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SALARY INEQUALITY IN CHILE THROUGH A NEW INDICATOR, 1845-2020*

*DESIGUALDAD SALARIAL EN CHILE A TRAVÉS DE UN
 NUEVO INDICADOR, 1845-2020*

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Abstract

We provide a new indicator of salary inequality for Chile: the ratio of the salary of the Finance Minister compared to that of the lowest paid worker in the Ministry of Finance (1845-2020). The ratio indicates the ideas that the political elite has about its own "worth", and that of those at the bottom, thus providing a new story about political views on inequality. We found that between 1845 and 1900 this ratio was very high (25-42), declining sharply during the 1900s-1910s, but climbed up to 14-16 between 1910 and 1930. Thereafter there was a new decreasing trend, with the lowest value reached in 1960 (6). Between 1970 and 2000 it moved within the range 9-10, to increase to 13-18 during the last two decades. According to this ratio, the most egalitarian period would be the 1940s-1960s, when a welfare state emerged

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in the country. In turn, the changes in this ratio were mainly the result of variations in the bargaining power of civil servants and low skilled workers, with actors competing to increase their participation in the national income.

Keywords: Chile, income inequality, salary inequality, top incomes.

Resumen

Proporcionamos un nuevo indicador de desigualdad salarial para Chile: la relación entre el salario del Ministro de Hacienda y el del trabajador peor pagado del Ministerio de Hacienda (1845-2020). La proporción indica las ideas que tiene la élite política sobre su propio "valor" y el de "los de abajo", proveyendo así una nueva historia de las opiniones políticas sobre la desigualdad. Hallamos que, entre 1845 y 1900, esta relación fue muy alta (25-42), disminuyendo drásticamente durante las décadas de 1900-1910, pero subiendo a 14-16 entre 1910 y 1930. A partir de entonces hubo una nueva tendencia decreciente, alcanzando el valor más bajo en 1960 (6). Entre 1970 y 2000 se movió dentro del rango de 9-10, para aumentar a 13-18 durante las últimas dos décadas. De acuerdo con esta relación, el período más igualitario sería 1940-1960, cuando surgió el Estado de Bienestar en el país. A su vez, los cambios en esta relación se debieron principalmente a variaciones en el poder de negociación de los funcionarios y trabajadores poco calificados, como actores que compiten por incrementar su participación en el ingreso nacional.

Palabras clave: Chile, desigualdad de ingresos, desigualdad salarial, ingresos altos.

INTRODUCTION

During the last ten years there have been considerable advances in our knowledge of the evolution of income inequality in Chile. Javier Rodríguez Weber has produced a remarkable series of works¹ for 1850-2010, on its evolution, causes

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- 1 Rodríguez Weber, Javier, "Economía política de la distribución del ingreso rural en Chile durante la decadencia de la Hacienda, 1935-1971." *Revista Uruguaya de Historia Económica*. Vol. 3. No. 3. 2013. pp. 33-62. Rodríguez Weber, Javier, "Globalización, instituciones y la economía política de la desigualdad en Chile entre 1850 y 1873." *Revista Uruguaya de Historia Económica*. Vol. 4. No. 7. 2015. pp. 45-64. Rodríguez Weber, Javier, "Impulsando la desigualdad «de mercado»: el vínculo elite-Estado en Chile en el siglo XX." *Revista Perfiles Económicos*. Vol. 1. 2016. pp. 11-41. Rodríguez Weber, Javier. *Desarrollo y Desigualdad en Chile (1850-2009). Historia de su economía política*. Santiago, DIBAM-Centro de Investigaciones Diego Barros Arana, 2017. Rodríguez Weber, Javier, "La erosión del poder de la élite en Chile entre 1913 y 1970. Una aproximación desde los ingresos del 1%." *Revista de Historia Económica - Journal of Iberian and Latin American Economic History*. Vol. 35. No. 1. 2017. pp. 49-80.

and consequences. The PNUD² launched another important study, which included a chapter on its historical evolution too,³ while there are other recent relevant studies by Durán, Schatan, Solimano and Pollack, Larrañaga, Contreras and Ruiz-Tagle; and Contreras and Ffrench-Davis⁴.

These contributions are all the more welcome given the recent social unrest in Chile, which started in October 2019 and paused due to the impact of coronavirus, mainly due to the income, salary and wealth inequality of the country. The Chilean case is puzzling because the country has usually been portrayed as enjoying strong state capacity, high per capita GDP, a high Human Development Index, and a remarkable macroeconomic stability, especially if compared to most Latin American countries. Yet, at the same time it is the most unequal country of the OECD club and has been one of the most unequal societies in the world, from the colonial period to the present day⁵. Historians of inequality have much to tell us about the causes and consequences of this issue for Chile. Without a substantial reduction in inequality, the country will never develop.

