income distribution and the dynamics between growth and distribution. First I consider Chile's position in the world distribution of per-capita GDP and income concentration (measured by the Gini coefficient) in the 1990s (using available UN-WIDER data; Figure 18). The cross-country data allows to estimate a non-monotonic relation between both variables that is consistent with the Kuznets hypothesis. Against this curve, Chile is a clear outlier. Considering its GDP level, Chile's Gini coefficient is some 15% higher than that of a country that conforms to the Kuznets relation.

For the time dimension, I now use Chilean income distribution data for a longer time horizon (1960-1997) from the University of Chile Employment Survey. This data is less reliable than the 1990-2006 data from the CASEN survey. However, it provides a useful first approximation to the evolution of income distribution from the 1960s through the 1990s. Combining the latter data as a distribution indicator (the inverse of the Gini coefficient) with per-capita GDP data allows to depict their relation during the last four decades in Chile (Figure 19). The data suggests that income distribution deteriorated significantly after the mid-1970s, with a partial recovery during the 1990s. Yet during the 1990s the Gini coefficient (an average 53%) was still significantly higher than during 1960-1975 (an average 46%).

The relation between income distribution and per-capita GDP show in Figure 19 seems to suggest that Chile's time-series experience is consistent with a Kuznets curve. While this reading of the data is tempting, one should bear in mind that the 1960-1997 income distribution data has drawbacks, the sample period includes significant recession periods in the 1970s and 1980s that lower the distribution indicator (the Gini coefficient is counter-cyclical), and a decade of post-1997 data is excluded (including the last 2006 survey that shows an improvement in income distribution).

Having the latter limitations in mind, now I apply the simple dynamic framework for growth and distribution spelled out in section 2 to interpret Chile's experience in the light of the latter model. With potential GDP growth at around 5% and a stagnating (or somewhat improving) level of high income concentration, Chile may be at some point between D2 and D3 along its growth-distribution path depicted in Figure 20. Therefore the country is probably at a juncture where the quality of policy-making, leadership, institutions, and policies could enable it to jump on a dynamic path of improving

distribution and high growth. In terms of figure 20, Chile's development challenge is to get on the D3-D4 train.

5. CURRENT RISKS AND CHALLENGES TO CHILE'S FUTURE DEVELOPMENT

In the following, I identify the key risks to Chile's future development path and review reform challenges in key areas, faced by the current Bachelet administration and by future governments.

5.1 Risks

Chile faces two major risks in its attempt to catch the development train. One is related to growth, the other to equity.

As discussed above, current and medium-term potential growth has been estimated at 5% for Chile. Future growth projections are generally unreliable, as they are based on recent performance or simple assumptions that are often inadequate for assessing future performance. In the case of Chile, the high-growth period has not been sufficiently extended to discard it as temporary, with the country relapsing to its historic growth of circa 3%. Reversion to the mean has been indeed the fate of most growth spurts observed in the world (Rodrik 2005). Chile could only be an exception to growth reversion if it continues adopting and extending growth-enhancing institutions and policies, and if it goes on improving the quality of its leadership and policy-making institutions.

The second risk faced by Chile is continuing stagnation of income and wealth distribution at current high levels of concentration, with little extension of the current set of limited opportunities to overcome poverty or near-poverty. This adverse scenario is bad for the welfare of the poor, for social and political stability, and for growth. Chile's current economic condition – and in particular the government's exceptional financial condition, reflected in an estimated cumulative 40% rise in real government spending during 2004-2008 – represents a unique opportunity for designing and implementing social programs focused at extending the opportunity set of the lower-income population.

This raises a related risk: adoption of social policies and government programs that contribute to alleviate poverty and reduce income concentration, but at the cost of imposing major distortions that lower growth. There is a large world experience of well-intended but badly designed social policies – ranging from traditional unemployment benefits to many government transfer programs – that lead to growth stagnation and, in the end, little improvement of poverty and income distribution. Hence Chile should be particularly careful in identifying potentially stiff trade-offs between efficiency and equity in the design or reform of social policies.

5.2 Reform Challenges

Having in mind the latter risks, the country faces significant reform challenges to improve both growth and equity prospects. Many of these challenges are tackled by the

current Bachelet administration, reflected in proposals worked out by special government commissions, legislative projects submitted to and discussed by parliament, and correction of preceding reforms. The main challenges are in the following areas:

1. Education. The low quality of primary and secondary education in Chile is a major hindrance to higher growth and improved income distribution. The 2006 Education Reform Commission presented a large and heterogeneous menu of reform proposals, currently evaluated by the government and parliament.
2. Pension system. In order to tackle the main problems of the current pension system (low coverage, low first-pillar benefits, and lack of competition in the pension service industry), the 2006 Pension Reform Commission developed a significant reform proposal. Based on the latter report, the government presented a pension reform package parliament, which is likely to be approved, with amendments, in 2007-2008.
3. Innovation, Research, and Development. To address Chile's weaknesses in innovation, research, and development (low private spending on research and development, inadequate government incentives and programs, weak innovation and research activities and output), the 2006-2007 Innovation Commission is developing a comprehensive reform strategy that is likely to be translated in more government spending on innovation, a revamping of government programs, and improved incentives for the private sector in 2008-2009.
4. Labor markets. Chile's labor market laws and regulations reflect a mixed picture of partial flexibility and incomplete worker protection. Inefficient distortions (high firing costs, constraints on part-time and over-time employment) coexist with insufficient protection of low-skilled labor (weak to moderate collective bargaining strength of unions, low unemployment insurance benefits and little government support of low-income families). The recently formed Equity Commission faces a very stiff trade-off between efficiency and equity in designing its future proposals to improve labor markets and reduce poverty.
5. State and government reform. After the 2003 government reform (that improved transparency and competition in hiring and remunerating government service managers), an additional government transparency law is likely to be enacted by parliament in 2007. Yet efficiency of central, municipal, and decentralized government services is low to moderate on average, and exhibits large dispersion across different services and government levels. Public enterprises operate in many areas where government productive activity exhibits little comparative advantage. Corruption at decentralized and lower levels of government, and in public enterprises, is certainly not absent. Therefore a wide-ranging reform of government services and enterprises (including broad privatization) should be high on Chile's reform agenda.
6. Control of crime and violence. Like most countries, Chile faces escalating crime and violence. While high growth and improved equity are likely to reduce crime and

violence, a revamped government policy of sticks and carrots is required to stem the rise in crime that taxes investment and growth, and affects very adversely the welfare of the people, particularly the poor.

7. Improving on previous reforms. Key sectors have been reformed recently but require – due to inadequate reform design and implementation – further adjustments, which in fact are considered or under implementation by the current administration. The new universal health program started by the previous administration (*Plan Auge*) requires major improvements in implementation. The energy sector (after Argentine natural gas cuts and the rise in international oil prices) requires better incentives for an expansion of the private supply of traditional and new energy sources. Finally, Santiago’s new public transport plan – a basket case of bad design and implementation – requires a major redesign.

