PUBLIC POLICIES AND NATIONAL DEVELOPMENT[1]

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[1] This paper formed the basis for a speech at the author's induction as a regular member of the Chilean Academy of Social, Political and Ethical Sciences (July 2003).

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I. Introduction

There is a national yearning in Chile for development. This is confirmed by the agreement on this goal expressed by the leading candidates in recent presidential elections. In his address to the nation on May 21, 2000, President Ricardo Lagos was categorical on this point, stating: "I propose a great shared mission for this date: to take Chile to the maximum of its potential, achieving a fully-developed and integrated country by 2010." He added, however, that "to reach development by our bicentennial, our economy must grow at a sustained annual rate of 6 to 7 percent. This is the goal I am setting for my administration."[2]

This objective rests on solid foundations. First, it is an expression of decades of frustrated hopes in Chile. Second, the progress achieved during the period from 1984 to 1997 confirms that these hopes are viable. Statistics show that the country's per capita income growth during this period averaged 5.4% per year.[3] No other period in the country's history has witnessed such a high, stable and prolonged level of economic growth. Projecting the growth rate of the 1984-1998 period into the future, and assuming a growth rate of 2.4% for Spain, Chile would equal the per capita income of that country in just 22 years. By the time of Chile's bicentennial in 2010, the country would enjoy approximately the per capita income of Portugal, and in 2016, that of New Zealand. In contrast, however,

[2] Presidential Message, May 21, 2000.
[3] Bergoeing and Morandé (2001).

if Chile's growth rate is only on the order of 3.0%, it would take 108 years for the country to reach Spain's level.[4]

Chile's national aspiration to development is not the product of an economistic vision which values only the increased availability of goods and services. Instead, it focuses on the favorable political and social consequences generated by an increasingly dynamic economy. Thus, for example, the period of rapid growth from 1984 to 1997 led to significant improvements in the country's indicators of social well-being.[5] At the same time, the country moved successfully from a military regime to a democratic government, exhibiting high levels of governability and the capacity to reach agreements and resolve very sensitive conflicts in a civilized manner.

Unfortunately, Chile's rapid growth has ceased. During the past five years, this has been reflected in the worsening of social problems, including increases in unemployment. The country's growth rates have returned to historically average levels; the average growth rate from 1998 to 2001 was only 1.2%,[6] while between 1940 and 1970 it was 1.71%.[7] This has led to frustration, criticism and a deterioration not only in the social environment, but also in the quality of political discourse.

[4] Beyer and Vergara (2001), *¿Qué Hacer Ahora? Propuestas para el Desarrollo*.
[5] According to the National Socioeconomic Survey (CASEN), poverty was reduced between 1987 and 1998 from 45.1% to 21.7% of the national population; that is, the number of people living in poverty fell from 5,501,000 to 3,160,100. The same survey shows that real household income increased by 69% over the same period. Similarly, low-income individuals' access to consumer goods increased considerably between 1994 and 1998, as evidenced by a doubling in their spending on these commodities. (Camhi, 2000).
[6] Bergoeing and Morandé (2001).
[7] Díaz, Lüders and Wagner (2002).

Is history repeating itself? In the late nineteenth century, Chile also enjoyed a period of rapid economic development. From 1869 to 1882, the average annual per capita growth rate was 5.2%.[8] However, by the end of that century and the beginning of the twentieth, this process had come to a halt. Between 1883 and 1900, the growth rate fell to an average of only 2.3%.[9] Discontent and frustration emerged. In a famous speech delivered in 1900, ten years before the country's centennial, Enrique Mac Iver expressed sharp criticism of the country's situation: "It seems to me that we are not happy; a malaise is evident that is not peculiar to a certain class of persons nor to certain regions of the country, but is shared by the entire country and its inhabitants in general. The country's previous relaxed attitude has been exchanged for narrow-mindedness, its energy in facing the struggle of life for slackness, its confidence for fear, its expectations for disappointments. The present is unsatisfactory, and the future appears among shadows which provoke uneasiness."[10] As is common in all societies facing such circumstances, expressions of nostalgia mixed with frustration were heard: "We supplied the Pacific coasts of the Americas and the islands of Oceania with our products … we sought the gold of California, the silver of Bolivia, the saltpeter of Peru … we founded banks in La Paz and Sucre … our flag flew over all the oceans … "[11]

We can confirm that something similar is happening today. The goal of achieving full development by the country's bicentennial has already become impossible. At the rate of growth seen in recent years (1998-2001), our per capita income will take 59 years to

[8] Ibid.
[9] Ibid.
[10] Irarrázabal and Piñera (1996), p. 37.
[11] Ibid., p. 39.

double.[12] This situation triggers frustration at all levels of society. Discontent is clearly expressed, as it was a century ago: "A kind of ill wind is blowing across the country … In these times – compared with the 1990s – there are fewer ideals, less enthusiasm … The direction is less clear, both in the personal and collective spheres … This ill wind is blowing in economics and in politics, among the country's leaders and among the common people."[13]

It is thus valid to ask: Is history repeating itself? Were the events between 1984 and 1997 just the product of chance? Was it only luck that favored us with per capita annual growth rates of 5.4%? Or were they merely the result of an extremely favorable external effect, which is unlikely to be repeated? Is Chile condemned to remain a country "on the path to development"? Is there a structural problem that hinders our progress?

This essay will attempt to answer these questions by taking a closer look at the influence of ideas and public policies on national development. In the following sections, I will address this important subject according to the following format: first, analyzing the ideas and policies applied in Chile during the previous century and their results; second, exploring what history and economics teach us about the causes of national progress; and finally, presenting the most recent evidence for the causes of Chile's vigorous growth during the past two decades.