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- 2 PNUD. *Desiguales: Orígenes, cambios y desafíos de la brecha social en Chile*. Santiago, PNUD, 2017.
 - 3 See also: Contreras, Dante. "Explaining Wage Inequality in Chile: Does Education Really Matter?" *Journal of Income Distribution*. Vol. 11 No. 1. 2002. pp. 53-76. Flores, Ignacio, Sanhueza, Claudia, Atria, Jorge y Mayer, Ricardo, "Top Incomes in Chile: A Historical Perspective on Income Inequality, 1964–2017." *Review of Income and Wealth*. Vol. 66. No. 4. 2019. Pp. 850-74.). Fairfield, Tasha and Jorratt De Luis, Michel, "Top Income Shares, Business Profits, and Effective Tax Rates in Contemporary Chile." *Review of Income and Wealth*. Vol. 62. No. S1. 2016. pp. S120–44. López, Ramón, Figueroa, Eugenio, y Gutiérrez, Pablo, "Fundamental Accrued Capital Gains and the Measurement of Top Incomes: An Application to Chile." *The Journal of Economic Inequality*. Vol. 14. No. 4. 2016. pp. 379–94. Sanhueza, Claudia and Mayer, Ricardo, "Top Incomes in Chile Using 50 Years of Household Surveys: 1957– 2007." *Estudios de Economía*. Vol. 38. No. 1. 2016. pp. 169–193. Agostini, Claudio e Islas, Gonzalo, "Evolución del impuesto al ingreso en Chile: desigualdad y grupos de presión." Estafane, Andres y C. Robles, Claudio (eds.). *Historia política de Chile, 1810-2010*. Santiago, FCE, 2018, pp. 207-38.
 - 4 Durán, Gonzalo, "Desigualdad y salarios en perspectiva histórica, siglos XIX y XX." Estafane, Andres y Robles, Claudio (eds.) *Historia política de Chile, 1810-2010. Problemas económicos*. Santiago. FCE. 2018. pp. 239-278; Schatan, Jacobo, "Distribución del ingreso y pobreza en Chile." *Polis*. No. 11. 2005. Disponible en: <https://journals.openedition.org/polis/5865> (Último acceso 19 de diciembre de 2020); Solimano, Andres y Pollack, Molly. *La mesa coja: prosperidad y desigualdad en el Chile democrático*. Santiago, LOM, 2006; Larrañaga, Osvaldo, "El Estado de Bienestar en Chile, 1810-2010" Ricardo Lagos (ed.). *Cien años de luces y sombras*. Volumen 2. Santiago. Taurus. 2010; Contreras, Dante y Ruiz-Tagle, Jaime, "¿Cómo medir la distribución de ingresos en Chile?: ¿son distintas nuestras regiones?, ¿son distintas nuestras familias?" *Estudios Públicos*. No. 65. 1997. pp. 59-80; Contreras, Dante and Ffrench-Davis, Ricardo. "Policy Regimes, Inequality, Poverty and Growth: The Chilean Experience, 1973–2010." *WIDER Working Paper No. 2012/04*, United Nations University World Institute for Development Economics Research (UNU-WIDER), 2012.
 - 5 PNUD, *Desiguales*

The recent plethora of works is not unique to Chile: studies on inequality and income distribution have proliferated for other Latin American countries for the region as a whole⁶; and for the rest of the world during the last decade in particular, including the elaboration of long-term statistical series on many indicators⁷.

These works have highlighted that the history of inequality should no longer be conceived of as a phenomenon caused by fluctuations in supply and demand: it cannot be reduced to purely economic mechanisms⁸. Rather, it should be analysed as a result of the interaction between market forces and the institutional environment, taking into account the power relations between the actors competing to increase their participation in the national income⁹. Furthermore, it is

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- 6 Bértola, Luis. "A 50 años de la curva de Kuznets." *Investigaciones de Historia Económica*. Vol. 1. No. 3. 2005. pp. 135-176. Serna, Miguel (Ed.), *Pobreza y (des)igualdad en Uruguay: una relación en debate*. Montevideo, Universidad de la República, 2010. Hora, Roy, "La evolución de la desigualdad en la Argentina del siglo XIX: Una agenda en construcción." *Desarrollo Económico* Vol. 47. N.º 187. 2007. pp. 487-501. Gelman, Jorge, y Santilli, Daniel, "Los salarios y la desigualdad en Buenos Aires, 1810-1870." *América Latina en la historia económica*. Vol. 21. No. 3. 2014. pp. 83-115; Bértola, Luis and Ocampo, José Antonio, *The Economic Development of Latin America Since Independence*. Oxford University Press, Oxford, 2012. Bértola, Luis and Williamson, Jeffrey (Eds.), *Has Latin American Inequality Changed Direction Looking Over the Long Run*. New York, Springer International Publishing, 2017. Prados De La Escosura, Leandro, "Inequality and Poverty in Latin America: A Long-Run Exploration." Hatton, Timothy, O'Rourke, Kevin and Taylor, Alan (eds.). *The New Comparative Economic History: Essays in Honor of Jeffrey G. Williamson*. Cambridge, MA. MIT Press. 2007. pp. 291-315. Frankema, Ewout, *Has Latin America always been unequal?* Vol. 3. The Netherlands. Brill. 2009. Arroyo-Abad, Leticia, "Persistent Inequality? Trade, Factor Endowments, and Inequality in Republican Latin America." *Journal of Economic History*. Vol. 73. No. 1. 2013. pp. 38-78. Arroyo-Abad, Leticia and Astorga, Pablo, "Latin American Earnings Inequality in the Long Run." *Cliometrica*. Vol. 11. No. 3. 2017 pp. 349-374. Baltzer, Markus and Baten Joerg, "Height, Trade, and Inequality in The Latin American Periphery, 1950-2000." *Economics & Human Biology*. Vol. 6. No. 2. 2008. pp. 191-203.
- 7 Atkinson, Aanthony, "Bringing Income Distribution in from the Cold." *The Economic Journal*. Vol. 107. No. 441. 1997. pp. 297-321. Atkinson, Anthony, *Inequality: What Can Be Done?* Cambridge, Massachusetts, Harvard University Press, 2015. Piketty, Thomas, *Capital in the Twenty First Century*. Cambridge, Massachusetts, The Belknap Press of Harvard University Press, 2014. Milanovic, Branko, "Why We All Care About Inequality (But Some of Us Are Loathe to Admit It)." *Challenge*. Vol. 50. No. 6. 2007. pp. 109-120. Milanovic, Branko, *Global Inequality: A New Approach for The Age of Globalization*. Cambridge, Massachusetts, The Belknap Press of Harvard University Press, 2016. Deninger, Klaus and Squire, Lyn, A New Data Set Measuring Income Inequality. *The World Bank Economic Review*. Vol. 10. No. 3. 1996. pp. 565-591. Lindert, Peter, "Three centuries of Inequality in Britain and America." Atkinson, Anthony and Bourguignon, François (eds.). *Handbook of Income Distribution*. Vol. 1. Amsterdam. Elsevier. 2000. Pp. 167-216.
- 8 Piketty, *Capital in the Twenty First Century*.
- 9 Atkinson, *Inequality: What Can Be Done?* Piketty, *Capital in the Twenty First Century*. Piketty, "Putting Distribution Back at the Center of Economics." Milanovic, *Global Inequality*.