6. TEN LESSONS FROM CHILE’S EXPERIENCE

I derive ten lessons from the assessment of Chile’s development experience carried out in preceding sections.

1. Recent cross-country research and Chile’s own experience has shown that development success is not only determined by good economic policies but is fundamentally a result of well-designed and managed economic and political institutions that provide the foundation for good policies.
2. However, digging deeper reveals that the links from institutions and policies to development are mediated by good leadership and a stable policy-making process (PMP).
3. Good leadership, PMP, and institutions / policies are key in moving countries from stagnant development traps to strong dynamics of growth convergence and improved equity.
4. Good leadership is promoted by closely aligned individual and political incentives, well-designed political institutions that promote transparency and accountability (minimizing corruption), a stable PMP, and a moderately efficient state bureaucracy.
5. Chile’s PMP is determined by democracy, a strong presidential system, a binominal electoral system, and six major factors that contribute to attain cooperative political outcomes between the two dominant party coalitions.
6. Reforms of institutions and policies – triggered by political and economic crises during autocracy and by the return to democracy in 1990 – have been and are broad, deep, and sustained, with a strong focus on growth and, since 1990, an added focus on equity.

7. Economic growth, based on investment and efficiency gains due to reforms, has increased significantly.
8. Poverty has declined massively but income and wealth concentration has remained very high.
9. Chile's main current risks are a relapse to lower growth and lack of progress in equity improvement. A related risk is adopting social policies and government programs that contribute to alleviate poverty and reduce income concentration, but at the cost of imposing major distortions that reduce growth.
10. Therefore Chile's main challenge lies in a careful design, negotiation, and implementation of institutional and policy changes for future growth and equity gains that complement each other, avoiding stiff growth-equity tradeoffs.

All this requires further hard work by Chile's leaders and technocrats, which face the right incentives provided by strong institutions, an effective PMP, and democracy.

7. CONCLUDING REMARKS

I have reviewed in this paper the relations between leadership, the policy-making process, policies and institutions (I), and development results in Chile. As an organizing framework, I have sketched a model for the dynamics of growth and distribution – two key dimensions of development. A Kuznets-type dynamic relation between growth and distribution can be traced to changes in the quality of L, PMP, and I.

Chile has been lucky in two dimensions. First, the autocratic government (1973-1990) – notwithstanding its massive human-right violations – adopted growth-enhancing reforms of IP and permitted an endogenous, smooth transition to democracy. Second, the center-left coalition government that has governed Chile since 1990 has largely continued growth-supporting reforms, complemented by a stronger emphasis on poverty reduction and improved equity.

Yet luck has been complemented by hard work. The quality of leadership and the policy-making process is relatively high in Chile, considering the country's level of development. This can be traced to several constitutional and political constraints, features, and traditions that shape the behavior of leaders and the policy-making process.

As a result of the growth-enhancing reforms of economic institutions and policies since 1973, the improved political institutions since the return to democracy, a modern policy-making process, and strong political leadership, Chile has recorded a quantum rise in economic growth and reduced income volatility during the last two decades.

Chile's equity experience is much more mixed than its growth record. On the positive side is the massive, systematic reduction in poverty – but on the negative side is Chile's highly concentrated income distribution. The latter is likely a reflection of

education and labor-market features that contribute to high concentration, including the low quality of education, high average unemployment, and low female labor force participation.

Chile faces two major risks in its attempt to catch the development train. One is a relapse from recent and current high growth to its historically low growth rate. The second is continuing stagnation of income distribution and equity. Both risks are bi-causally related. The higher is long-term growth, the better are the prospects for defeating poverty and improving income distribution. And the better is income distribution and the lower is poverty, the larger will be investment and growth. Realizing the latter virtuous cycle of growth and equity puts the onus on Chile's political leaders. They have to motivate careful design, negotiation, and implementation of institutional and policy changes for future growth and equity gains that complement each other, avoiding stiff growth-equity tradeoffs.

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Diagram 1
Relation between Institutional/Policy Hierarchy and Results

