The Political Economy of Income Inequality in Chile Since 1850

Javier E. Rodríguez Weber

1 Introduction[1]

Inequality is again at the center of the political and economic debate. At the beginning of 2014 Barack Obama called it "the defining challenge of our time."[2] Soon after the publication of the English version of *Capital in the 21st Century*, by Thomas Piketty (2014), aroused a deep debate on the role played by inequality in developed countries since the eighteenth century and the challenges it poses to the future.

Inequality has always been a matter of concern in Latin America. Many believe that inequality is the most important obstacle to development and Chile, often called an "economic success story," is one of the most unequal countries in the region. Shortly after Obama's speech and, while assuming for a second time the

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[2]Barack Obama: State of the Union Address, on http://www.whitehouse.gov/the-press-office/2014/01/28/president-barack-obamas-state-union-address.

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presidency of Chile, Michelle Bachelet said that inequality was the biggest opponent of her country.[3]

This chapter summarizes a 400-page dissertation on the political economy of inequality in Chile between 1850 and 2009 (Rodríguez Weber 2014). The thesis aims to contribute to understanding the relationship between inequality and economic growth in the long run. I analyze the relationship as the result of the interaction between market forces and institutions. The aim is to highlight the mutual influences and to unravel the relationship between the overall process, historical specificities, and contingencies. This is what I call a political economy approach to inequality.

In the remainder of this chapter I present the leading evidence and the main arguments for a brief economic history of income inequality in Chile between 1850 and 2009. The second section discusses a methodological strategy capable of measuring the main trends of income inequality in the long run, and capturing at least part of the relationship between the market forces and the institutions which led to these trends. In Sect. 3, the core of the chapter, I report income inequality trends and summarize its relationship with the general development process. Section 4 concludes with some reflections on the past, the present, and the future of Chilean inequality.

2 The Problem, the Approach, the Method, and the Data

2.1 Inequality and Development in Chile

Regardless of where someone lives, his or her life is very different today than it was two centuries ago. The place they live, the way they earn their living, the way they relate to each other, the political system that makes the laws that rule their behavior, and every single aspect of their lives have been radically transformed by the developments that occurred in the last two centuries. Nevertheless, saying that every part of the globe has been affected by the transformation is not the same as saying that all have been affected in the same way. Modern economic growth has multiplied the capacity to produce goods and services by several times, but these goods and services have been unevenly distributed. Economic inequality has two dimensions: between regions and/or countries and between people and/or groups inside each country. With what is by Latin American standards a homogeneous population, Chile—an OECD member—has a GDP per capita which is a half that of OECD average. But it is its Gini coefficient of 0.53 (PNUD 2013) that makes Chile a typical Latin American country.

[3] "¡Chile tiene un solo gran adversario, y eso se llama desigualdad!", see Michelle Bachelet, takeover address, http://www.gob.cl/2014/03/11/presidenta-michelle-bachelet-en-su-primer-discurso-al-pais/.

I study the relationship between market income distribution and development in Chile for two reasons. As I will explain below, I do not think that the complexity of this subject can be studied in the aggregate way that characterizes the Kuznets Curve literature. Furthermore, the history of Chile is rich enough to study all of the problems that the literature has posed as central to the development and inequality relationship. In the last century and a half, Chile has been beneficiary of and prejudiced by the international economy and has gone through many different political regimes and development strategies. Therefore, Chile presents a large diversity of experiences that can be used to test different theories and hypothesis on how income inequality and development are related.

2.2 A Political Economy Approach

Most of the attempts to analyze the relationship between inequality and development derive a hypothesis from a general theory and use data to test it. Typically, these works assume the *ceteris paribus* clause. If I want to measure the effect of market integration on wage inequality, I must look for cases where nothing else has changed. The problem is that development transforms every aspect of social life, and changes in one area usually affect others. While economists may try to control for everything else but their favored variable, their success is always debatable. Certainly it is not possible to study all of them at the same time, so there is a need for simplification. I chose to highlight the interaction between institutions and market forces, the way that each one influences the other, and how both of them influence income distribution.

Inequality cannot be studied as the single outcome of market forces. Supply and demand are—of course—relevant, but no market factor exists without institutions and asymmetric power relations between those who interchange in it. In other words, it is necessary to recognize that beyond the market, there are social and political relations between individuals and groups, as well as a state that can—and usually does—intervene not only in market exchanges, but in what can be called—broadly speaking—the distributive conflict.

The state can shape market income distribution through different procedures, for example, by regulating rights and obligations of those who interchange, like property rights and the minimum wage. In other cases, it can intervene directly in a distributive conflict—by sending the police or military forces to dissolve a strike, or by pressuring the entrepreneurs to accept a rise in wages.

This is why a "pure" market income distribution does not exist, in the sense of a distribution solely determined by supply and demand forces. The political side of the economy is always there, especially when we are talking about inequality (Robinson 2010; Piketty 2014, 2015; Atkinson 2015).

2.3 Estimates: Dynamic Social Tables

How to measure market inequality among Chileans from 1850 to 1970? Income tax data is unavailable and using proxies like the ratio between income per capita and wages seemed unsatisfactory, so I opted to build dynamic social tables.[4] A social table is constructed assigning income recipients to different categories, usually occupations. Two kinds of data are needed for each category: how many there are and how much they earn. Typically, this methodology is used to estimate income inequality at a specific point in time. To study the evolution of inequality over time requires that social tables are built for different benchmark years (Lindert and Williamson 1982, 1983, 2013; Londoño 1995; Bértola et al. 2009). A "dynamic" social table estimates instead the number of income recipients and their income for each category for every year over a period of time.[5] Therefore, what makes a social table "dynamic" is the fact that it covers a *period of time*, not just a year—or a set of years. Within that period, the categories remain constant, but the number of people included and their income change every year. Metaphorically speaking, if the use of different social tables enables the derivation of inequality trends from a set of "pictures," a dynamic social table allows us to "see the whole movie."[6]

In order to estimate income inequality and other related variables in Chile, I built two dynamic social tables, one for the period 1860–1929 and the other for 1929–1970. The first one has 49 categories (9 in agriculture—7 of landowners, from peasant to big landlords, and 2 of workers—3 in mining, 10 in industry, 20 of civil servants, 5 in transport, and 2 in others–professionals and domestic service). The second one (1929–1970) has 116 categories. The different sectors and branches represented include agriculture, mining (3 branches), industry (23 branches), commerce, transport, and public and private services (3 branches), and they were segregated between employers, self-employed, employees (white collar), and workers (blue collar). Sometimes one of these categories was also disaggregated, like employers in the agriculture sector who were divided into nine categories according to the size and quality of their properties. Another problem is that the sources allowed us to measure pretax income inequality between income earners only. To estimate inequality after taxes and transfers or between households is impossible (at least for the whole period).