essential to understand the political actors' views in each country about what is just and what is not, what is an acceptable income/salary distribution, as well as the relative political/economic power of these actors¹⁰.

Thanks to these new works on Chile, we now know that it has never been an egalitarian country, that it has suffered income inequality at very high levels, that its levels of inequality have not remained constant, and that this has been due to many political factors¹¹. We also know that the income share of the richest 1% of Chile's population has also fluctuated but it has always remained at a high level.¹² Given the fact that during most of this period per capita GDP has been increasing, for Chile, as for many other countries, Kuznets' theory of income inequality decreasing as capitalism advances does not hold (on this, see Piketty).¹³

However, despite the importance of these contributions, some aspects of the dynamics of internal politics which explain income distribution remain unexplored, including salary gaps between social groups¹⁴. Rodríguez Weber¹⁵ has already stressed that since the 1930s internal politics is the most important variable to explain periods of improvement as well as of decline in income distribution in Chile. He has also analysed the evolution of the income share taken by the top 1% of the income distribution, as Flores et al.¹⁶ did. Yet, these authors have not analysed the decisions taken by the executive to set their own salaries and those of the workers below them, or the initiatives taken to reduce the salary gap between the best paid and the lowest paid civil servants. This is important because those within the top income group concentrate not only far more disposable income and wealth, but also more political power¹⁷.

10 Piketty, *Capital in the Twenty First Century*.

11 Rodríguez, "Impulsando la desigualdad «de mercado»". Flores, "Top Incomes in Chile".

12 As a reference point, in 2016, the richest 1% of the population accounted for 30% of Chile's national income. PNUD, *Desiguales*. Flores, "Top Incomes in Chile".

13 Piketty, *Capital in the Twenty First Century*. That said, it has to be mentioned that this theory was about economies in a process of industrialization, while for a significant part of the 20th century Chile has actually experiencing deindustrialization.

14 Durán, "Desigualdad y salarios en perspectiva histórica, siglos XIX y XX"

15 Rodríguez Weber, "Impulsando la desigualdad «de mercado»"

16 Flores, "Top Incomes in Chile".

17 Atkinson, Anthony And Piketty, Thomas, *Top Incomes: A Global Perspective*. Oxford, Oxford University Press, 2010. Atkinson, Anthony, Piketty, Thomas, and Saez, Emmanuel, "Top Incomes in the Long Run of History." *Journal of Economic Literature*. Vol. 49. No. 1. 2011. pp. 3-71. Piketty, *Capital in the Twenty First Century*.

This gap in our knowledge is unfortunate. Piketty¹⁸ has already called our attention to the need for new data, which may contribute to current debates: “we must begin by gathering as extensive as possible a set of historical data”. In this paper we provide a new series on salary inequality: the ratio of the annual salary of the Minister of Finance compared to that of the lowest paid worker in the Ministry of Finance. Why is this alternative indicator important to inform the discussion on the evolution of income inequality? It provides new and revealing evidence on the long-term dynamics of income from labour inequality, while being indicative of the ideas on social justice and income distribution of one of the three main powers of the state, in particular to reduce inequality, as well as of strategies adopted to influence the wages of the poorer strata of society. This new indicator provides a new vision about inequality at the top: it indicates the ideas that the political elite has about its own “worth”, and that of those at the bottom of the pay scale (and within the same institution), thus providing a new story about Chile’s political views on inequality. We show that this ratio has fluctuated importantly during the last century and a half, while it also suggests that population’s welfare, *ceteris paribus*, improved during the 1940s-1960s.

Finally, this ratio contributes too to the study of standards of living in Chile. There is wide agreement within the literature that standards of living is a complex and multivariate concept: the more variables are brought into the analysis the better. Thus, there is an increasing tendency to consider new variables such as height and nutrition, moving beyond the traditional analysis based solely on GDP per capita. For Latin American countries, Moramay López-Alonso has produced a remarkable series of work that have greatly improved our understanding of Mexico’s both living standards and inequality in the long run.¹⁹ In the Chilean case, two recent studies have provided useful information about these variables too: height and nutrition.²⁰ They show that the height of adults increased during the twentieth century, and that Chile experienced a profound

18 Piketty, *Capital in the Twenty First Century*. p. 16.

19 López-Alonso, Moramay, *Estar a la altura: una historia de los niveles de vida en México, 1850-1950*, Mexico City, Fondo de Cultura Económica; López-Alonso, Moramay, “Growth with Inequality: Living Standards in Mexico, 1850-1950”, *Journal of Latin American Studies*, Vol. 39, No. 1, 2007, pp. 81-105.