[12] According to Bergoeing and Morandé (2001), it would take this long for per capita income to double at an annual growth rate of 1.2%.
[13] Tironi, Eugenio (2002), p. 13.

Thus, I will try to elucidate whether the accelerated growth of the 1984-1997 period can be explained by our policies and actions, and whether the country can continue realistically to aspire to its objective of becoming a developed nation.

II. Our Economic Inferiority?

In studying the causes of national development, it is illustrative to examine the influence of ideas in Chile during the twentieth century. As mentioned above, expressions of considerable frustration with regard to the country's capacity for development emerged early in that century on the part of distinguished public leaders. To understand the public policies applied by the country during a great part of the century, it is essential to recognize this frustration and its causes. Political and intellectual leaders with very diverse political philosophies coincided in a diagnosis that blamed the country's frustrated development on external causes or internal factors that were structural in nature and thus very difficult to overcome.

Accordingly, Francisco Antonio Encina, one of the period's most influential intellectuals, put forth the hypothesis in his book *Our Economic Inferiority* that the country's lack of progress was fundamentally due to problems of "the race," aggravated by inadequate education. "In recent years, our economic development has shown symptoms characteristic of a truly pathological state (…). They reveal … an extraordinary economic ineptitude in the national population, a product of the mentality of the race."[14] He also believed that geographic factors contributed to the country's economic incapacity. Bluntly, Encina concluded: "Our territory [is] one of those regions in which the weak or badly-

[14] Encina (1978), pp. 15-17.

educated races, whatever their abilities in other areas of activity, merely eke out a lethargic and precarious existence in the economic sphere."[15]

In analyzing his diagnosis, we see that except in the case of education, this prominent intellectual proposed that Chile's economic problems were due to structural causes, such as its territory or racial characteristics, which on the one hand are very difficult to change over a reasonable period of time, and on the other hand require massive intervention on the part of the State. Given that the problem was viewed as a lack of capacity on the part of the population and the national territory, it is not surprising that Encina himself introduced the ideas of State protectionism and autarky: "The intensity of contact with considerably more advanced economies, which may have been beneficial in another epoch from the point of view of the development of wealth, constitutes at the present time its most serious obstacle."[16] He added that "the direct investment of foreign capital contributes little to the country's economic development."[17]

These ideas, proposed in 1911, later fell on more fertile soil due to the enormous impact of the Great Depression on Chile's economy. As is well known, Chile was one of the countries affected most strongly by this catastrophe, and its effects in the economic and social spheres were devastating. During a single year, from 1930 to 1931, industrial production fell by 21%, construction activity by 49% and mining production by 31%.[18]

[15] Ibid., p. 54.
[16] Ibid., p. 119.
[17] Ibid., p. 228.
[18] Ellsworth (1945).

First as a pragmatic reaction to the crisis, but later buttressed by local ideas such as those described above, as well as external theories such as those coming from the Keynesian school, the country gradually increased State intervention and participation in the economy. Initially, these policies led to growth, facilitated by the enormous availability of resources due to the great depth and duration of the economic depression. From 1933 to 1943, growth rates were very high, with an annual average increase of 5.57%[19] in per capita GDP. This was the "easy growth" phase. However, this initial impulse lost its force. The drawbacks of a small market made themselves felt, as did the country's failure to take advantage of economics of scale, the lack of competition and the inefficient distribution of resources, so that between 1944 and 1950, per capita GDP grew only by 2.1% annually.[20]

Starting in the 1950s, the ideas emerging from the Economic Commission for Latin America and the Caribbean (ECLAC) gained great influence. This organization urged Latin American countries to initiate an accelerated industrial growth process based on the "inward-looking" [*hacia adentro*] development model. The State was supposed to protect manufacturing sectors with high import duties and other subsidies, thus imitating the patterns of the industrialized countries.[21] The result was a shift toward public policies which deepened the economy's isolation from world trade, by means of higher import duties, the imposition of quotas and import licenses, and the introduction of a range monetary exchange controls. At the same time, measures such as price controls, regulations

[19] Díaz, Lüders and Wagner (2002).
[20] Ibid.
[21] These ideas originated with Argentine economist Raúl Prebisch, who served as ECLAC's founder and director. (For more details, see Prebisch, 1950).

on production and the sale of goods and services, and State intervention to promote production in selected sectors were also increased.

The frustration continued, however, since the problem of low growth – only 1.8% per year between 1944 and 1960 – was now accompanied by inflation. In fact, "upon taking office, in November 1952, President Ibáñez' administration inherited an annual inflation rate of 23 percent."[22] By the third year of his term, it had reached 86 percent, "the highest inflation rate registered in Chile up to that time."[23] In response, "dependency theories"[24] appeared in force during the 1960s, along with socialist proposals which blamed the problems of the Chilean economy above all on the country's ownership structures – especially for land – as well as its lack of entrepreneurial spirit, the intrinsic drawbacks of the capitalist economy and class conflicts.[25] Even inflation was attributed to structural causes: "Chile's inflation is fundamentally a reflection of the struggle of the country's various socioeconomic groups and sectors to either conserve or change a specific distribution of income."[26] The public policies implemented during this era undermined private property rights through an agrarian reform and the nationalization of key sectors of the economy. At the same time, the closed-economy model was emphasized even further, culminating in the early 1970s with the attempt to apply a development model "in which the capitalist system must be changed."[27] However, the socialist model failed, not only

[22] Ffrench Davis (1973), p. 23.
[23] Ibid.
[24] Larraín (2001).
[25] Pinto (1973).
[26] Ibid., p. 193.
[27] Larraín (2001), p. 123.

because it eliminated all microeconomic incentives for growth, but because it disregarded the most fundamental elements of macroeconomic equilibrium.[28]

In evaluating the influential ideas underlying the public policies adopted during a great part of the previous century, we can state that the results were poor from the standpoint of development, since the country experienced a significant relative regression on the international level. Thus, for example, at mid-century (1950), Chile's per capita income was 1.2 times that of Spain and 3.1 times that of South Korea. However, by the century's end (1993), both countries had surpassed Chile's per capita income, by 1.6 and 1.1 times respectively.[29] It must be remembered here that the public policies applied in Chile were based on an analysis which identified structural causes as the most significant explanations for the country's economic problems.