The main sources of data were population and economic census, statistical yearbooks, and a myriad of secondary sources—mainly historical statistics,[7] but also historical sources. Many assumptions were necessary, and I grounded them on theoretical and historical knowledge—e.g., the composition of peasant incomes, or the share of utilities in the mining sector appropriated by foreign capital. Sometimes

[4] Household surveys are only available for Santiago and the metropolitan zone from 1957 onwards.

[5] The term "dynamic" was proposed by Branco Milanovic in a workshop in Montevideo in 2011.

[6] A similar strategy was carried forward by Lindert and Williamson (2014) and Astorga's paper in this book.

[7] For example: Haindl (2007), Díaz et al. (2010), and Matus (2012).

there were alternative sources—e.g., rural wages between 1880 and 1925 (Bauer 1975; Matus 2012)—and I used what I thought were the best examples.

It is impossible to describe here the entire methodology applied, but some decisions that were taken are important enough to be presented in some detail.[8] This is specially the case for the top-income earners. If the estimation of the incomes of the top centiles presents several problems in the present, these are even more pronounced in the case of historical statistics. In order to deal with these problems, the two tables were created following different procedures. In the first table, which covers the years between 1860 and 1930, there are four categories of high-income earners. The first one is composed by elite civil servants (president, ministers, governors, etc.) where I used their annual salaries. Regarding landowners and industrialists, I estimated their income for a base year in which I had a reliable source and then projected it by an index which takes account of the evolution of prices, productivity, and wages. Finally, in the case of mining owners, first I estimated the sector's GDP at current prices for the whole period and then calculated the operating surplus which accrued to Chilean capitalists.[9] The procedure for estimating the operating surplus was also used in the second table (1929–1970), but in this case I used the series of GDP at current prices estimated by Haindl (2007). The total profits were then distributed between employers through different procedures—for example, in the case of the seven categories of landowners they were assigned to them according to the distribution of property and capital which was estimated from the agricultural censuses.

Many assumptions are controversial. To evaluate how sensitive the results are to them, different series were estimated, changing sources or assumptions. Figure 1 presents the maximum and minimum Gini estimates for each year between 1860 and 1970. Two conclusions are suggested. First, the different sources and assumptions of a wide range in levels of inequality, especially from WWI to early 1920s. Second, trends and cycles coincide. In short, level comparisons with other countries may be a source of error, but volatility and trends are unlikely to be.[10]

For the period after 1970 I used household surveys. The period 1850–1859 was estimated by a procedure adapted from van Zanden et al. (2011) which was inspired, in turn, by the concept of Inequality Possibility Frontier (Milanovic et al. 2011).

Nevertheless, there are some assumptions and sources that are, in my opinion, better than others. These lead to what I consider "the best" estimates, presented in Figs. 2 and 3. Both figures present two different measures of market income inequality. The former measures factor income distribution as the profit share in gross domestic income. Figure 3, on the other hand, measures market income distribution among Chileans and excludes the estimate of profits of foreign capital in the mining sector. This "best" estimate will be used in the remainder of the chapter.

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[8] The reader will find a full description of the methodology in Rodríguez Weber (2014: chapter 3).

[9] Note that foreign capital was very important in the mining sector. See Figs. 4 and 6.

[10] The reader will find a deeper analysis of the reliability of the estimated data in Rodríguez Weber (2014: 110–123).

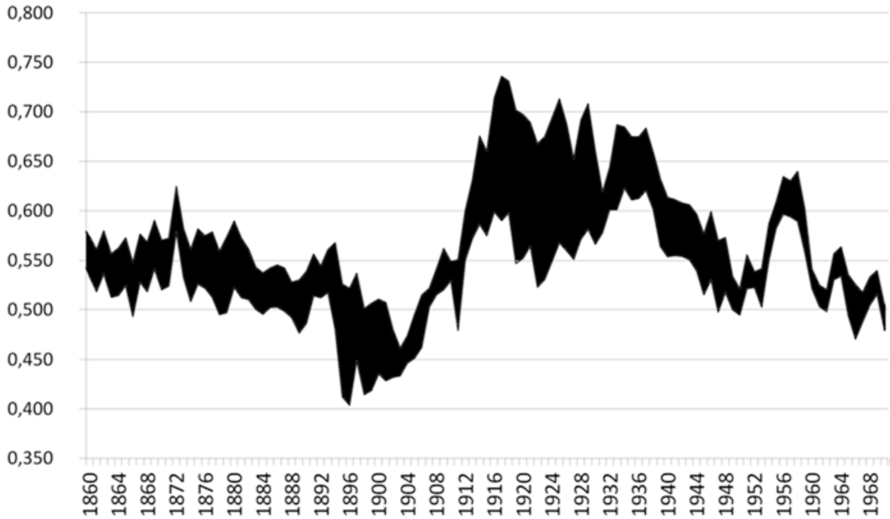

Fig. 1 Income distribution among Chileans between 1860 and 1970. Maximum and minimum estimations obtained through different sources and methods. *Source*: Own estimate. The estimates differ in their sources and/or assumptions

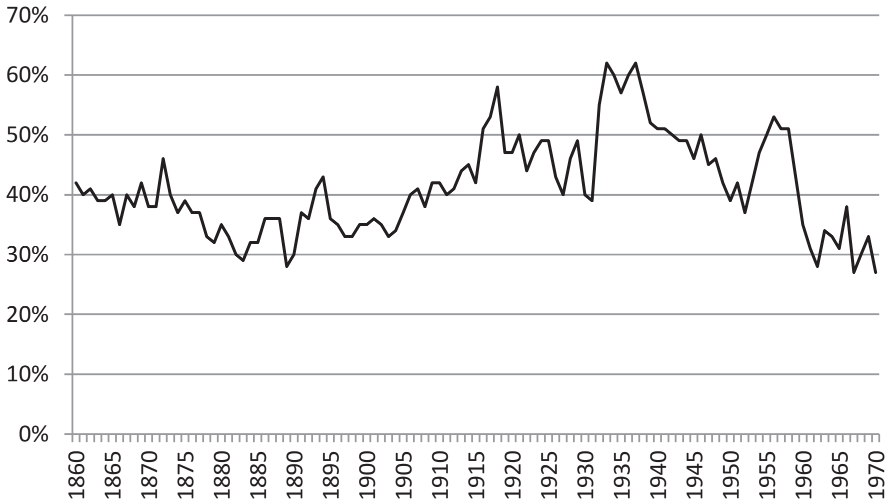

Fig. 2 The "best estimate" of factor income inequality, 1860–1970. Profit share as a percentage of gross domestic income in Chile, 1860–1970. *Source*: Own estimate