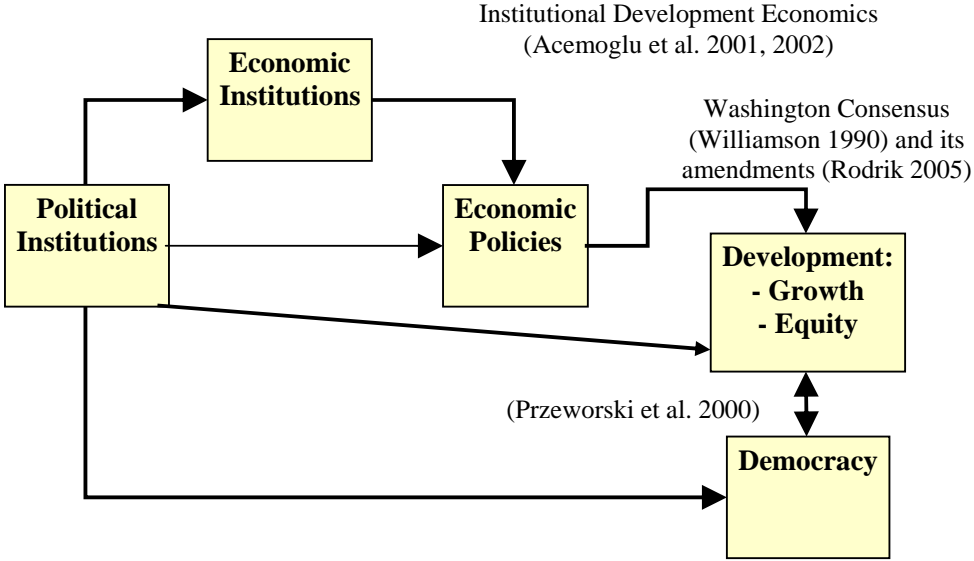


Diagram 2
Leadership, Policy-Making Process, Reforms, and Results

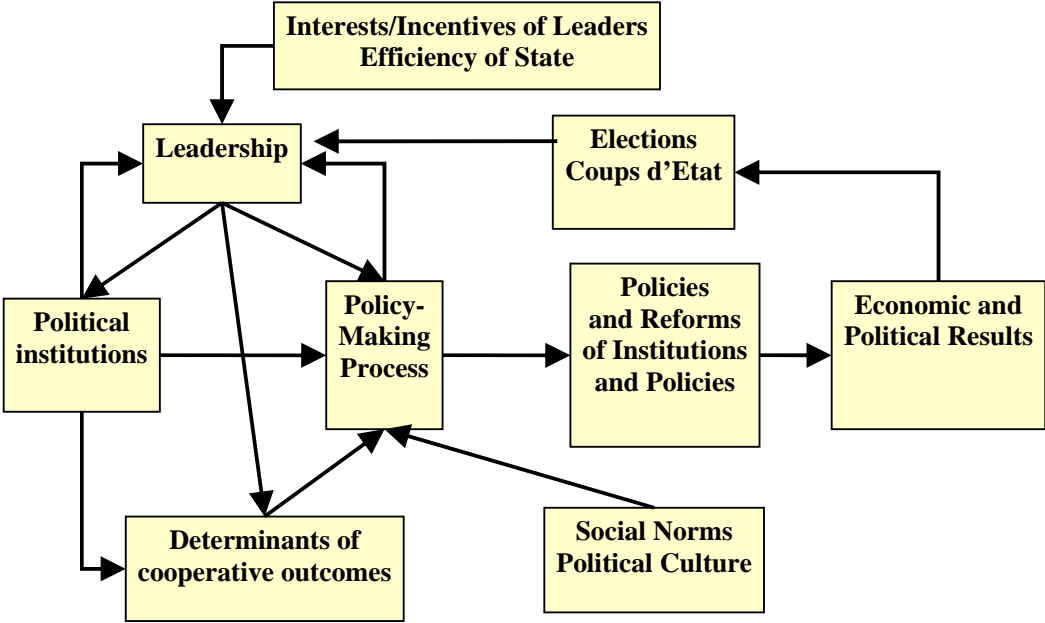


Figure 1
Simple Dynamic Model – Case A: Low Income and Low Equity Trap

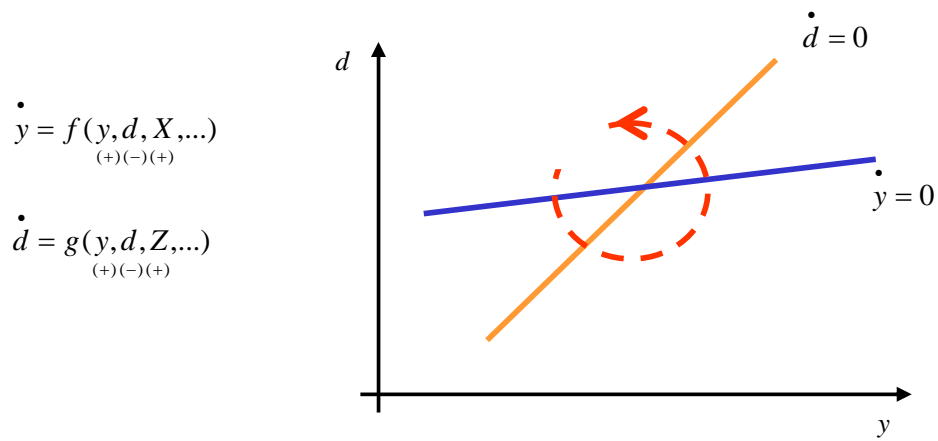


Figure 2
Simple Dynamic Model – Case B: Development Path of High Growth (Growth Convergence) and Deteriorating Distribution

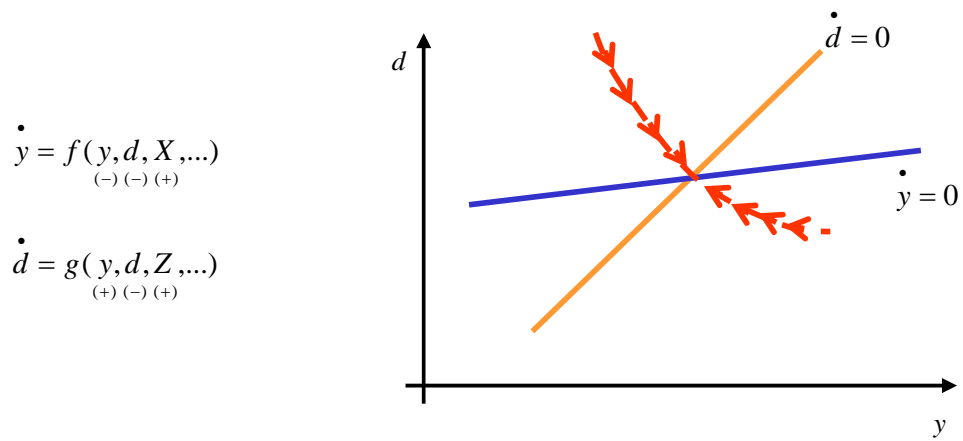


Figure 3
Simple Dynamic Model – Case C: Development Path of High Growth (Growth Convergence) and Improving Distribution

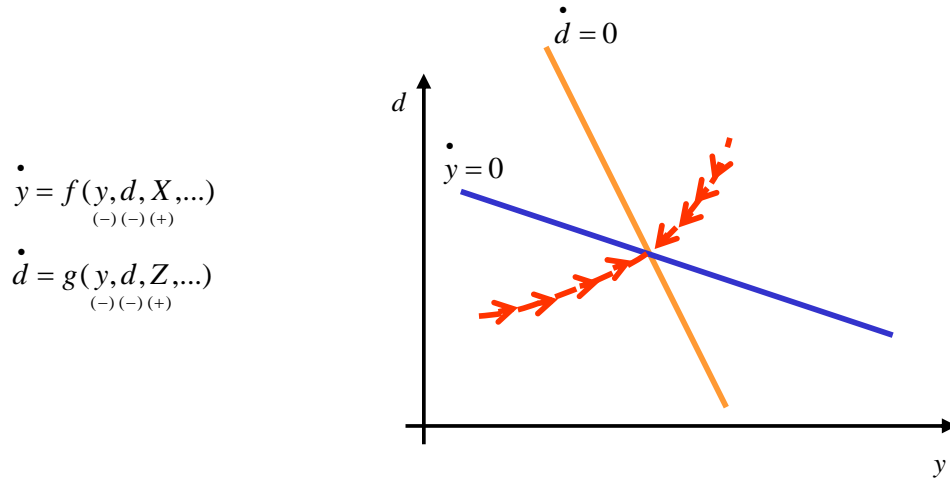
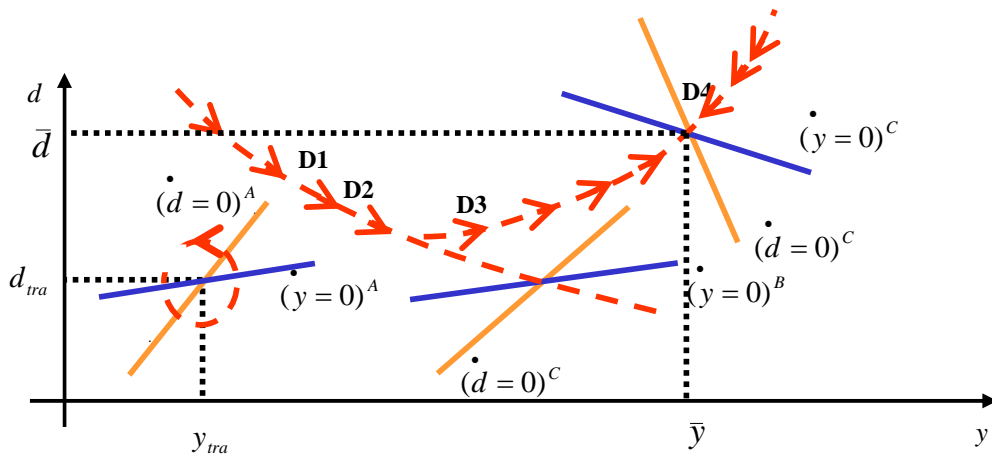