It can be concluded that this analysis was incorrect: the country's problems were not due to racial factors, the lack of an entrepreneurial spirit, excessive dependence on natural resources, the concentration of property ownership or the unsuitability of the capitalist system in developing countries. Thus, it should not be surprising that the policies applied, such as the import substitution model which restricted innovation and competition; limitations on the role of the market, including price controls and excessive regulations; or restrictions of property rights, such as the nationalization of the country's leading productive activities, resulted in a deterioration of the framework of incentives for the country's growth.

[28] By 1973, the country had a budget deficit of 24.7% of GNP and an inflation rate of over 300%. See *Chile: An Economy in Transition*, 1979.
[29] Büchi (2000).

Today, after five years of low economic growth, it is important to seek clarity in these matters, since the times are propitious for the reappearance of ideas similar to those described above. Thus, some current observers maintain that the development strategy which permitted the strong growth from 1984 to 1997 is in crisis.[30] Once again, the capacities of Chile's population are being questioned – specifically our entrepreneurial abilities. It is alleged that "the most serious problem of the Chilean entrepreneurial class is not only one of vital spirit, it is also one of habits and skills."[31] At its foundation, this analysis coincides – only in a more restrained manner, in keeping with the times – with that of Aníbal Pinto, when he stated that Chile suffered from "an inability to achieve on the part of a self-styled bourgeoisie, vitally divorced from economic creation."[32] As will be seen below, such a thesis is especially serious and erroneous, since it discounts one of the most important factors in national progress: the entrepreneurial spirit. As noted by Joseph A. Schumpeter (1957), economic development is brought about fundamentally by a process of "creative destruction," which is initiated by entrepreneurs as they create new products, new services, new distribution methods, new forms of organization, and so forth. This creative process takes place when adequate stimuli are present to allow innovators to replace less efficient producers on an ongoing basis. Thus, it is essential to create the conditions so that this entrepreneurial spirit can be expressed concretely in individual businesses and markets. That is to say, if some entrepreneurs lose their "vital spirit,"[33] the important thing is to have public policies which allow them to be replaced by others who still possess it.

[30] "La Concertación de Chile por un Desarrollo con Justicia" (October 2002).
[31] Tironi (2002), p. 104.
[32] Pinto (1973), p. 89.
[33] Tironi (2002).

III. Why Do Countries Achieve Growth?

III. 1. A Historical View

Economic history has made enormous advances in identifying the underlying causes of the prosperity of nations. It has investigated why civilizations as advanced as Rome, China and others – which developed new knowledge and had access to the latest discoveries – were unable to transform that knowledge into the mass use of tools and technologies for productive purposes. In the much-studied case of the Roman Empire, knowledge was gained of such technologies as water-driven mills, which seventeen centuries later proved vital to Europe's progress. Around the first century after Christ, Alexandria, the Roman Empire's center of technological innovation, "possessed virtually all of the basic types of machines utilized today, including a steam engine which was used only to open and close the doors of a temple."[34] Another very interesting case is that of the Chinese civilization, where paper and printing were invented in the ninth century; that is to say, several centuries before Europe, where Gutenberg printed his first Bible in the thirteenth century. Gunpowder was known in China in the eleventh century, whereas the Europeans did not discover its formula until the fourteenth. The Chinese are said to have developed a hydraulic spinning machine in the twelfth century, 500 years before its appearance in England. In addition, the Chinese used coal and coke in high-temperature smelting ovens, producing the incredible quantity of 125,000 tons of rough iron in the late eleventh century, a figure not reached by Great Britain until 700 years later.[35]

[34] Baumol (2002), p. 253. Spanish translation by the author.
[35] Landes (1999).

Why, in spite of these inventions, did these societies fail to achieve economic progress and growth, to raise per capita income and the living standards of their inhabitants? What is the difference between these civilizations and the European societies which several centuries later transformed this knowledge and applied it on a mass basis, expanding the availability of goods and services and raising incomes, thus permitting a radical change in living conditions for the great majority of the population? Following Landes, we can state that the reasons these civilizations did not experience an industrial revolution which transformed their inventions into innovations – that is to say, into capital goods used on a mass scale – were "the nonexistence of a free market and the failure to institutionalize property rights. The Chinese State interfered constantly with private enterprise, taking control of lucrative activities and prohibiting others, manipulating prices, collecting bribes, and hindering the private accumulation of wealth."[36] A second factor involves the underlying values of the society in question, as seen, for example, in the confining of women in the home. Thus, in contrast with Europe and Japan, China did not utilize its female workforce for productive ends. A third reason can be seen in the exercise of totalitarian control over society; that is, "it is the State that kills technological progress in China."[37]

Landes also provides explanations for the progress which began with the Industrial Revolution in Europe. In his view, the factors underlying Europe's capacity to transform technological discoveries into innovations to facilitate progress included its cultural and

[36] Ibid., p. 65.
[37] Balaszs (1974), pp. 22-23. Spanish translation by the author.

religious values, such as "the Judeo-Christian respect for manual labor" and the "concept of the subordination of nature to man."[38] The other fundamental element explaining European development is the rise of the market as an instrument of economic interaction and resource distribution. In Landes' words, "the entrepreneurial spirit knew no bounds in Europe. Innovation was successful and profitable, and monarchs and other powerful figures were limited in their ability to hinder or restrain it."[39]

In summary, the examples of Rome and China show us that while inventions arose in these cultures, the necessary institutions did not appear which would have enabled these inventions to be transformed into innovations in the service of progress. These inventions were used only by the religious and political elites. The absence of competition, free markets, the rule of law, and institutions such as those to protect property rights prevented their transformation into instruments of economic development.