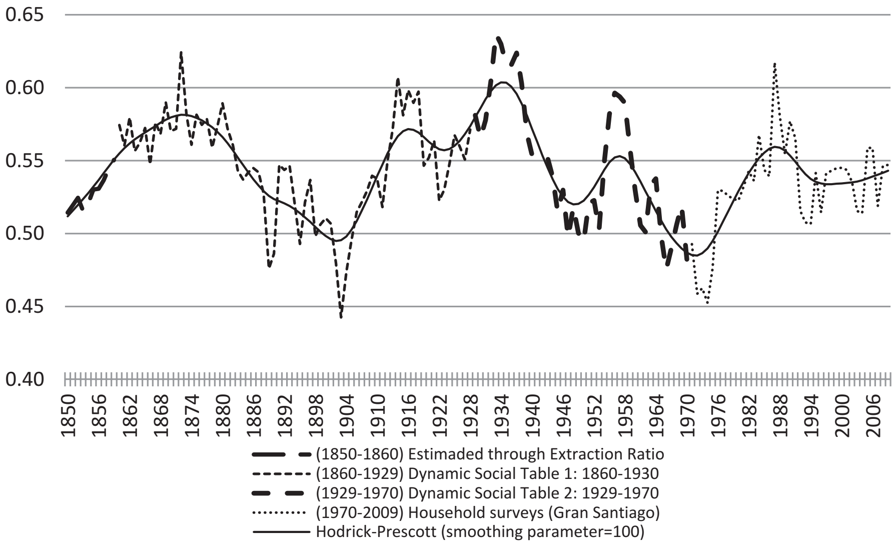

Fig. 3 The "best estimate" of Chilean income earner inequality, 1850–2009. Gini coefficient. *Source*: Own estimate. The different lines and dots represent different estimation methods. The pitfalls of each methodology and the splice of estimations obtained through different methodologies imply that only the midterm tendencies, obtained through the Hodrick-Prescott filter, will be used in the historical analysis

3 A Brief History of Income Inequality in Chile

3.1 Globalization and Institutions, 1850–1873

Unlike what happened in most of Latin America after independence, Chile State was rapidly consolidated. Although there were civil wars in the 1850s, postindependence conflicts had ended by 1830. In those decades of political stability, Chile benefited from growing international demand for copper and wheat. The first was driven by the expansion of the industrial revolution, and the second one by rise in world living standards and declining international transport costs. This commodity boom generated export-led growth.

Thus began the modern era of Chilean economic history, characterized by a virtuous cycle between exports, imports, and state revenues. Increasing world demand stimulated the production of tradables, the increase in foreign exchange earnings financed increased imports, and the tariffs on foreign commerce—the main source of tax revenues—allowed the expansion of public spending, especially on infrastructure. As a result, Chile's economy grew faster and foreign trade share rose[11] (Cariola and Sunkel 1982; Collier and Sater 1998; Salazar and Pinto 2002; Ortega 2005).

[11] Between 1850 and 1873 the annual growth rate for GDP per capita, exports, imports, and fiscal revenues were 3.8, 6.2, 5.9, and 4.1 % (Rodríguez Weber 2014: Table 5.2).

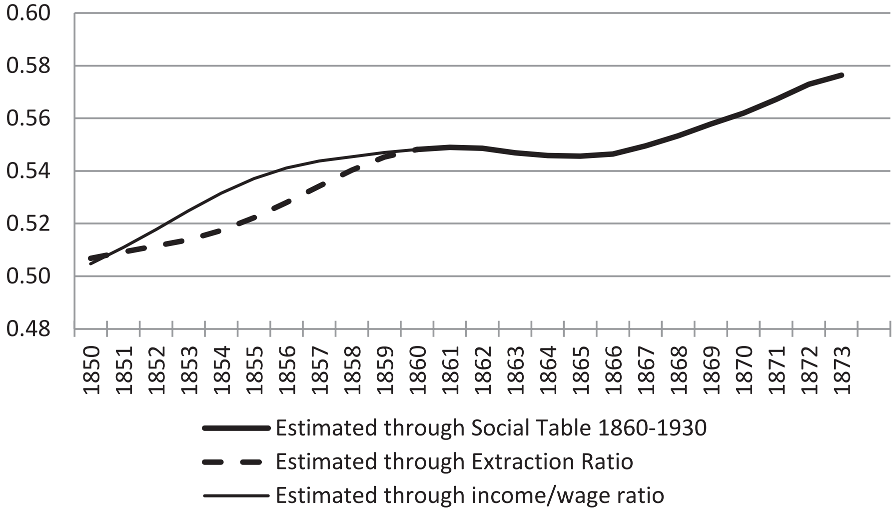

Fig. 4 Market income inequality among Chileans, 1850–1873. Gini index. *Source*: Own estimate. The period 1850–1859 was estimated by projecting the value of 1860 through two different methods. Both are based on assumptions which are consistent with historical knowledge (Rodríguez Weber 2015)

According to Williamson (2002, 2011) these global forces led to an increase in the rental/wage ratio which benefited landowners and implied a worsening income distribution. This was precisely what happened in Chile between 1850 and the mid-1870s (Fig. 4). The exports of wheat to California and Australia during the gold fever in the 1850s, and to Great Britain the decade that followed, promoted the use of land that was previously idle. But this land, although unused, had owners. So, new lands were placed into production on established *haciendas.* In a process which has been compared to the “second serfdom” of Eastern Europe, globalization forces tended to reinforce the archaic institution of the *inquilinos* (Bauer 1975, 1992; Bengoa 1988).[12] Part of the labor force of the *haciendas* since the seventeenth century, the *inquilinos* were paid with the right to use a piece of land, and they and their families had the obligation to work in the landlords’ fields. During this period, the value of land rose as a consequence of the increased demand for Chilean wheat (Gay 1863), and the obligations of the *inquilinos* increased as their rights diminished (Bauer 1975). Pushed by external demand, the economy grew, but the institutional framework which had the *hacienda* system at its core—which affected the lives of 80 % of the Chileans at that time—assured that growth went almost exclusively to the elite. Most people maintained a living standard barely above subsistence. As a consequence, income distribution worsened (Rodríguez Weber 2015).