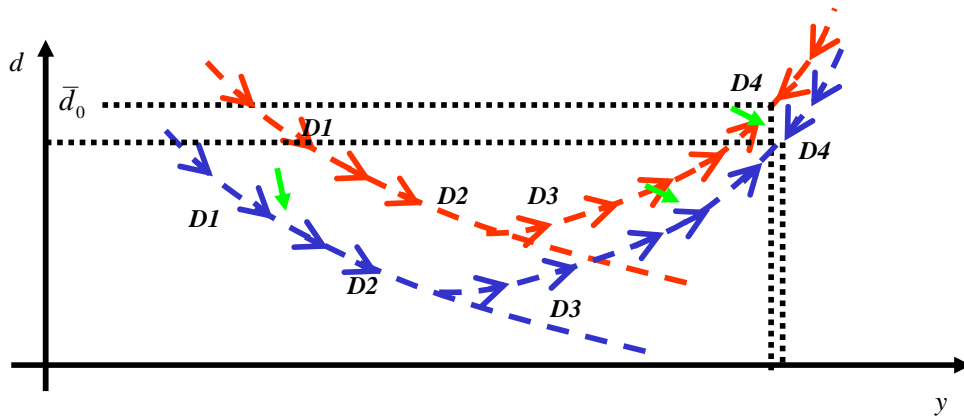
Figure 4
Full Development Path: Shifting Dynamics from Case A to B and C



Shift from Dynamics B to Dynamics C caused by improving IP-L-MP that shifts and rotates steady-state equilibrium conditions

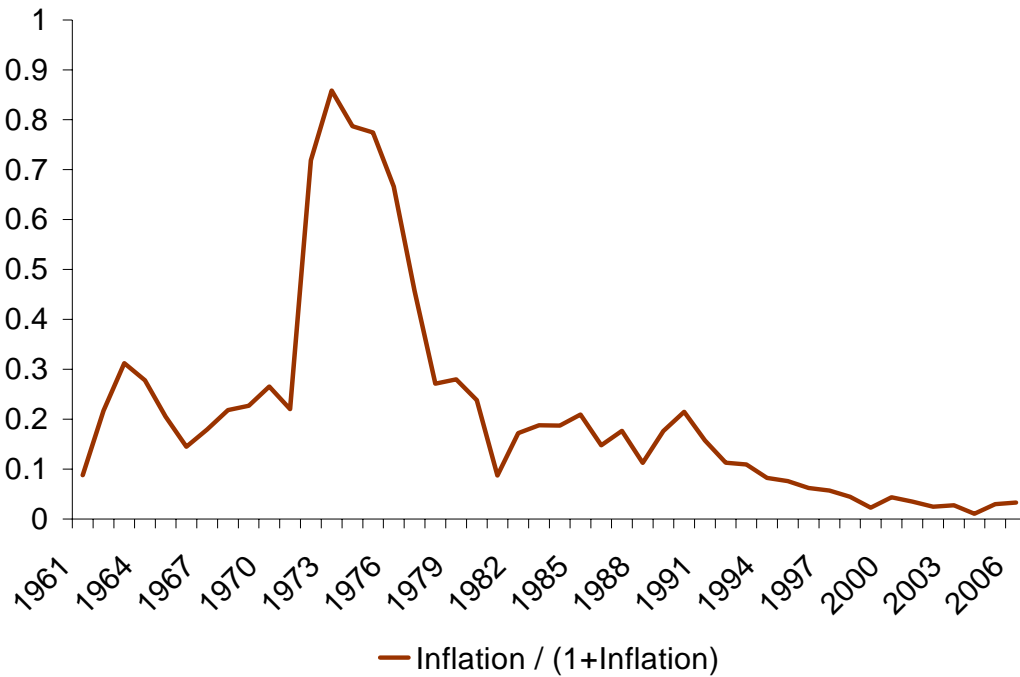
Note: D1-D2-D3-D4 is the Kuznets Curve. But other development paths that contradict the Kuznets curve are possible (e.g. Anand and Kanbur, 1993)

Figure 5
Ex. Comparative Dynamics of Development Paths altered by Chin-India's Integration into the World Economy (Freedman 2005)



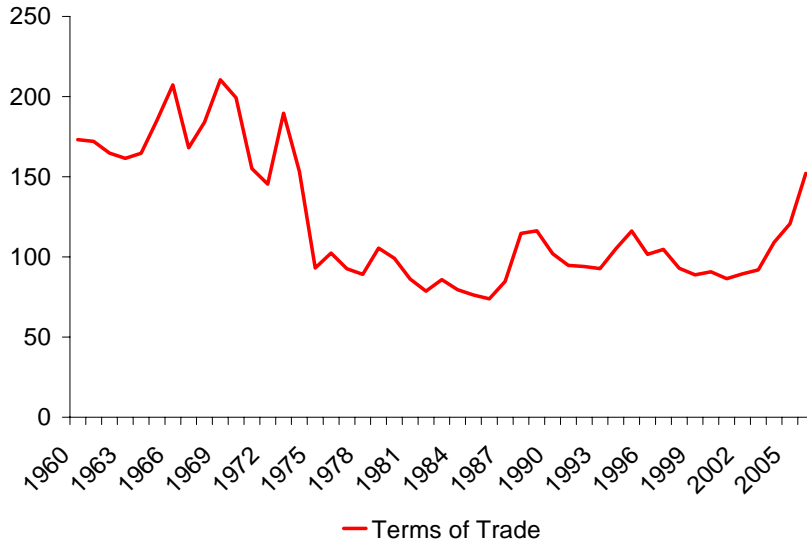
Cases South-East shifts of dynamic paths: worsened distribution, improved temporary growth, permanently higher income levels.