III. 2. An Economic View

The advances in knowledge from an economic standpoint about the causes of national development have also been significant. Factors such as the development of statistical tools, access to gigantic databases and the computer revolution have contributed to this progress, permitting researchers to process enormous quantities of historical information and to undertake comparisons among countries.

[38] Landes (1999), p. 67.
[39] Ibid., pp. 67-68.

Economic growth is fundamentally caused by the accumulation of production factors and the more efficient use of them (Solow, 1957).[40] The more capital which is available in a country, and the larger its work force, the greater its production of goods and services will be. Thus, increases in capital stock – through increases in the investment rate and the number of people willing to work – serve to raise the growth rate. However, not just the quantity of these production factors is important, but also their quality. Therefore, modern economic theory identifies human capital – that is, the educational and health levels of a country's workforce – as a fundamental factor for growth. The depth and level of development of the capital market are also important, since they permit appropriate capital investments. An additional factor, which in technical language is called the "residual" or "total factor productivity" (TFP), also serves to explain a significant proportion of growth.[41] Total factor productivity is nothing more than the increasingly efficient use of production resources. It is interesting to note that in measuring the growth of developed countries over a relatively long period – for example from 1960 to 1990 – TFP can be seen to contribute

[40] The original model presented by Solow (1957) proposes an economic production function of type Y=F(K,L,T), where total production (Y) is a function of capital (K), labor (L) and technology (T). Thus, supposing a neoclassical production function for work and capital and a special form for technology (Y=T*F[K,L]), GDP growth is determined by the rate of technological progress or "residual," the growth rate of capital and the growth rate in labor, these last weighted by their respective share in GDP: $(\Delta Y/Y) = (\Delta T/T) + s_K*(\Delta K/K) + s_L*(\Delta L/L)$.

The problem with this formulation is that the residual does not represent technological progress alone, but also contains improvements in the quality of the factors; that is to say, measures which are not included in the classical measurements of capital and labor, such as improvements in human capital. Thus, the function described above is broadened to incorporate variables measuring improvements in the factors' quality, in order to isolate the residual of these effects.

Further, and following Harberger, this residual involves a broader concept than just technological progress. For him, it represents the increases in productivity, or the "thousand and one ways of reducing costs" (Harberger, 1998), a term which includes technological progress as well as improvements in total factor productivity or externalities. (For more detail, see Rosende, 2000).

[41] See previous note.

an average of some 39% to the growth of the six richest countries.[42] That is to say, given a GDP growth rate of approximately 4%, 1.6 points are due to the improved utilization of production resources. Thus, economic growth is not simply a matter of accumulating more capital, increasing employment and raising the quality of the workforce; it is equally or more important to generate conditions which permit more effective utilization of these production factors.

What are the main elements allowing a country to make more effective use of its production factors, or in other words, permitting total factor productivity to contribute to growth? An abundant literature exists today with regard to this subject. Some analysts emphasize innovations leading to more effective combinations of production resources to produce goods;[43] others stress the importance of cost reductions in the improved utilization of production resources.[44] There are also the theories of "endogenous growth" (Romer, 1987; and Lucas, 1988, among others), according to which certain policies aimed at stimulating innovation, improving human capital or taking advantage of economies of scale generate externalities leading to a feedback effect which raises total factor productivity. That is, some economic policies produce "virtuous circles," especially when they are applied consistently.

In seeking to answer the questions set forth in this paper, it is not enough to recognize that increasing the quantity and quality of production factors leads to a rise in countries' GDP. It is also necessary to identify the public policies which lead to this accumulation of

[42] Easterly and Levin (2000).
[43] See Aghion and Howitt (1990).
[44] See Harberger (1998).

production factors and which stimulate countries to make more effective use of them. In so doing, we must ask: do these policies truly exist, or is growth only a byproduct of favorable developments in the world economy? Or – according to what in my judgment was the most influential position in the country during the twentieth century – do structural factors prevent the adoption of these policies? Thus, for example, if one believes that Chile lacks entrepreneurial capacity, it would be misguided or ineffective to adopt policies based on a market economy model to promote the country's progress over the short term, since this model requires a dynamic spirit of private enterprise.

Fortunately, it is possible to answer these questions. Abundant modern historical and economic evidence shows that the quantity and quality of a country's resources depends on the public policies applied by that country. Income differences among countries cannot be explained by their original endowment with resources, human capital or technology. Instead, they are the result of institutions and economic policies which affect the national capacity for development.[45] This has been demonstrated in a wide variety of countries during the past fifty years.[46]

As noted above, there is agreement today among economic researchers as to the macro- and microeconomic policies which induce countries to accumulate more and better resources. These policies will be described in the following sections.

[45] Olson (1982).
[46] In this regard see Nelson and Pack (1997), Gallego and Loayza (2002), McMahon (2000), Fortin (2002) and Fontaine (1990).