[12] It’s worth noting that, contrary to other Latin American countries, there wasn’t an ethnic divide between Chilean peasants and landowners. The Chilean population was homogenous. Thus, at the end of the colonial period, the indigenous population accounted only for 9.5 % of total population, while Spaniards/whites were 74.5 % (Newson 2006, Table 5.3).

3.2 Crisis, Frontier Expansion, and Foreign Investment, 1873–1903

Income inequality fell between 1873 and 1903, surprisingly since it was still export led, but this trend obscures the fact that the period contained two different situations: 1873–1880 was a time of crisis that ended with the Pacific War (1879–1883), and 1880–1903 was a time of expansion.

Global forces that led to growth following the gold fever of the 1850s provoked a serious crisis in 1873. The quantity and the prices of exports fell strikingly, fiscal incomes sunk, and the whole economy collapsed (Sater 1979; Ortega 2005). The elite, and perhaps some civil servants in the middle—in any case the upper decile—were the only ones affected by the crisis, because most people were at subsistence. Reduced incomes in the top, even though it remained stable for the poor, implied a reduction in income inequality.

But things changed after 1880, when Chile initiated a second cycle of export-led growth, this time driven by the nitrate exports. This cycle was characterized by a process of frontier expansion in which the area of land controlled by Chile increased in almost 50 %. This was a consequence of two military victories: the first one over Peru and Bolivia in the North, which allowed Chile to gain control over the nitrate fields, and the second one over the *mapuches*, in the South, which allowed Chile to expand its agricultural frontier. As a result, the land/labor ratio increased by 30 %. The incorporation of natural resources, above all the nitrate fields, led to the second growth cycle of nineteenth century, which ended in 1913 (Cariola and Sunkel 1982).

Income inequality fell in the 1870s as a consequence of the crisis, but the same trend is seen after 1880, in a context of high growth led by nitrate exports. Why did this happen? The answer consists of two parts. First, the elite, weakened by the crisis, could not preserve the nitrate business for themselves. Instead, it was rapidly controlled by foreign capital—mainly the British. Therefore, an important share of the profits from the core industry during this period went to foreigners (Fig. 5).

In other words: foreign control of the industry and the burden of taxes collected by the state over the nitrate activity implied that a significant portion of income which would have gone to Chilean elite, if it had maintained control, ended up in foreign hands.

The other process which explains the counterintuitive fall in income inequality during this post-1880 period of export-led growth was the impact of frontier expansion on wages. During the last two decades of the century, Chile expanded its territory both to the north and to the south. In the north, salaries were high enough to attract the labor force to work on the inhospitable environment of the nitrate fields. In the south, after the Chilean Government won a war against the *mapuches*, thousands of people from the Central Valley migrated and occupied a piece of land—which had no owners, except, of course, the *mapuches* themselves. As a consequence, between 1880 and 1900 many people abandoned the rural sector of the Central Valley—the mainland of the *hacienda* system (Table 1).

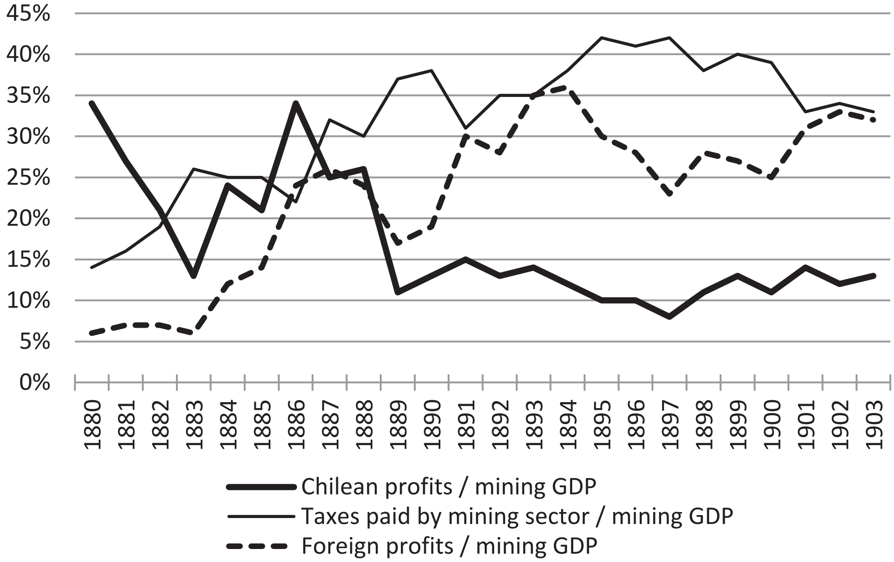

Fig. 5 Distribution of mining GDP between foreign investors, local investors, and the state, 1880–1903. *Source*: Own estimate. See Rodríguez Weber (2014: Cuadro AE 16)

Table 1 Population by regions and average growth rates between censuses

Region		Population by region (%)				Population growth: Annual rate by period (%)		
		1875	1885	1895	1907	1875–1885	1885–1895	1895–1907
North	"Big" north	0.1	4	6	8	48.9	3.9	4.0
	"Small" north	11	10	8	7	0.6	–0.9	0.7
Center	Central Valley	68	61	60	54	0.9	0.9	0.5
	Concepción	13	14	12	11	2.8	–0.5	0.9
South	Frontera	0.9	4	6	10	13.9	6.1	5.9
	The Lakes	4	5	5	7	3.1	2.0	4.0
	Austral	3	3	3	3	1.3	0.6	1.1
Total		100	100	100	100	2.0	1.0	1.5

Sources: Population census (1907) and Hurtado (1966, Cuadro 2). The Big North includes the provinces of Tacna, Tarapacá, and Antofagasta. The "Small" North includes the provinces of Atacama and Coquimbo. The Central Valley includes the provinces of Aconcagua, Valparaíso, Santiago, O'Higgins, Colchagua, Curicó, Talca, Linares, Maule, and y Ñuble. Concepción is formed by the provinces of Concepción, Arauco, and Bío-Bío. Frontera region by Malleco and Cautín. The Lakes by Valdivia and Llanquihue, and Austral zone by provinces of Chiloé and Magallanes territory

Therefore, labor demand increased as a consequence of the emerging nitrate industry and the growth of cities, at the same time that people were abandoning the rural area of Central Valley. Meanwhile, the growth of public education—enabled by state revenues collected over nitrates—initiated a slow but steady expansion of