Figure 6
Inflation Rate / (1+Inflation Rate) , 1961-2006



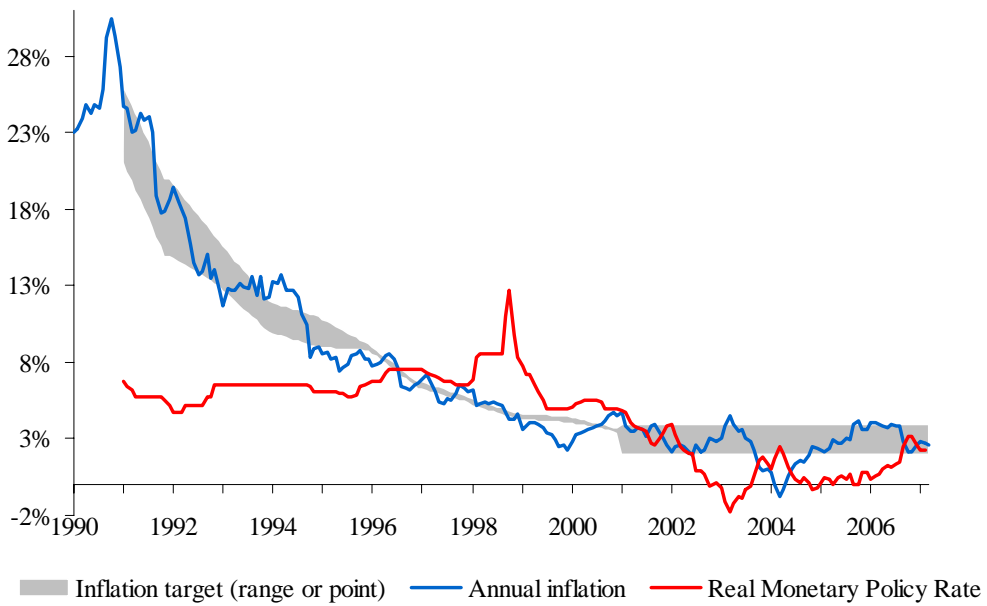
Source: Central Bank of Chile

Figure 7
Terms of Trade



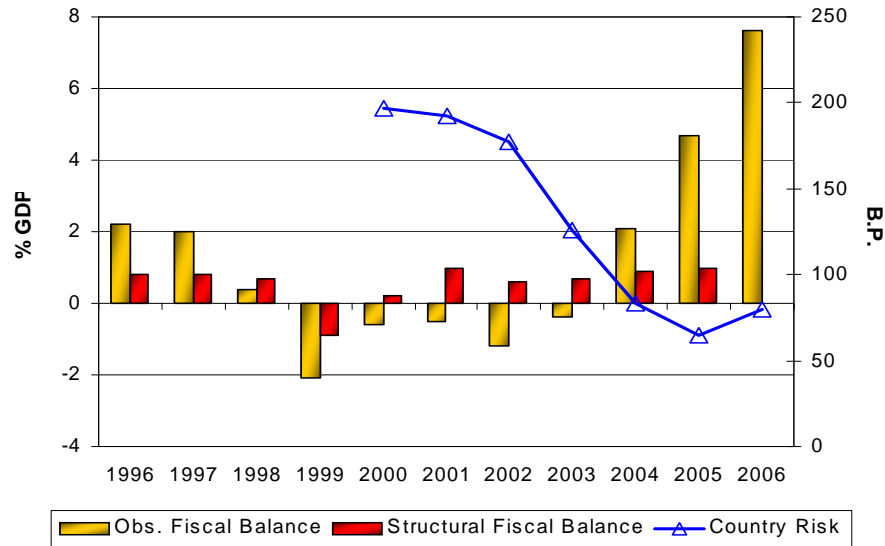
Source: Central Bank of Chile

Figure 8
Monetary Policy Regime: Monetary Policy and Inflation under Inflation Targeting, 1990-2007



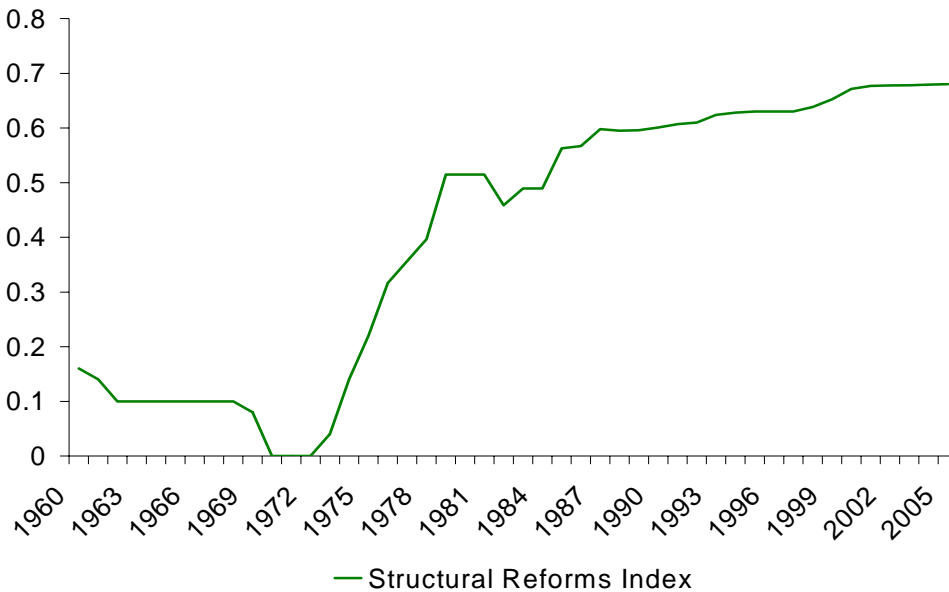
Source: Central Bank of Chile

Figure 9
Fiscal Policy Regime: Actual and Structural Fiscal Balance, and Sovereign Risk Premium, 1996-2006



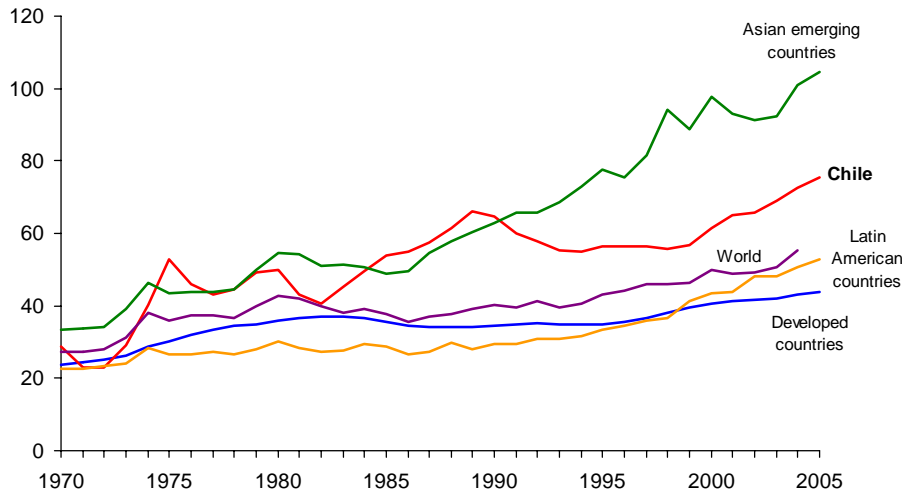
Source: Author's calculation based on data of Ministry of Finance