20 Llorca-Jaña, Manuel, Juan Navarrete-Montalvo, Roberto Araya, Federico Droller, Martina Allende & Javier Rivas. “Height in twentieth-century Chilean men: growth with divergence”. *Ciometrica*. Vol. 15. No. 1, 2021, pp. 135-166; Manuel Llorca-Jaña, Ricardo Nazer, Juan Navarrete-Montalvo, Daniel Morales, “Milk and meat consumption and production in Chile, c.1930-2017: a history of a successful nutrition transition”, *Historia Agraria*, Vol. 82, No. 3, 2020, pp. 245-285.

nutrition transition too. This new literature provides further support to the idea that living standards improved during the 1940s-1960s.

We have structured this article in three sections. We explain the nature of our sources and the methodology used. We then turn our attention to our results, commenting on the evolution of our alternative ratio on salary inequality. Finally, we make a brief comparison with other countries for 2019/2020. We expect other colleagues to follow us and to produce comparable series for their own countries, so that more comprehensive comparisons can be made.

SOURCES AND METHODOLOGY

We have produced a new series on salary inequality: the ratio of the salary of the Minister of Finance compared to the lowest paid worker in the Ministry of Finance. For this, we have taken both the highest and the lowest paid employees for a key ministry: the one who set the national budget every year. This is the more important since the nation's budget is closely linked to the decision about how much any country actually spend on social policies, on how social expending is distributed, and this in turn has a direct impact on the population's standards of living. We can call it the *minister/doorman ratio*, given the fact that during the first decades of our data, the lowest paid Finance Ministry worker was, most of the time, the doorman.²¹ In any case, we have also collected data for other ministries (e.g. Ministry of the Interior), and the alternative ratios (i.e. between the salary of the minister of other ministries compared to the lowest paid worker of that ministry) shows exactly the same trends (data available upon request). This is unsurprising since most ministers earned roughly the same salary, while Chilean lowest skills workers got similar salaries across all ministries.

The *minister/doorman ratio* is a direct consequence of a conscious decision taken by the executive. It is the government, and in particular the finance minister and a small group of advisors, who decide how much to spend every year and how to spend it, including the wage structure of all public services. Salary bands in the public sector are defined by the executive, for all positions. Furthermore, it is the president and the finance minister who have the power to

21 Other occupations at the lowest end of the pay scale were also unskilled workers: elevator operator, messenger boy or cleaner. The skills required during the whole period of study did not change.

set their own remuneration.²² For example, recently, Ignacio Briones, the current Finance Minister, proposed reducing his salary by 30%, given the negative consequences of the ongoing coronavirus pandemic. The economic policies of Chile are not formulated by technical teams looking to improve the nation's welfare per se, but by a handful of influential public servants, who are empowered to take crucial decisions.

Furthermore, this new indicator is complementary to better known indicators such as the income Gini coefficient, the share of the income taken by the top 1% of a given country (see Flores et al.²³ for data on Chile from the mid-1960s, and Rodríguez Weber²⁴ for a longer period), the Q5/Q1 inter-quintile ratio, also known as 20:20, the Palma ratio, or the P90/P10 interdecile ratio. In any analysis of inequality, there is widespread agreement that the more indicators are brought into the analysis, the better²⁵.

As in most income inequality studies, our primary sources with which to construct our salary inequality indicator are imperfect and incomplete, but nonetheless it is worth producing series from them for the period 1845-2020. Rather than collecting data for all the 175 years we covered, we collected data every five years, entering the nominal gross salaries for each year collected, since we wanted to assess long term trends for this ratio, rather than focusing on annual fluctuations. When studying inequality, the most important thing is to identify significant changes that occur from time to time²⁶. Furthermore, we do not anticipate many fluctuations in this ratio within the short term.

The data on the salary of both the finance minister and the lowest paid full-time worker in the Ministry of Finance was taken from the nation's budgets, available annually for most of our period of study: 1845-1970. These budgets are available at the National Budget Directorate²⁷, and were published every

22 An issue that may arise as part of this arbitrary process is that too often those on the top of the political pyramid presume individual talents and aptitudes to justify diverse inequalities, including huge differences within the public sector pay structure. For example, a controversial argument used recently by some Chilean members of parliament is that if their salary is not high enough, as it is nowadays, they would look for another occupation and, therefore, less skilled people would take their positions, which would be detrimental to the nation as a whole. See, for example, Jacqueline van Rysselberghe's views on this topic: <https://www.eldinamo.com/nacional/2019/06/02/jacqueline-van-rysselberghe-se-niega-a-rebajar-dieta-parlamentaria-esta-autoflagelacion-de-que-no-nos-merecemos-el-sueldo-no-hace-bien/> (accessed 09 September 2020).

23 Flores, "Top Incomes in Chile".

24 Rodríguez, "Impulsando la desigualdad «de mercado»".

25 Durán, "Desigualdad y salarios en perspectiva histórica, siglos XIX y XX".

26 Piketty, *Capital in the Twenty First Century*.

27 <http://bibliotecadigital.dipres.gob.cl/>

year by law. For 1845-1970, the national budget is very detailed and the gross salaries include payments to all staff. For 1990-2000 we requested the same information under freedom of information, which was willingly granted by the finance ministry. For 2005-2020 very detailed data is available online at the Finance Ministry website²⁸. For the period 1990-2020, the data is of the same quality as for the period 1845-1970: it includes all payments made to staff, including bonuses and special payments.