Table 2 Annual income by categories of income earners. Constant shields of 1960

Period	$	Total	Elite	Unskilled labor			Skilled labor	Salaried
		Mean	Top 1 %	Urban	Rural	Total	Total	Total
1880–1884	Shields of 1960	298	7.425	299	121	214	1.735	311
1900–1904	Shields of 1960	428	8.183	412	231	324	1.811	445
1880–1884/1900–1904	Total growth	43.9 %	10.2 %	37.7 %	91.1 %	51.4 %	4.4 %	43.4 %

Source: Own estimate. See Rodríguez Weber (2014: Cuadros AE3, AE4, AE6, and AE7)

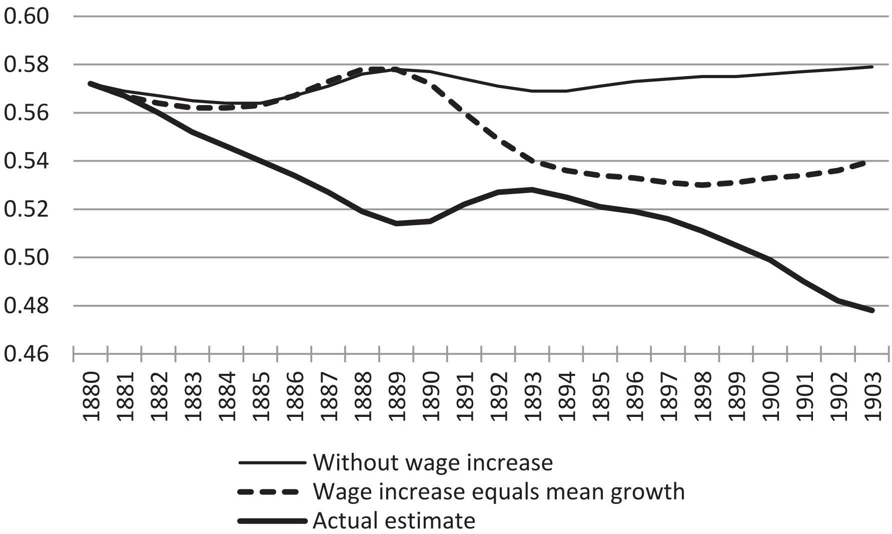

Fig. 6 Estimating the effect of the increase of wages on inequality. Gini coefficient, 1880–1903. *Source*: Own estimate

the middle classes and an increase in the supply of skilled workers (Rodríguez Weber 2014: Cuadro AE 12). All of this led to a bigger increase in unskilled wages—especially in rural wages—than in the mean income and elite income (Table 2). As the counterfactual exercise shown in Fig. 6 demonstrates, the increase in unskilled wages was big enough to have an important equalizing effect.

Why is it that we do not see the same evolution in other examples of frontier expansion during the same period like Argentina, New Zealand, or Australia? Because in these cases the expansion of the frontier went hand in hand with a population explosion due to an important immigration process. In Argentina, for example, between 1875 and 1914 the supply of agricultural land increased from 55 to 83 million of hectares. But population growth was even more important, from 1.7

to 7.8 million in the same period. As a consequence, the hectares per capita decreased from 31 to 11. The same process is seen in New Zealand (Álvarez 2012). That is to say, in both cases it followed the opposite tendency than in Chile, when hectares per capita increased from 18 to 23 between 1875 and 1885.

In sum, unskilled wages increased at the same time that most of the profits generated in the nitrate sector went outside the country. As a result, personal income distribution among Chileans fell in a context of economic growth led by exports of natural resource-intensive goods. Profit share, on the other hand, remained almost constant although at a lower level than in the 1860s (Fig. 2).

3.3 Zenith and Decay of the "Oligarchic Republic," 1903–1938

Between 1903 and 1913, the real mean income grew at an annual rate of 1.9 %, the real income of the top 1 % by 8.0 %, and the real income of the unskilled workers decreased at a rate of—1.5 % (Rodríguez Weber 2014: Tabla 7.1). As a result, the total real income increased by 33 %, the income of the top percentile rose 137 %, and that of the bottom 99 % increased by only 17 %. In other words, the top 1 % appropriated 55 % of the total growth of the period. Why the difference between 1873 and 1903?

The crisis of 1873 affected the income of the elite, but not its power. Their control over the state was so total that it is accurate to talk about an "oligarchic republic" (Vial Correa 2010) or "aristocratic regime" (Reinsch 1909). When the effects of frontier expansion and internal migration passed, the elite could turn into almost the unique beneficiary of the last decade of growth in the nitrate era.[13] When growth declined after 1913, the elite could keep their privileged situation, until the effects of the crisis facilitated a social alliance between urban workers and middle sectors which in turn overthrew the oligarchic republic.

To talk about an "oligarchic republic" while studying the political economy of income inequality requires a theoretical stance. One can expect that under such a regime the state will promote policies beneficial to the elite in their conflicts with other classes. Hence, while much has been debated about the impact of oligarchic institutions on economic growth in the long run,[14] the consequences for inequality are much less debatable.

There were three causal mechanisms derived from the elite's political control over the state, which allowed them to become the main beneficiary of the economic growth at the end of the nitrate era and which explain the rapid increase in income inequality between 1903 and 1913 and into the 1920s (Fig. 3).

[13] This time growth was led in the first place by increasing prices. Nitrates were used for explosives, so demand increased in the decade before the Great War.

[14] See Acemoglu et al. (2005), Coatsworth (2008), Bértola (2011), Dobado (2009), and Mahoney (2010).

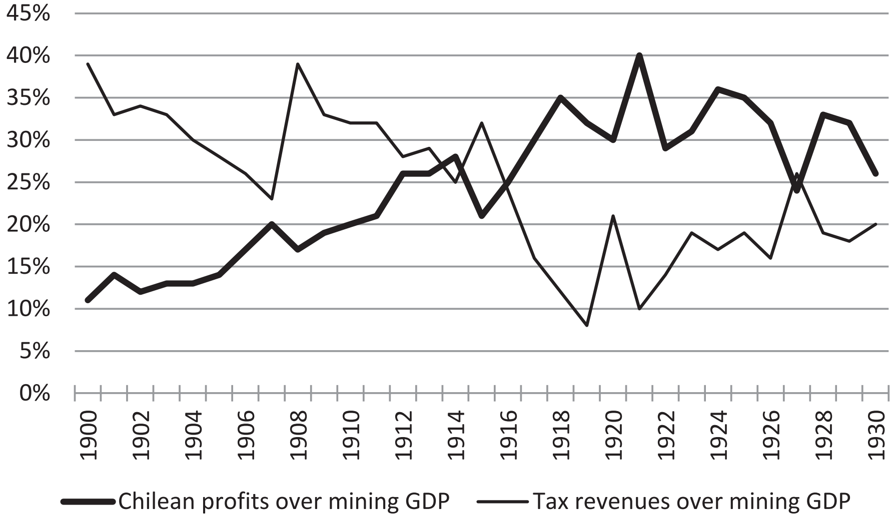

Fig. 7 Chilean profits and tax revenues collected in the mining sector as a percentage of mining GDP. *Source*: Own estimate. See Rodríguez Weber (2014: Cuadro AE 16)