III.2.a. Property Rights

The evidence confirms that countries endowed with institutions which respect and promote private property rights have enjoyed higher economic growth rates. Protecting property rights encourages people to save and invest, stimulates entrepreneurs to take risks based on the potential reward of owning goods, and promotes the improved use of production resources by enabling people to enjoy the corresponding benefits. (De Soto, 1986; and North and Thomas, 1973, among others.)

III.2.b. Market Economies

In a market economy, the free pricing of goods and services creates a flexible system of signals to society. At the same time, the ability to freely enter or exit markets for goods and services allows competition to exist, obliging economic agents to allocate their resources more efficiently. The existence of market signals as well as incentives to satisfy customers' needs and increase efficiency favors the productivity increases required for growth. Opportunities for personal profit serve to stimulate the free market, which in turn produces a higher standard of living for the population and generates the common good of economic progress (Friedman, 1980, chapter 1; Hayek, 1945; and Smith, 1776, among others).

III.2.c. Open Economies

The economic development of countries which allow freedom of commerce and are open to international trade is based on comparative advantages. That is, these countries produce goods and services which they can provide at a relatively low cost, while consuming domestic and international goods offering the lowest prices and the highest levels of quality. Furthermore, open economies permit cost reductions, since they can take better advantage of economies of scale, thanks to the higher production volumes made possible by the enormous size of international markets. Openness also facilitates the use of new technologies by improving access to them and reducing their cost, while promoting specialization and stimulating competition, with the consequent effects on investment and productivity (Corbo and Fisher, 1994; Edwards, 1993; Krueger, 1985; and Lucas, 1993, among others).

III.2.d. “Creative Destruction”

In countries where incentives exist to innovate and start businesses, a virtuous circle is produced which allows growth. This dynamic takes place at the level of individual businesses and industries. The goal of increasing profits and market share leads businesses to seek “at least a thousand and one ways to reduce costs”[47] as well as to develop new products, new production methods, new forms of distribution, and so forth.[48] The term for this in the specialized literature is “creative destruction.”[49] The process starts when an entrepreneur identifies a market opportunity and obtains extraordinary profits. This information is then transmitted within the market, stimulating the creation of new enterprises to capture a share of these profits. This dynamic leads to increases in employment, investment and productivity. It is important to note that these productivity gains arise from the competitive process itself: less efficient businesses fail, while the survivors are those which have found ways to use their production resources more effectively. Thus, in developed countries, only 40 to 50 percent of companies remain in operation after seven years. In consequence, the entry and exit of businesses within a market accounts for some 20 to 40 percent of the total increase in productivity.[50]

Incentives for the phenomenon of “creative destruction” are provided by microeconomic policies. These policies must permit free entry into markets, active

[47] Harberger (1998), p. 3. Spanish translation by the author.
[48] Baumol, 2002.
[49] See Schumpeter (1957).
[50] Hemmings, Scarpetta, Tressel and Woo (2002).

competition and the exit of inefficient businesses. It is also vital that public policies do not prevent the acquisition of extraordinary profits. Tax policies and the financial market are especially relevant in this regard.

III.2.e. Human Capital

The evidence also shows that countries which invest in education and health care, and which make better use of resources in these areas, enjoy higher growth rates. More rigorous educational systems, along with cultures placing a higher value on education and health, prepare individuals more effectively for participation in the labor force (Becker, 1995). This is especially important in today's world, where knowledge is the scarcest factor. Furthermore, improving the quality of the labor factor also produces positive externalities; that is to say, the productivity of other people is also increased (Lucas, 1993).

III.2.f. Macroeconomic Policies

Policies which promote macroeconomic equilibrium – as reflected in low inflation rates, minimization of the destabilizing effects of external shocks, fiscal equilibrium and relatively stable real exchange rates – have also been key factors in explaining the increases in investment, employment and productivity required by growth. Countries which are relatively unstable, due to imbalances in their fiscal, monetary or external accounts, provide fewer incentives for the accumulation of production factors and their more efficient use (Barro 1995; Caballero, 2002; Easterly and Levin, 2000; and Harberger, 1998, among others).

III.2.g. Effective Government

Countries which are able to solve public problems by implementing appropriate and timely policies, and which enjoy the rule of law and a democratic political system, show a greater capacity for growth, thanks to the benefits of equilibrium and stability in the rules of the game which an open and democratic society tends to produce. In contrast,[51] in countries characterized by substantial disagreements about economic policy exist among influential leaders, high public corruption, and the ability of the State to extract significant resources from the private sector through taxes and other instruments, the incentives for investment and innovation will be low. The same is seen with efforts to increase productivity. Weak governments also contribute to poor results, both for policy reasons and because of the low quality of their human resources, since interest group pressures tend to reduce the quality of public policies in these cases.[52]

This problem has been especially relevant in Latin America, where a "rent-seeking" attitude has often been manifest: State institutions or enterprises have been captured by diverse pressure groups, which have used public policies and institutions for their own benefit rather than for the common good. The consequences of these practices have mainly been suffered by the weakest members of society.[53]

[51] Foxley, A., *Economía Política de la Transición*, 1993.
[52] Olson (1965).
[53] De Soto (1986).

In summary, we can conclude that the evidence from economic research coincides with that provided by history. What, then, are the causes of national economic growth? It is brought about by an array of public policies and institutions which allow people, acting with freedom, to invest more, to educate themselves further and to work harder, and which constantly provide them with incentives to make better use of their human capacities as well as the capital and technologies available to them.