For the sub-period 1975-1985 the country was under dictatorship, so that it is difficult to gather public information. However, thanks to the law DL-249 of 5 January 1974 and the law DL 3551 of 26 December 1980, as well as information provided by the Comptroller General of the Republic, we managed to gather alternative data, good enough to get the ratios for 1975, 1980 and 1985. However, the salary data provided by these sources has two shortcomings that must be born in mind, although they do not significantly affect the actual values.²⁹ First, the salaries are given per grade (i.e., group of people earning a similar salary), rather than per person. Secondly, the salaries provided include only the “base salary”, without all other additions such as bonuses. We managed to complete the whole series from 1845 to 2020 for the minister/doorman ratio.

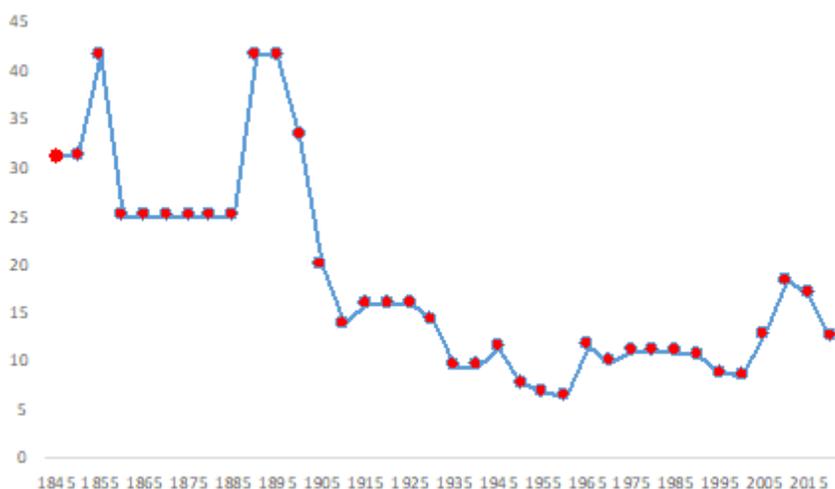
RESULTS: THE EVOLUTION OF THE MINISTER/DOORMAN RATIO

In Chart 1 we have plotted the minister/doorman ratio, that is the annual salary of the finance minister compared to that of the lowest paid full-time worker in the Finance Ministry. The results can be divided into several sub-periods. The first one runs from circa 1845 to 1900, when the ratio was very high. The annual salary of the finance minister was 25-42 times that of the lowest paid worker in the ministry. From 1900 the minister/doorman ratio started to decline, and sharply, reaching 14 in 1910, and remaining at 14-16 until 1930. The average ratio for 1905-1930, our second sub-period, was nearly halved if compared to 1845-1900. The third sub-period runs from c.1935 to 1970, when the ratio was at its lowest level, oscillating within the range 6-12. Its lowest value ever was achieved in 1960. Finally, our last sub-period encompasses c.1970-2020, when the ratio increased to the range 10-18.

28 <https://www.hacienda.cl/transparencia/>

29 This said, it could be the case that the minister/doorman ratio is somehow underestimated during Pinochet's period, as a result of the limitation in the data for those years, although we might never know the magnitude. This, though, is a point to bear in mind.

Chart 1: Ratio salary of the Finance Minister compared to that of the lowest paid worker in the Finance Ministry, 1845-2020



Source: Own elaboration, see above.

The first sub-period c.1845-1900, belongs to two sub-periods in the classic periodization of Chilean economic history: the second half of the early republic (c.1810-1879) and the first half of the nitrate era (c.1880-1930). During the early republic the economy relied heavily on the agricultural sector, which was characterised by the predominance of large haciendas and low levels of productivity. There was high income and land ownership inequality³⁰, a production matrix characterised by concentration on the production of a few staple products, a backward subsistence agricultural sector, poor transport facilities, deficient specification of property rights and low suffrage.

Early independent Chile remained a land of great estates: the land-tenure system was roughly the same as under Spanish rule³¹. In turn, up to 1880, this situation coincided with the first stage of Chilean public administration history. The public sector was made up of a small number of public offices at a central level³². Public employees were seen as directly dependents from the president

30 Llorca-Jaña, Manuel, Navarrete-Montalvo, Juan, And Araya-Valenzuela, Roberto, "Inequality in Chile Before The First Globalization: An Approach Derived From Agricultural Market Income, 1830s-1850s." *Historia Agraria*. No. 74. 2018. pp. 104-134.

31 Collier, Simon, "Chile". Bethell, Leslie (ed.). *Spanish America after Independence, c.1820-1870*. Cambridge, Cambridge University Press, 1987.

32 Barría, Diego, "Rasgos Burocráticos en las reformas administrativas en el Chile de la década de 1880." *Historia Crítica*. No. 56. 2015. pp. 61-84.

of the republic, and there was no clear public policy regarding employees' salaries, which explains the massive variations in our ratio during the nineteenth century (Chart 1). The first public service statute was promulgated as late as 1925.³³

It is not surprising, then, that our ratio remained so high during this period, and indeed at its highest ever level. The peak of 1855 is explained in particular by the promulgation of the Ministries' Law of 1853, which improved substantially the political standing and salaries of ministers, but which was subsequently lowered as a means of combatting rampant inflation. In 1887, though, there was a new ministerial reorganization that led our ratio to the same levels as those of 1855. This time, though, the growing size of the state and increasing expenditure on public employees' salaries were seen as reasons for high inflation. Public opinion turned against public sector workers³⁴. The idea of reducing public expenditure and the size of the state led to a reduction in real wages of all workers, which particularly affected those ranked below ministers.