First, the elite took control over the nitrate industry. In fact, between 1901 and 1925 the participation of the Chilean capital in the industry increased from 14 to 68 %. Meanwhile, the British share was reduced from 55 to 23 % (Cariola and Sunkel 1982: Cuadro 16). At the same time, the portion of the mining GDP collected by the state as tax revenues was significantly reduced (Fig. 7).

Second, during the decade before the Great War, monetary police led to increased inflation[15] which reduced real wages since nominal wages grew more slowly. When urban and mining workers organized in their recently formed unions and demanded an increase in nominal wages to match inflation, as well as other improvements in labor conditions, they were wildly repressed. The massacre of 1907 in Iquique, when more than 2000 mining workers and their families were strafed in a school by the army, became the bold symbol of the period.[16] After that, the union activity fell off, as did real wages (Fig. 8). In sum, the unions could not prevent the fall in real wages and the economic growth directly benefited the elite. But this was not the result of "impersonal market forces." It was, instead, the direct consequence of the policies carried forward by the oligarchic republic in favor of the elite.

Third, the property rights over the land taken from the *mapuches* in the South were now regularized in a way that they systematically benefited the great landowners in detriment to the *mapuches* and the people who had settled there in the previous

[15] The increase in the consumer price index was 10 % in 1905, 17.3 % in 1906, 24.4 % in 1907, and 12.2 % in 1908 (Matus 2012).

[16] The number of workers dead as a consequence of state repression during this period was similar to the Chilean casualties during the Pacific War.

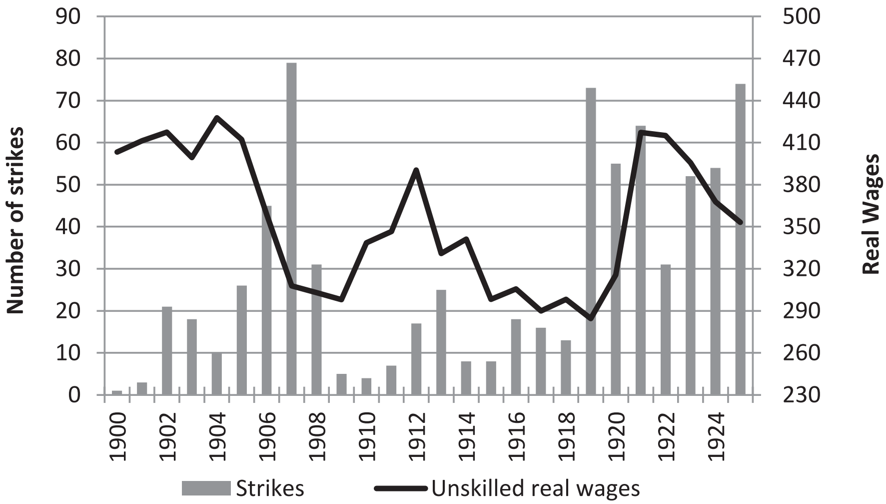

Fig. 8 Index of real wages for unskilled workers (1913 = 100) and number of strikes in Chile, 1900–1925. *Sources*: Strikes: Pizarro (1986: cuadros 2 y 7). Real wages: Own estimate

period. The control of the elite over the state guaranteed that the *hacienda* system expanded to the frontier (Solberg 1969; Bengoa 1988; Almonacid 2009).[17]

These are the fundamental mechanisms that explain the rapid increase of income inequality between 1903 and 1913. After that, inequality remained high, but the economic context changed radically.

Between 1913 and 1938, there was hardly any economic growth at all. This was the net result of interwar volatility and the Great Depression. This situation of stagnation with volatility, if not affected the privileged place of the elite in economic terms, at least undermined its political role.

The crisis severely affected fiscal revenues. The taxes on foreign commerce had fed state expansion, but now public earning and spending sunk. In 1917 fiscal expenditures were at 44 % of their 1912 levels (Diaz et al. 2010). As the state was a central player in the skilled labor market—teachers, military officers, and civil servants—the fiscal crisis reduced the demand for skilled workers, whose wages fell jointly with fiscal expenditures. Between 1912 and 1917 skilled wages fell by 38 %. They recovered during the 1920s but dropped again after 1930. Between 1912 and 1937, skilled wages fell at an annual rate of 2.0 %. During the same period the ratio between skilled and unskilled wages fell from 6 to 2.9 (Rodríguez Weber 2014: Cuadro AE 7). This, together with the increase in the strikes—by that time the unions had recovered from their defeat of 1907—fed political discontent, social turmoil, and sabre-rattling. The oligarchic republic was in steep decline.

After 1920 different presidents acceded to the government against the elite's desires—something unthinkable a few years earlier. In 1938, after two decades of

[17] See also Rodríguez Weber (2014: 227–232).

political turbulence—which included two dictatorships and a first attempt to set up a socialist republic—the elections were won by the *Frente Popular*, a left-wing alliance formed by social democrats, socialists, and communists.

3.4 Achievements and Pitfalls of the "Mesocratic Republic," 1938–1973

The expansion of education between 1910 and 1940—when Chile narrowed the education gap with core countries (Bértola et al. 2012: Cuadros 8 and 9)—allowed an increase in skilled labor in the next decades. Thus, the "mesocratic republic," between 1938 and 1973, was a time of expansion and growing importance of the middle sectors, both in political and economic terms. It was also a period of an increasing role of state regulation on economic activity. Its influence was particularly important in the promotion of industry. This led to a structural change in three ways. First, it fed the urbanization process. Between 1940 and 1970 urban population increased from 53 to 75 %. Second, the structure of sectoral GDP and working labor changed dramatically. As elsewhere in Latin America, this was an era of industrialization (Thorp 1998; Bértola and Ocampo 2012). Between 1935 and 1970 the industrial share in GDP increased from 12 to 23 %. Meanwhile, the agricultural and mining shares fell. In terms of the labor force, the structural change was characterized by the fall in agriculture and the expansion of services. Third, there was a relative expansion of employees, especially skilled. Between 1940 and 1970 white-collar workers increased from 14 to 39 % of the total labor force, and from 21 to 47 % of the urban workers (Rodríguez Weber 2014: Cuadro AE 12).