Figure 10
Structural Reform Index, 1960-2005



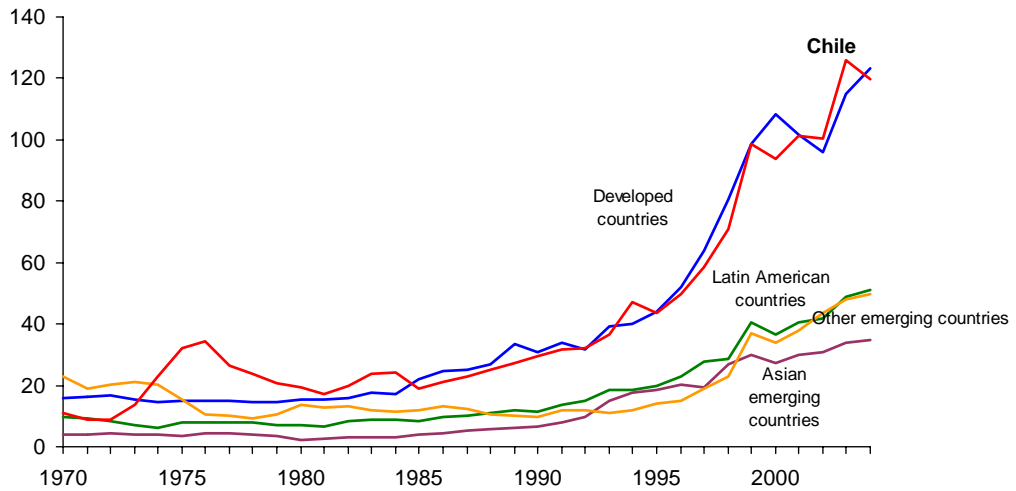
Source: Author's calculation extending Lora et al., IDB.

Figure 11
Trade Openness (Trade Share in GDP, 1970-2005)



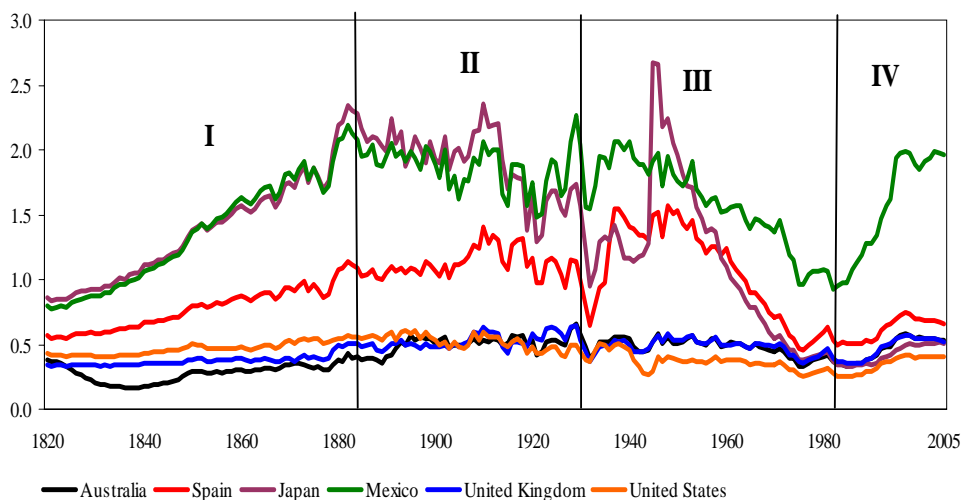
Note: Measured as the Sum of Exports and Imports in percent of GDP.
Sources: World Bank and IMF.

Figure 12
Financial Openness: 1970 – 2004



Note: Measured as the Sum of the Stocks of External Assets and Liabilities of Foreign Direct Investment and Portfolio Investment in percent of GDP.
Sources: Lane, Philip and Gian Maria Milesi-Ferretti (2006) and IMF.

Figure 13
Four Stages in Chile's Historical GDP Dynamics Relative to Six Selected Countries: 1820-2005



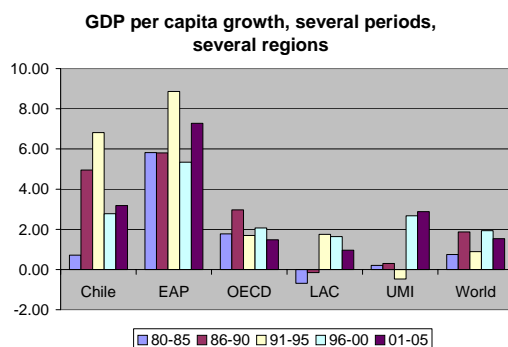
Source: Author's calculation based on data of Diaz *et al.* (2003), IMF and Central Bank of Chile

Note: Based on per capita GDP levels expressed at PPP-based Exchange Rates

Figure 14
Per Capita GDP and GDP Growth in Chile and Major World Regions, 1980-2005

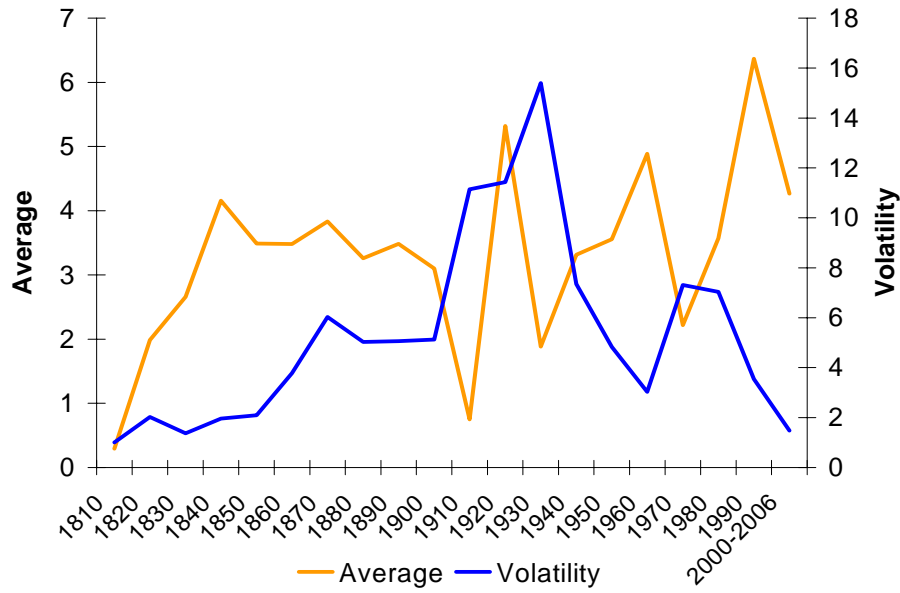
Per Capita GDL (USD PPP), several periods, several regions

	80-85	86-90	91-95	96-00	01-05
Chile	2,928	4,173	6,275	8,524	10,821
EAP	760	1,287	2,134	3,292	4,915
OECD	11,831	16,610	21,127	25,627	30,833
LAC	3,989	4,799	5,701	6,752	7,689
UMI	5,237	6,433	6,863	7,840	9,831
World	3,458	4,628	5,677	6,878	8,502