The Chilean governments of the 1850s and 1880s-1890s thought that their ministers, should get an annual salary of up to 42 times greater than that of their lowest paid employees, and this was accepted by Chilean society. After the 1891 Civil War, the winners reinforced social elitism. Thus, in 1892 the Interior Minister went as far as to declare that "we [the economic and political elite] are the owners of Chile, of both its capital and its land. The rest is just a mass of influenceable and saleable people, whose opinion and prestige are worth nothing" (quoted by Durán³⁵). This coincides with a weak workers' movement, characterised by powerless unions³⁶.

Next, the sub-period 1905-1930, when the ratio halved if compared to 1845-1900, corresponds roughly to the second half of the nitrate era, which was the first export-led growth episode of the country. The development of the economy was strongly associated with the performance of mining exports, and fiscal revenues increased dramatically thanks to an export duty on nitrate shipments

33 Ibáñez, Adolfo. *Herido en el Ala. Estado, Oligarquías y Subdesarrollo. Chile, 1924-1960*. Santiago, Editorial Biblioteca Americana, 2003.

34 Barriá, Diego, "Continuista o rupturista, radical o sencillísima: La reorganización de Ministerios de 1887 y su Discusión Político-Administrativa." *Historia*. Vol. 41. No. 1. 2008. pp. 5-42. Barriá, "Rasgos Burocráticos en las reformas administrativas".

35 Durán, "Desigualdad y salarios en perspectiva histórica, siglos XIX y XX"

36 *Ibid.*

imposed by the government³⁷. There was significant economic growth during these decades, to the extent that *per capita* GDP in the 1920s was more than twice as high as in the 1870s³⁸.

In political terms this period mostly belongs to the Parliamentary Republic (c.1891-1925), characterized by lesser powers of the President and his ministers. The ministers were often called to the congress to account for their actions, and many were even removed from their duties. This was also a period that witnessed the emergence of new and stronger workers' organizations that started to seek higher wages³⁹, both in the private and public sector. In response to inflation, many laws were passed to improve public employees' salaries, in particular the laws 1.839 (1906), 2.179 (1909) and 2.500 (1911), which was specially tailored to improve the relative position of those at the bottom end of the pay scale. Finally, it is also believed that public employees were key players during the presidential and parliamentary elections of the first decades of the republic⁴⁰. According to the Radical Party MP, José Tomás Segundo Matus, those proposed laws that increased salaries were only passed because of the imminent presidential election, as a way to secure votes, which was also true of the 2.179 law of 1909⁴¹.

During his first presidential period (1920-1925), Arturo Alessandri Palma was perhaps the first Chilean president to raise his voice against inequality and the privileges of the economic and political elite and called for better care for the poor⁴². During the first presidency of Ibáñez (1927-1931), the government incentivized the creation of public sector unions. This period also signals the beginning of a welfare state in Chile, following the promulgation of the first social and labour laws of the country⁴³.

Our third sub-period is perhaps the most interesting of all, starting in 1935 and running until 1970, when the minister/doorman ratio was low and stable, achieving its lowest level ever, in 1960, at just 6, which was even lower than during the

37 Badía-Miro, Marc and Díaz, José, "The Impact of Nitrates on the Chilean Economy, 1880-1930" Kuntz, Sandra (ed.). *The First Export Era Revisited*. London. Palgrave MacMillan. 2017 pp. 153-188.

38 Díaz, José, Luders, Rolf, Y Wagner, Gert. *Chile, 1810-2010, la república en cifras*. Santiago. Ediciones UC. 2016.

39 Grez, Sergio, "¿Autonomía o Escudo Protector? El Movimiento obrero y popular, y los mecanismos de conciliación y arbitraje (Chile, 1900-1924)." *Historia*. Vol. 35. No. 1. 2002. pp. 91-150.

40 Valenzuela, Julio Samuel, *Democratización Vía Reforma. La Expansión del Sufragio en Chile*. Buenos Aires, IDES, 1985.

41 Cámara de Diputados, sesión 61° extraordinaria, 2 February 1906, p. 1921.

42 Durán, "Desigualdad y salarios en perspectiva histórica, siglos XIX y XX". Larrañaga, "El Estado de Bienestar en Chile"

43 *Ibíd.*

presidency of the socialist Allende. This means that the Minister earned a salary which was “only” six times that of the doorman who opened the main ministry’s entrance door when he went to work every morning.⁴⁴ This was roughly the period in Chilean economic history of industrialization led by the state, also known as import substitution industrialization or inward-looking development. The 1929 depression signalled the end of the oligarchic republics in most of Latin America⁴⁵. During this period there was a profound economic and social change in the country, characterized by greater state intervention in economic affairs, increasing investments in public works, and the promotion of national industrialization. State institutions grew in number, while many policies of social incorporation were promoted, leading to the emergence of a welfare state, and a more democratic political project⁴⁶. By the end of the period, demands on the State to improve living conditions were at their highest ever level⁴⁷, and these certainly included better wages and better salary distribution policies.