The political scene was increasingly dominated by left-wing parties and unions. The center-left controlled the executive between 1939 and 1952, and again between 1964 and 1970. Furthermore, between 1971 and 1973, Chile passed through a revolutionary process under the presidency of Salvador Allende. The new political context of the 1940s and 1960s was correlated with an increase in the union activity. Between 1936 and 1941 the unionization rate of white-collar workers increased from 20 to 45 %. Although it later declined, it rose again during the Christian Democratic government, from 25 % in 1964 to 45 % in 1970. Unionization grew also within the industrial sector, but less than in the case of white-collar workers. For rural workers, unionization was almost nonexistent before the victory of the Christian Democratic Party, but rocketed after 1964, reaching 74 % of the rural labor force by 1970 (Rodríguez Weber 2014: Cuadro AE 19).

Between 1940 and 1970, inequality fell as a consequence of various forces. Only in the 1950s was this trend partially reversed (Fig. 3). The mechanisms by which distribution was improved were of two types. First, the process of structural change undermined the importance of a sector which was highly unequal (agriculture) in favor of the urban economy, where inequality was lower (Rodríguez Weber 2014: Cuadro AE 23).[18] More important was the increase in the middle sectors—mainly

[18] The same was true in Colombia and Uruguay (Londoño 1995; Bértola 2005).

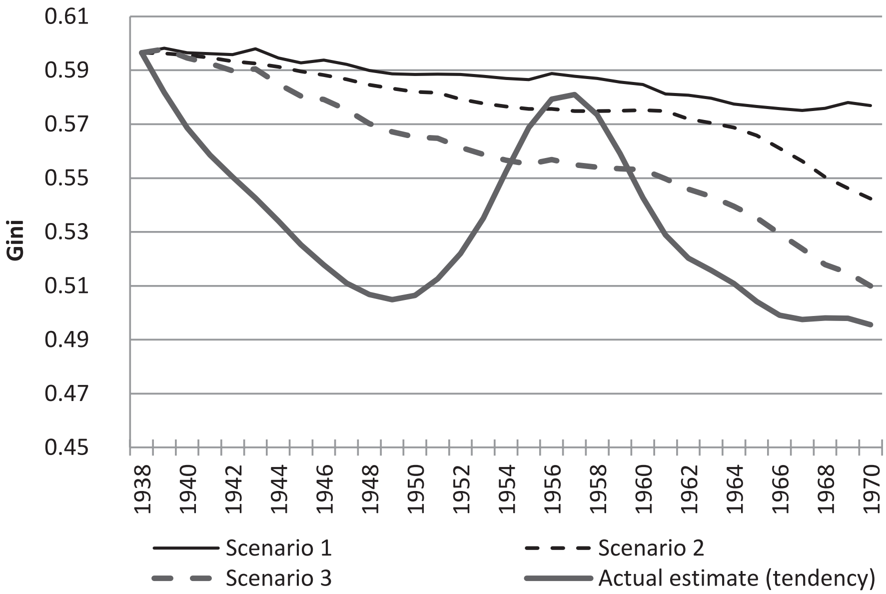

Fig. 9 Estimating the effect of structural change on income inequality reduction. *Source*: Own estimates. See text for descriptions of the different scenarios

employees—which meant that an augmented portion of workers earned salaries nearer the mean of the distribution. Thus, between 1940 and 1970, income recipients which earned between 50 and 200 % of the mean income increased from 42 to 55 % of total income earners (Rodríguez Weber 2014: Gráfico 8.14).

The combination of both processes of structural change, between sectors and between categories of workers (that is, the increased importance of employees), had a strong equalizing effect, especially in the 1940s and 1960s when the process accelerated. This can be seen from the counterfactual scenarios presented in Fig. 9. The purpose of the exercise was to capture the effect of the different aspects of structural change on income inequality, so the level of income for each category was maintained constant at its level of 1938. In the first scenario, income inequality was estimated assuming that the structural change was only due to the migration of unskilled workers between sectors. Thus, scenario 1 captures the effect of the rural workers moving on to urban unskilled jobs.[19] In scenario 2, inequality was estimated assuming no structural change between sectors but only between categories of workers, i.e., between blue-collar workers and white-collar employees. Thus, this scenario captures the effect of the "skilling" within sectors. Finally, in scenario 3 income inequality was estimated assuming shifts between sectors and categories of

[19] The gap between rural and unskilled urban wages grew during the period, in accordance with the increasing gap in productivity and differences in the institutions that ruled both labor markets. In 1938, 1950, and 1970, rural wages were 41, 44, and 24 % of unskilled urban wages (Rodríguez Weber 2014: AE 7).

workers but, as in the other scenarios, income levels remained constant for all categories. As can be seen, if only this had occurred, then income inequality would have fallen by about the same magnitude that actually occurred.

The second kind of mechanisms was related to the effect that the new political context had in the labor market institutions. During the 1940s, both government intervention—especially through the implementation and increase of the minimum wage for employees—and union activity favored an increase in the income earned by the poorest of the white-collar workers. Between 1940 and 1953, minimum wage systematically increased above the inflation rate of the previous year, a policy that not only reduced inequality within employees—the Gini coefficient for employees fell from 0.40 in 1939 to 0.28 in 1950 (Rodríguez Weber 2014: Cuadro AE 22)—but also seemed to affect unskilled wage growth (Rodríguez Weber 2014: 296–297).

Nevertheless, the redistributive goal was put in second place as inflation became the first policy concern. As it accelerated, the minimum wage lost its role as a redistributive tool during the 1950s; real wages fell, and income distribution worsened for a while (Fig. 3).

During that time, conservative forces gained influence and a monetarist adjustment was attempted.[20] The goal was to freeze wages at the reduced level that they were after the inflation accelerated. Whereas during the 1940s the increase in the legal minimum wage for employees was a tool to promote real wage growth, now it was used as a way to contain the growth of prices. Nevertheless, this policy was impossible to implement under the institutional conditions of the mesocratic republic. The white- and blue-collar unions fought against the monetary policy, and it was progressively abandoned.