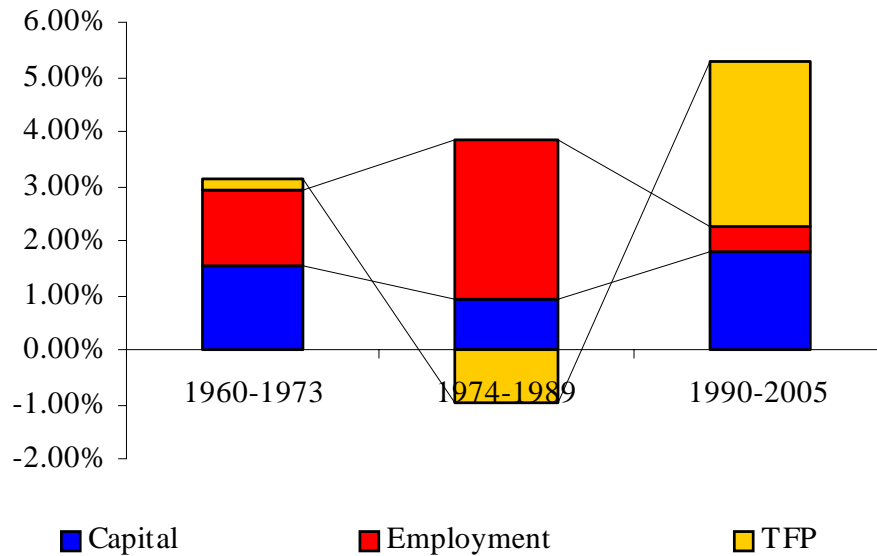
Source: Author's calculation based on data of IMF and Central Bank of Chile

Figure 15
Average per capita Chilean GDP Growth Level and Volatility by decades.



Source: Author's calculation based on data of Diaz *et.al.* (2003)

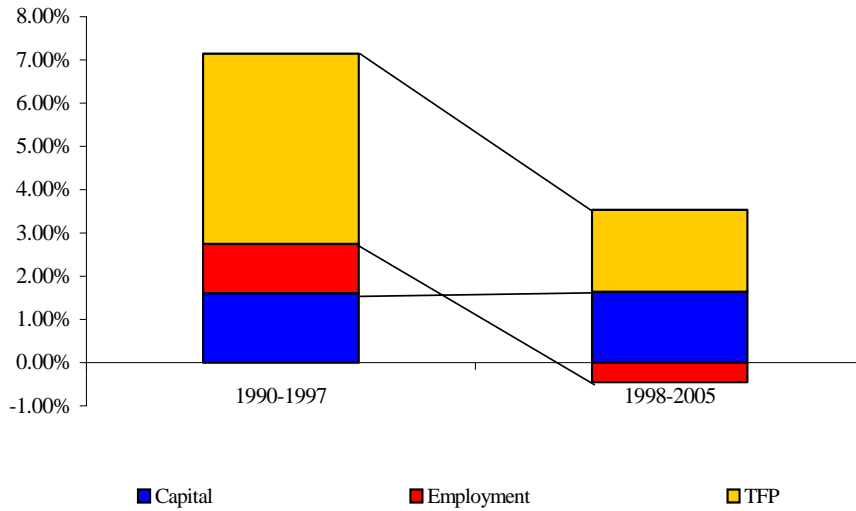
Figure 16
GDP Growth decomposition, 1961-2005



Source: Fuentes, Larraín and Schmidt-Hebbel (2006)

Note: Capital and labor adjusted for hours and wages, full sample periods and sub-periods

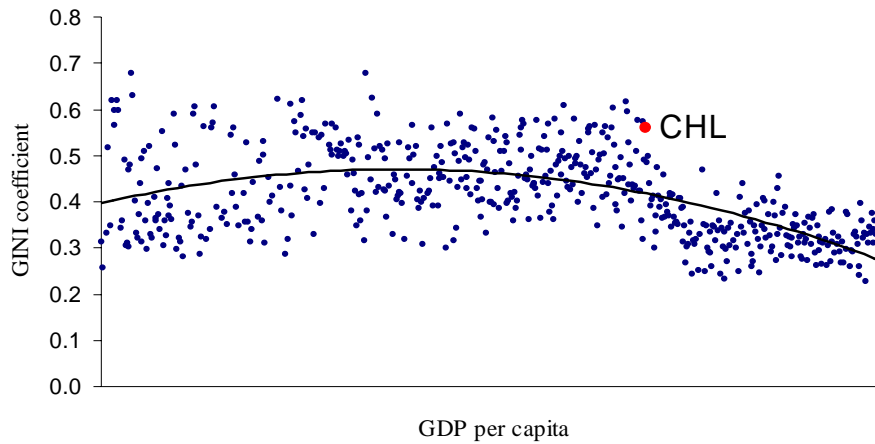
Figure 17
GDP Growth Decomposition, 1990-1997 and 1998-2005



Source: Fuentes, Larraín and Schmidt-Hebbel (2006)

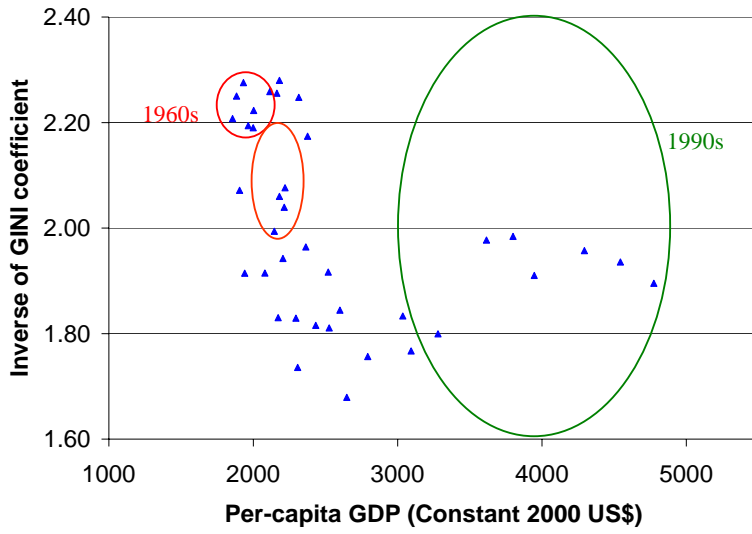
Note: Capital adjusted for utilization (energy consumption) and labor adjusted for hours and wages

Figure 18
Cross-Country Relation between World Income Distribution (Gini coefficient) and per-capita GDP, 1990s



Source: Author's calculation based on UN-WIDER World Income Inequality Database (2000).

Figure 19
Income Gini Coefficient and per-capita GDP in Chile, 1960-1997



Source: Author's calculation based on data of Central Bank of Chile and Employment Survey of University of Chile.