The poverty rate of the country declined from 52% in the 1920s to 32% in the 1960s. The governmental social expenditure in per capita terms increased nearly five-fold between the 1920s and the 1960s, while social mobility, education and health care also improved; the average number of years children spent in school increased from 6.3 in the 1920s to over 9 by the early 1970s. Finally, the union movement became stronger during this period than it has ever been before or since⁴⁸. These changes triggered greater awareness of the political elites about income distribution policies, while the working class was also more empowered, and there was an increase in suffrage. The Chilean middle-class was strengthened and a powerful democratization process took place between the 1930s and the 1960s⁴⁹. In 1932 less than 20% of the adult population was able to vote; by 1969 this ratio had increased to 71%⁵⁰.

New public sector’s employees statutes were launched in 1930, 1945 and 1960: the public sector was wholly modernized. New entrants had to accomplish ad-

44 For the value of the ratio in 1960 in particular, it is worth mentioning that during the presidency of Jorge Alessandri Rodríguez (1958-1964), there was the so-called managers’ revolution or *revolución de los gerentes* (Silva, Patricio, *In the Name of Reason: Technocrats and Politics in Chile*. Pennsylvania, The Pennsylvania State University Press, 2008.). This was translated into a “cleaning” of the public sector senior positions by a new cadre of senior public servants.

45 Bértola and Ocampo, *The Economic Development of Latin America*.

46 Tironi, Eugenio, *El Régimen Autoritario. Para una Sociología de Pinochet*. Santiago, Dolmen, 1998.

47 Larrañaga, “El Estado de Bienestar en Chile”.

48 Durán, “Desigualdad y salarios en perspectiva histórica, siglos XIX y XX”.

49 PNUD, *Desiguales*.

50 Díaz, et al., *Chile, 1810-2010*.

ditional requirements, but there were clearer mechanisms for pay rises, based on merit and length of service⁵¹. In turn, public sector employees became stronger as a political group after the creation, in 1943, of the National Association of Public Employees (ANEF)⁵². They were so influential that they avoided all attempts made by several governments to reduce their wages, including the government's failure in 1950 to eliminate an annual bonus, and the attempts made during the 1950s to reduce all wages of public sector employees, as part of the recommendations of the IMF and the Klein-Saks Mission⁵³.

As part of this process of wages improvement and job stability, middle-class professionals also started to be appointed to high-ranking public positions: the upper class lost some political power, and no longer had a monopoly⁵⁴. In the long run, these were government officials far more aware of income distribution and working-class living conditions. In turn, the necessity to reduce fiscal expenditure due to the Great Depression also helped to reduce this gap. For a finance minister to earn a monthly salary just six times that of the lowest paid worker in his ministry is truly remarkable for a country such as Chile. In 1932 (and this explains the sharp fall of the ratio in 1935), the government reduced the ministers' salaries by 30%.

Complementary indicators, such as Rodríguez Weber's income GINI ratio, show that income distribution improved through most of the 1930s-1960s. In the same vein, the share of the top-1% of national income declined sharply between c.1935 and the early 1950s⁵⁵. The top 1% income share of Chile also decreased during the 1960s and the beginning of the 1970s⁵⁶. This is in line with the idea that during c.1930-1973, the Chilean upper class lost both economic and political power, to the benefit of the bulk of the population⁵⁷.

During the last sub-period there was stagnation in our ratio between 1975 and 1990, during Pinochet's dictatorship. This was followed by a decline in 1995 and 2000. During the 1990s the ANEF became more visible, pushing success-

51 Valenzuela, Arturo, "Parties, Politics and the State in Chile. The Higher Civil Service". Suleiman, Erza. (ed.) *Bureaucrats and Policy Making*. New York. Holmes and Meier. 1984.

52 Candina, Azun. *Clase media, Estado y sacrificio. La Agrupación Nacional de Empleados Fiscales en Chile contemporáneo (1943-1983)*. Santiago, LOM, 2013.

53 Ahumada, Daniel, "La contratación de la Misión Klein-Saks por Chile (1955)". *Sophia Austral*. Nro. 24. 2019. pp. 25-43.

54 PNUD, *Desiguales*.

55 Durán, "Desigualdad y salarios en perspectiva histórica, siglos XIX y XX".

56 Flores, "Top Incomes in Chile".

57 PNUD, *Desiguales*.

fully for salary increases for public servants, including the implementation of a quarterly bonus based on performance. However, despite improvements for most workers, the salary of the public sector elite increased dramatically, to the extent that there was a sharp increase in 2005 in our Minister/Doorman ratio, reaching similar levels to those at the end of the oligarchic republic. The level of salary inequality is equivalent to that existing before 1910. The country regressed by almost a century: a shameful episode in public sector salary distribution. Some have argued that the new democratic governments' social policies have been restricted by Pinochet's constitution. We agree with that idea, and also believe that there was no legal or political impediment for the new democratic governments to further reduce the salary gap between ministers and all other public servants during the 1990s; there has been no reason to increase it during the last two decades. Unsurprisingly, following the October 2019 social unrest, in July 2020 parliament approved a reform to reduce by 25% the annual salaries of both ministers and MPs.

Last year, Nicolás Eyzaguirre⁵⁸, one of the Finance Ministers whose salary is included in Chart 1, made it clear that after the return to democracy, in 1990, the most important concerns of the new democratic governments, as far as economic policy is concerned, were to promote GDP growth and to maintain macroeconomic stability, while policies to improve income distribution were relegated to second or third place: it was all about growth, very little about development, as he confessed⁵⁹. Social policies were fully subordinated to growth considerations; there was a technocratization of political activity⁶⁰. The reduction of inequality was regarded as merely an "outstanding debt"⁶¹. Nonetheless, the behaviour of Chilean political elites is not unique during this period. In most developed countries inequality began to rise sharply from the 1970s-1980s⁶².