In the 1960s, the redistributive agenda took a new impulse, and it now reached the countryside. The agrarian reform led by the Christian Democratic government was the last attempt to transform the structure of inequality by ending the *hacienda*, the ancient institution which had its origins in the *encomienda* system of the colonial times (Loveman 1976; Santana Ulloa 2006; Rodríguez Weber 2013). This path of transformation was reinforced by Allende's victory in 1970. In that election, a vast majority of Chileans opted to deepen the structural reforms. However, street riots, and the attempt to build a socialist economy, alarmed a vast part of those in the middle, which by 1973 sided with the elites in opposition to the government. A military coup overthrew Allende on September 11th of 1973.

3.5 The Legacy of Repression and the Debt of Democracy, 1973–2009

The period 1973–2009 exhibits a unique style of development, characterized by the return to the export-led growth strategy, and the withdrawal of the state from the economy and a commitment to the centrality of the market in allocating resources,

[20] Due to the Klein-Sacks mission.

but it is useful to distinguish between two different stages. Between 1973 and 1989 Chile was under the dictatorship of General Pinochet, whose regime was guilty of massive violation of human rights. The state repressed organizations like political parties and trade unions which play a central role in distributive conflicts. This was also a period of high economic volatility, marked by two deep recessions in 1975 and 1982/1983, and modest economic growth. It was under such circumstances that inequality reached its highest level since the 1930s (Fig. 3).

Chile has been governed by a democratic political system since 1990. This most recent period was characterized by greater stability, higher levels of investment, and a higher growth rate. Nevertheless, the center-left coalition that ruled Chile between 1990 and 2009 was unable to reduce the extreme level of inequality which inherited from the authoritarian regime.

The high level of inequality that Chile faces today arose in a highly repressive political context, characterized by the prohibition of political parties and the repression of the trade unions and any kind of opposition. It was under these circumstances that the military dictatorship led by General Pinochet and his advisors promoted a radical transformation of the economy and society (Gárate Chateau 2012). Inequality arose because the policies carried forward by the government led to redistribute in favor of the elite. This was evident both in the structural reforms they boosted as well as in the short-term measures they adopted in response to the crisis of 1975 and 1982. The combination of high inflation, unemployment, and repression sank real wages. Poverty rocketed and income distribution worsened radically in few years (Fig. 3; see also Rodríguez Weber 2014: Cuadros 9.3, 9.6, and 9.8).

But the legacy of inequality that Pinochet and the Chicago boys left to Chilean democracy was settled in its structural transformations. First, the privatization of public enterprises and services—made in a highly opaque context (Gárate Chateau 2012; Mönckeberg 2001)—implied that profits could now be made from selling services that were considered rights a few years before. Instead of the perfect competitive markets that were promised by the Chicago boys who led the transformation, these services were increasingly provided by oligopolies which extracted huge profits by providing services that were once provided by the state (Solimano 2012).[21]

Secondly, the liberalization of the labor market, where a reform was introduced with the explicit aim of debilitating union's bargaining power (Coloma and Rojas 2000), left the vast majority of workers unarmed to face the power of the huge economic groups born under the dictatorial rule. And that is the third structural change provoked by the dictatorship that anchored inequality until 2009. The extremely rich elite,[22] whose economic and political power is similar today to what it was during the oligarchic republic at the beginning of the twentieth century,[23] impose

[21] Even *The Economist* admitted that Chilean capitalism had several problems on this subject. See http://www.economist.com/node/21552566.

[22] According to the population of their country, Chilean billionaires are overrepresented in the Forbes list. Related to Chile's GDP, their fortunes are also bigger than in most countries.

[23] Between 1913 and 1937 the 28 % of income went to top 1 % of income earners. In the first decade of twenty-first century the proportion was about 30 % (Rodríguez Weber 2014: Tabla 9.5).

formal and informal rules that undermine Chilean democracy (Garretón 2003; Gárate Chateau 2012). Even under democracy, the elite have been able to stop the timid attempts made by the government to improve income distribution. These, jointly with the fears of the parties which ruled between 1990 and 2009 that progressive policies like labor reform could destabilize the economic and political system, explain why inequality did not improve after 20 years of center-left governments. Inequality still is, as Michele Bachelet recognized, the major debt of democracy.

4 Income Inequality in Chile: Past, Present, Future

Chilean inequality has changed over time because it is part of the broader historical process. Among the market forces that have had an impact on income distribution it is useful to distinguish between those affecting the supply side from those acting on the demand side. The former include the frontier expansion, which in turn increased the land/labor ratio, and the expansion of education, which fueled the supply of skilled labor. Among the latter, of most importance were the changes in the market for Chilean exports. Finally, the processes of structural change—industrialization, urbanization, and expansion of the public sector—have affected both the demand and supply of labor, resulting in a reallocation of labor between sectors and categories of workers. However, changes in supply and demand of productive factors have never acted separately, and its consequences for inequality have always been mediated by the institutional environment. For example, the capacity of collective actors to build organizations like trade unions in defense of their interests, as well as the relationships—usually conflictive—they built with other players in the distributive conflict influenced the development of redistributive policies carried forward by the state, as well as the institutions governing property rights and factor markets. On the other hand, state intervention as a relatively autonomous player influenced not only the capacity of the agents to succeed in the distributive conflict, but it also affected the prices of relative factors. In other words, markets and institutions were the two sides of the same coin. It was the development of their relationship as a part of the general historical process which shaped inequality trends.

Nevertheless, to say that history matters implies not only that things changed over time, but also its persistence, a fact whose importance over the present and future of Chilean inequality is difficult to overestimate. At first sight, the fact that Chile is nowadays one of the most unequal countries in the world is due to the policies carried forward under the dictatorship. But a closer scrutiny shows that this was the last—although the nastiest—episode of a series in which the state assumed a role in promoting inequality. And this is, in turn, a consequence of a long-term trend: the control of the elite over the state, which allows it to shape the economic and political institutions in its favor. In this sense, and similarly to the argument developed by Sánchez-Ancochea in his chapter for this book, to achieve a better understanding of Chilean inequality today, but especially to forecast what might happen with it in the future, it is essential to analyze how the actual economic and political power of the elite evolves: a power that is rooted in the high concentration of wealth and the oligopolistic market structure which not only promotes high inequality of wealth and income, but also undermines democratic institutions.[24]

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[24] The scandals which exploded at the beginning of 2015 over the role of the PENTA Group—a holding which has its origins in the privatizations made under Pinochet—in political financing, tax evasion, and bribery are the most recent—and evident—example of this "incestuous relationship between money and politics" as Marta Lagos called it. See "Executives Are Jailed in Chile Finance Scandal," the *New York Times*, March 8, 2015, page A9.

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