IV. Why Did Chile Grow?

Chile enjoyed rapid economic growth from 1984 to 1997. This fact allows us to discard the theory that "racial," "geographical" or "structural" problems impeded the country's developments. The people who achieved impressive progress for fourteen years in the late twentieth century were had the same genetic and cultural backgrounds and class differences as those who had failed to achieve it during the previous period. They were living in the same territory, with the same climate and natural resources. There were still significant – although lesser – differences among the various sectors of society with regard to income levels and access to education, health care and other social services. In spite of all this, the country experienced growth.

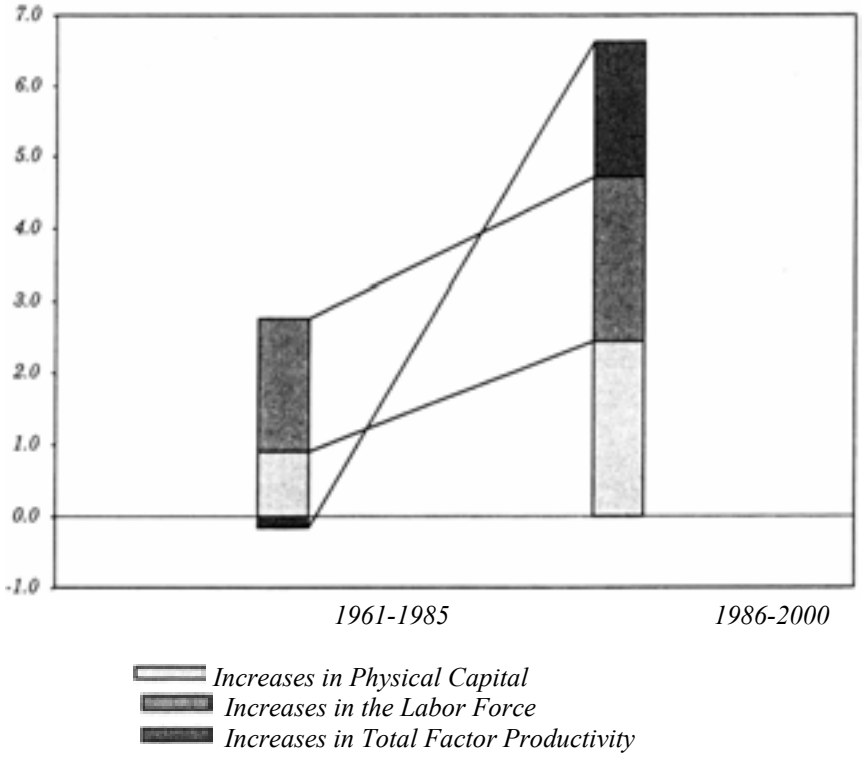
These fourteen years provide a valuable resource for studying the causes of growth in greater depth. Advantageously, a large quantity of national and international research has been undertaken in recent years to attempt to explain this phenomenon. Gallego and Loayza (2002) studied the country's growth between 1986 and 2000, comparing it with the 1961-

1985 period for Chile and an additional 46 countries. In these comparisons, it is striking to note that the country's growth in per capita GDP between 1986 and 1999 was not only high in comparison with the previous period and with other countries during that time, but also less volatile. That is, Chile enjoyed not only a high growth rate, but one that was sustained on a more stable foundation. In addition, this growth extended to the majority of the country's productive sectors, not only "the areas directly affected by the privatization of public enterprises, such as the public utility services, transportation and telecommunications (…). Other sectors also enjoyed a noteworthy growth rate. For example, banking, trade and construction grew by more than 6% per year after 1985."[54]

In breaking down the sources of growth, it can be noted that during the 1986-2000 period, the contribution to total growth (6.64%) made by capital accumulation was 2.46%; that of the increase in the labor force was 2.22%; and that of the increase in total factor productivity was 1.95%. In contrast, the same contributions for the 1961-1985 period were 0.95%, 1.77% and -0.18%, respectively (see chart).[55]

Factors Contributing to Growth
Percentage

[54] Gallego and Loayza (1992), p. 423. Spanish translation by the author.
[55] Ibid.



SOURCE: Gallego and Loayza (2002).

Thus, Chile's experience confirms the importance of the quantity and quality of production factors, as well as their effective use, as reflected in the total factor productivity or "residual."

What policies produced these results? According to the same authors, they were strategies leading to improvements in the quality of education and health care; a well-developed capital market to channel savings and finance investment; an open economy which demanded more efficient production; a government of limited size; free markets with few price distortions; advances in civil liberties and more and better infrastructure. In addition, the coherence and complementary nature of the country's policies, combined with a favorable external environment, explain no less than 73% of the increase in growth for the

1986-2000 period in comparison with 1961-1985.[56] One of the most notable insights confirmed by the Chilean case is the importance of ensuring that all public policies are consistent with the objective of growth. As Gallego and Loayza note: "this indicates that a strategy of coherent reforms, directed at all policy fronts, produces a significant premium over and above the independent positive effect of isolated policy improvements."[57]

Another illuminating study, carried out using the econometric technique of time series, is that of Jadresic and Zahler (2000). They investigated whether the country's growth was due to good economic policies, the chance effects of the favorable external environment, or political conditions which generated stability in the rules of the game. They conclude that compared with the 1960s, Chile's higher growth during the 1990s was due chiefly to its structural reforms in favor of a free and open market economy. However, comparing the 1990s with the 1970s, the higher growth of the 1990s is explained by the low inflation during that period, and if one compares the 1990s with the 1980s, the growth of the 1990s is explained by improvements in political rights, lower inflation and the lower external interest rate[58] (see table).

[56] Ibid.
[57] Ibid., pg. 446. Spanish translation by the author.
[58] Jadresic and Zahler (2000).