Figure 20
Chile's Distribution-Growth Dynamics

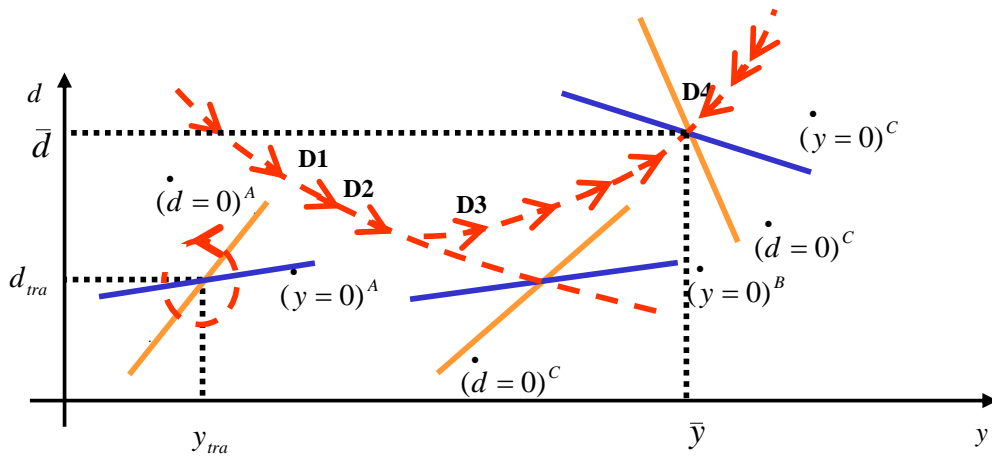


Table 1
Chile's Position in World Ranking of Macro and Institutional Development Indicators, 2006

Index	Highest ranked emerging country	Position of Chile	Number of countries	Source
Competitiveness	Chile	27	125	The Global Competitiveness Report
Ease of Doing Business	Lithuania	28	175	Doing Business - The World Bank Group
Quality of Institutions	Chile	11	30	World Bank
Rule of Law	Chile	12	30	World Bank
Macroeconomic Management	Algeria	6	125	World Economic Forum
Banking System Strength	Chile	9	30	Based on Moody's Financial Strenght Ranking
Contribution of monetary policy to macroeconomic performance	Chile	1	61	Institute for Management Development
Corporate tax rate	Hungary	3	30	Price Waterhouse Coopers
Labor Market Rigidity	Brazil	18	21	Heckman and Pagés (2004)

Table 2
Institutionalized Democracy Index

	1925-1935	1
	1935-1955	3
	1955-1964	5
	1964-1973	6
Chile	1973-1981	0
	1981-1983	0
	1983-1988	0
	1988-1989	2
	1989-2000	8
	2000-2004	9
World Average		5
Latin America Average		8

Source: Polity IV Project: Center for Global Policy, Marshall and Jaggers (2004)

Note: The Democracy index is an additive eleven-point scale (0-10)

Table 3
Institutional and Policy Determinants of Growth Changes between 1981-1985 and 1996-2000 in Chile and Major World Regions

	Variable	Chile	Latin America	East Asia	Industrial Countries
Economic Growth	Actual change	3.57	2.94	-0.21	1.37
	Projected change	3.76	2.65	1.42	0.94
Convergence	Initial GDP per capita	-0.19	0	-0.2	-0.09
	Human capital	0.47	0.4	0.47	0.42
Structural Policies	Private credit	-0.11	-0.11	-0.29	-0.25
	Institutions index	0.94	0.5	0.32	0.01
	Government expenditure	0.78	0.35	0.32	0.04
Stabilization Policies	Inflation rate	0.55	0.9	0.07	0.3
	RER overvaluation	0.35	-0.01	-0.03	-0.46
Openness Policies	Trade openness	0.45	0.42	0.51	0.42
	Financial openness	0.67	0.38	0.52	0.8
External Shocks	Terms of trade changes	0.11	0.09	0.02	0.01
	Changes in the period	-0.27	-0.27	-0.27	-0.27

Source: Calderón and Fuentes (2006).

Table 4
Decomposition of Annual TFP Growth, 1963-2005

	Measure 1*	Measure 2*
Average annual TFP growth		
Actual	0.75%	0.46%
Predicted	0.75%	0.70%
Contribution of cyclical variables		
Terms-of-trade loss of gain	-1.89%	-0.95%
Real exchange rate devaluation or appreciation	0.10%	0.08%
Contribution of better policies and Institutions		
Improvement in macroeconomic instability	0.00%	-0.10%
Improvement in structural reforms	2.54%	1.66%
Improvement in civil liberties	0.00%	0.00%
Improvement in policy complementarity	0.00%	0.03%

Source: Fuentes, Larraín and Schmidt-Hebbel (2006)

* Capital and labor adjusted for hours and wage-based labor quality

** Capital adjusted for utilization (energy consumption) and labor adjusted for (hours and wage-based labor quality)

Table 5
Population Share living in Poverty in Chile, 1987-2006 (%)

	Poverty	Extreme Poverty	Total
1987	27.7	17.4	45.1
1990	25.6	13.0	38.6
1992	23.8	9.0	32.8
1994	20.1	7.6	27.7
1996	17.5	5.7	23.2
1998	16.0	5.6	21.6
2000	14.6	5.6	20.2
2003	14.0	4.7	18.7
2006	10.5	3.2	13.7

Source: MIDEPLAN based on CASEN 2006 household survey.

Note: Expansion factor calculated on 2002 CENSUS

Table 6
Evolution of Income Distribution across Deciles in Chile, 1990-2006

Decil	1990	1992	1994	1996	1998	2000	2003	2006
I	1.4	1.5	1.4	1.3	1.2	1.3	1.2	1.2
II	2.7	2.8	2.7	2.6	2.5	2.7	2.7	2.9
III	3.6	3.7	3.5	3.5	3.5	3.6	3.6	3.9
IV	4.5	4.7	4.5	4.5	4.5	4.5	4.7	4.9
V	5.4	5.6	5.6	5.4	5.3	5.7	5.4	5.6
VI	6.9	6.6	6.4	6.3	6.4	6.2	6.6	7.0
VII	7.7	8.1	8.1	8.2	8.3	7.9	8.2	8.7
VIII	10.4	10.5	10.6	11.1	11.0	10.4	10.7	11.1
IX	15.2	14.8	15.4	15.4	16.0	15.1	15.3	16.0
X	42.2	41.8	41.8	41.8	41.4	42.7	41.5	38.6
	100	100	100	100	100	100	100	100

Source: MIDEPLAN based on CASEN household survey

Table 7
Income Distribution Indexes in Chile, 1990-2006

	1990	1992	1994	1996	1998	2000	2003	2006
Ratio 10/10	30.1	27.9	29.9	32.2	34.5	32.8	34.6	31.3
Ratio 20/20	14	13.2	14	14.8	15.6	14.4	14.5	13.1
Ratio 10/40	3.5	3.3	3.5	3.5	3.5	3.5	3.4	3
Gini Coefficient	0.57	0.56	0.57	0.57	0.58	0.58	0.57	0.54

Source: MIDEPLAN based on CASEN household survey

Note: Ratios (x/y) represent the share in country's wealth of the x% richest compared to the y% poorest

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