Periods	Structural Reforms	Inflation	External Interest Rate	Political Rights	Other Factors	Total
1990-98 vs 1961-69	**2.5**	0.7	-0.1	-0.7	0.2	2.5
1990-89 vs 1970-79	1.7	**4.5**	-3.2	1.6	0.0	4.6
1990-89 vs 1980-89	0.6	0.4	0.9	**2.3**	0.3	4.5

SOURCE: Jadresic and Zahler (2000).

In their report, Jadresic and Zahler conclude that "the key factors behind the rapid increase in productivity growth in the 1990s were the structural reforms which began in the mid-1970s and which continued and were deepened in the 1980s and 1990s; the relative environment of low inflation which prevailed during the 1990s; and the improvement in political rights starting in the late 1980s (…). In summary, the results above support hypotheses stating that the increase in productivity growth was due to good public policies and the country's political transformation. At the same time, they undermine the hypothesis of *good luck* as a relevant explanation for the phenomenon."[59]

To further deepen our understanding of Chile's growth, it is interesting to analyze additional studies which view this process from a microeconomic or sectorial perspective. This is relevant because improvements in productivity, investment, worker training and so forth are initiated at the level of individual businesses and industries. As noted above, the dynamic of competition – which in turn leads to the creation and destruction of companies – is responsible for a significant proportion of economic growth.[60] This phenomenon, which has been proposed in theory and demonstrated empirically at the international

[59] Ibid., pp. 18-20. Spanish translation by the author.
[60] In this regard see Baumol (2002), Harberger (1998) and Schumpeter (1957).

level,[61] has also been measured in Chile. Thus, from 1981 to 1992, 8% of the country's manufacturing plants were new startups each year, while 8.7% closed their doors, with the first group being 6.2% more productive than the second.[62] Between 1986 and 1997 – a period of extremely high growth – approximately 7% of factories exited from the market each year, and by the end of ten years, more than 50% had disappeared.[63] What does the Chilean experience teach us in this regard? What public policies promote these increases in investment and productivity at the level of individual businesses?

One of these key public policies is tax policy, especially due to the tax structure's effects on savings and investment. Hsieh and Parker (2002) investigated the impact of the tax reform initiated in Chile in the mid-1980s. It should be remembered that this tax reform reduced taxes on businesses while also modifying the tax base, significantly reducing taxes on profits reinvested within companies. The goal was to bring the national tax system closer to what is known as the consumption tax[64]; that is, eliminating the tax burden on investment and thus stimulating this growth factor, which, in turn, produces external effects leading to productivity increases. The authors mentioned above, researchers at Princeton University, concluded that this tax reform was "a significant and direct cause of the economic boom experienced since the mid-80s."[65] Thus, data at the level of industries and individual companies shows "that the reduction in taxes on retained profits permits financially-restricted firms to take advantage of the opportunities presented (…). The

[61] See Hemmings, Scarpetta, Tressel and Woo (2002), among others.
[62] Camhi, Engel and Micco (1997).
[63] Cabrera, De la Cuadra, Galetovic and Sanhueza (2002).
[64] In this regard see Browning and Browning (1979), Büchi (1993) and Büchi (1994).
[65] Hsieh and Parker (2002), p. 27. Spanish translation by the author.

increase in savings associated with the investment boom can be almost exclusively explained by an increase in business savings."[66]

Another microeconomic policy measure with a significant impact on growth was the country's social security reform.[67] This initiative boosted employment by reducing the tax on labor, while stimulating savings by eliminating disincentives and strengthening the capital market. According to Klaus Schmidt-Hebbel, "one-fourth of the increase in growth can be attributed to the pension reform."[68]

Chile's experience is also illuminating with regard to the impact of lowered import tariffs on individual businesses and industries. Pavnik (2000) studied more than 4,000 Chilean manufacturing plants from 1979 to 1986. As a result of the country's trade opening during this period, productivity increases exhibited by businesses competing directly with imports were from 3 to 10 percent higher than those exhibited by firms in sectors not affected by increased international competition. At the same time, the closure of some factories in the study also contributed to a general increase in productivity, since the failed plants were on average 8% less productive than those which survived. It is also noteworthy that productivity grew by 25.4% over a period of seven years in the export-oriented sector, and by 31.9% in domestic industries facing competition from imports, whereas the productivity gain in the sectors producing goods not affected by international competition was only 6% during the same period.[69]

[66] Ibid., p. 27. Spanish translation by the author.
[67] Piñera, José, "El Cascabel al gato …"
[68] Schmidt-Hebbel (1998).
[69] Pavnik (2000).

Just as opening the economy to international trade unleashes a dynamic of increased investment and productivity, policies such as the deregulation of markets and the privatization of State enterprises produce similar effects. In general, deregulation initiatives eliminate legal and administrative barriers which previously hindered entry into markets or the introduction of new products. Equally, when privatization eliminates the regulations which granted monopoly privileges to State enterprises, a dynamic of increased competition is generated, stimulating investment and boosting factor productivity. Liu (1993) investigated the impact of these types of policies over a period of eight years (1979-1986), concluding that the productivity gains obtained during that time "suggest that the microeconomic reforms – including privatization, deregulation and increased freedom of trade – were effective in discriminating between efficient and inefficient producers"[70] and that "in 17 out of a total of 25 industries, average efficiency was significantly greater in the surviving plants than in those which were forced to close their doors."[71]

Finally, Chile's results serve to confirm international experience with regard to the impact on companies of policies tending to increase rigidity and restrictions in the labor market. The evidence in Europe shows that the "high costs of hiring and firing workers weaken productivity gains, especially when adjustments in salaries and/or training are unable to offset the higher costs, thus leading to non-optimal balances between labor and technology and reduced incentives for innovation."[72]

[70] Liu (1993), pp. 219-220. Spanish translation by the author.
[71] Ibid., p. 230. Spanish translation by the author.
[72] Hemmings, Scarpetta, Tressel and Woo (2002), p. 26. Spanish translation by the author.

Thus, Bergoeing and Morandé (2001) suggest that the labor reforms discussed in Chile during recent years, which would raise the cost of hiring and firing workers, would produce an effect equivalent to a tax increase of 6.75% on labor.[73]

A review of the empirical studies of Chile's growth from the mid-1980s through a large portion of the 1990s confirms what both history and economics tell us about the policies conducive to growth. The Chilean experience contributes an additional set of data confirming the type of policies needed to produce the conditions for economic growth.

V. Conclusions

In this paper, we have analyzed the question of national development in an attempt to explain its principal causes. In light of international experience, including the most recent historical and economic research and the study of the specific case of Chile, we can conclude that economic progress depends to a substantial – although not exclusive – extent on public policies, especially those which produce a dynamic within society of innovation, cost reduction, wealth accumulation, and related effects. We have seen that this dynamic is generated in countries characterized by free market economies, openness to international trade, institutions that protect and promote property rights, policies producing macroeconomic equilibrium, democratic societies and limited governments able to achieve governability and stimulate economic creativity.

[73] Bergoeing and Morandé (2001).

It follows from this that the State is a fundamental factor in the achievement of development. In fact, implementing good public policies, creating and administering effective institutions and carrying out the macroeconomic function are in great measure the responsibility of the State. In consequence, growth requires not a passive or absent State, but one which "empowers growth."[74] This should not be wrongly interpreted; what is needed is not an activist or interventionist State, but one which, through its public policies, "creates an environment that stimulates increases in productivity."[75]

One example of what the State should not do is to favor certain businesses, industries or activities with special privileges, in the belief that they will spark the country's growth. This strategy tends to result in failure, due to the State's incapacity to select the winners. It also carries the additional cost of discrimination against other economic players which may have more potential for development.[76] There is abundant evidence on both the domestic and international level of the damage caused by such policies and the error it would signify to implement them in Chile.

On the contrary, what must be done is to strengthen property rights, as occurred in 1982 with the passage of the Mining Concessions Law.[77] Under this legislation, propertyholders affected by expropriations must be compensated in accordance with the value of future flows; in other words, they must receive the full economic value of the expropriated resources. The upholding of this law, along with the strong signal of stability

[74] Olson (2001).
[75] Porter, Michael E. (1998).
[76] In this regard see Noland and Pack (2002) and Sala-i-Martin (2002).
[77] Piñera, José (2002).

produced by the country's return to democracy, permitted private investment in mining to grow at a rate of 18.6% between 1992 and 2000. Another example is provided by policies opening up greater opportunities for the private sector, such as the privatization of telecommunications and electrical power enterprises, which led to increases in their productivity. As shown in a study by Bernstein (2003),[78] the number of workers per unit of energy sold fell from nearly 0.8 workers per GWh in 1984 to 0.5 in 1990. A similar example can be seen in the recent increase in private sector investment in Chile's highway infrastructure. Only ten years ago, this area accounted for only 0.5% of total public investment in the sector, while in 2002 it represented 46%. Policies which increase competition by means of laws, decrees or regulations easing entrance into markets also operate in the same direction. This can be seen, for example, in the competitive opening of the long-distance telecommunications market; during 1994, just after the reform, the volume of long-distance calls increased by 46.2%.[79]

In summary, a large number of cases can be cited to demonstrate the vital importance of State policies and actions in generating an environment conducive to growth. Some maintain that these types of policies are obsolete.[80] This is a serious error. The evidence to the contrary is very significant. Beyer and Vergara (2001)[81] note that the country has been unable to continue its rapid growth because of its failure to implement microeconomic reforms, such as measures to improve educational quality, stimulate business creation or increase the efficiency of the State. According to these studies, if Chile is able to improve

[78] Bernstein, Sebastián (1993).
[79] Informe Estadístico 1 (2000) and 2 (2001), Telecommunications Subsecretariat.
[80] Ibid. See also "La Concertación de Chile por un Desarrollo con Justicia" (2002).
[81] Beyer B., Harald and Rodrigo Vergara (2001), "Productivity and Economic Growth: The Case of Chile."

educational quality to the average achievement level measured by the international mathematics and science test (TIMSS), its total factor productivity would increase by about 0.7 percentage points. If, in turn, the effectiveness of its government can be improved to the level of those countries with better world performance, total factor productivity could be increased by an additional 0.8 percentage points.[82]

We can conclude by responding to the questions with which this paper began. Chile is capable of reaching the development goals it has set for itself. Growth is not the result of luck, nor of structural changes. It is mainly the fruit of appropriate institutions and public policies. Great advances have been seen in this regard during the past thirty years. Thus, we were able to confirm during the 1984-1997 period that annual growth rates of 7 percent are possible in our country. To return to these levels, we must, on the one hand, maintain the policies and institutions which supported this growth, and on the other hand, achieve political agreement on new reforms to boost the entrepreneurial spirit. Chile does not deserve to repeat its past experience of "frustrated development" in this new century which is beginning.

[82] Numerous papers have been published which propose a comprehensive and coherent array of public policies that would permit a return to high and sustained growth. See Libertad y Desarrollo (2001), Centro de Estudios Públicos (2001) and J. Vial (2003).

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