In Chile, the top 1% of the income distribution increased its share during the first half of Pinochet's dictatorship (c.1973-1980), remaining at a high level during the first decades after the return to democracy (1990s-2000s), to increase again moderately from 2015⁶³. This is all consistent with our findings. This means that our proposed ratio seems to be a good alternative for other

58 Eyzaguirre, Nicolás, *Desigualdad: raíces históricas y perspectivas de una crisis*. Santiago, Debate, 2019.

59 *Ibíd.*

60 Silva, *In the Name of Reason*.

61 Durán, "Desigualdad y salarios en perspectiva histórica, siglos XIX y XX".

62 Piketty, *Capital in the Twenty First Century*.

63 Flores, "Top Incomes in Chile".

countries, in particular when there is no sufficient data for estimating Ginis or top income shares.

All in all, our new evidence suggests that Chilean ministers have benefited as much as the rest of the richest 1% of the country, to which they belong. A recent study estimated that around 75% of all Chilean ministers between 1990 and 2016 studied in the most expensive private schools of the country and/or completed undergraduate studies in the most popular undergraduate degree subjects in the most prestigious universities in the country⁶⁴.

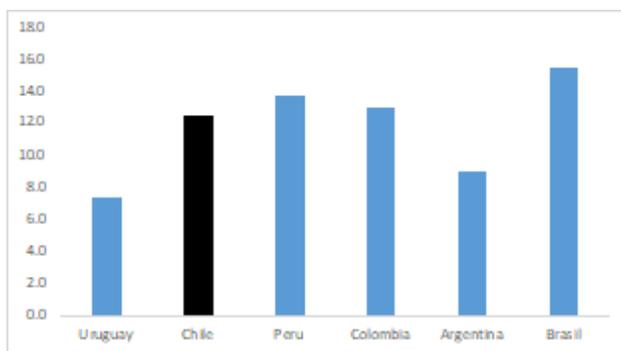
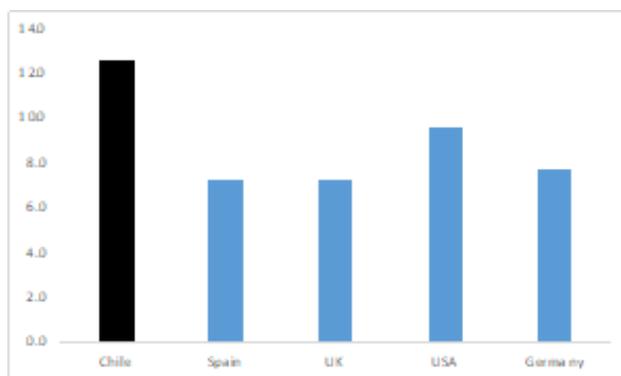
Last but not least, it has to be mentioned that, in 2014, a group of MPs pushed hard to reduce the MP's salaries, and with that that of Ministers too, some even proposing a cut by as much as 50%. After six years of hot discussions, ultimately, only last year, the Parliament entrusted the *Consejo de Alta Dirección Pública* to establish the exact amount of this salary reduction, which was eventually settled in 25%.

INTERNATIONAL COMPARISONS

So far we have provided a long-term evolution of a novel ratio on salary inequality. Yet, without providing a comparison with other countries it would be difficult to place Chile's position within an international scope. Given the fact that inequality is a relative notion, Chart 2 portrays the minister/doorman ratio for a selected group of countries. As can be seen, Chile scores above all developed countries included in our sample. Within Latin America, Uruguay has the lowest ratio, followed by Argentina. The case of Uruguay is consistent with the country enjoying the lowest GINI coefficient of income distribution within South America. The ratio for Chile is above that of Argentina and Uruguay, and at a comparable level to that of Peru and Colombia, but slightly below that of Brazil. Our chart also suggests that except for Uruguay and Argentina, salary inequality as expressed by our proposed ratio is generally high within Latin America, but that there is room for improvement in Chile.

64 PNUD, *Desiguales*.

Chart 2: Ratio of the salary of the Finance Minister to that of the lowest paid worker in the Finance Ministry (2019 or 2020)



Source: For Chile our data; for Argentina <https://www.boletinoficial.gob.ar/detalleAviso/primera/210267/20190701> (accessed 09 September 2020) and <https://datos.gob.ar/dataset/jgm-asignacion-salarial-autoridades-superiores-poder-ejecutivo-> (accessed 09 September 2020); for Uruguay <https://www.gub.uy/ministerio-economia-finanzas/institucional/recursos-humanos/recursos-humanos-dgs/retribuciones-mensuales-permanentes> (accessed 09 September 2020); for Germany Merkur, 6 March 2020, “Das ist das stattliche Gehalt von Bundesfinanzminister Olaf Scholz - und als SPD-Chef”; for the UK, <https://www.gov.uk/government/publications/grade-and-salary-bands> (accessed 09 September 2020); for Peru, <http://www.mef.gob.pe/es/transparencia-mef> (accessed 09 September 2020); for Brazil, <http://www.portaltransparencia.gov.br/> (accessed 09 September 2020).

We are not the first to attempt such comparison, although previous comparisons have been for MPs (the legislative power) rather than for Ministries, as we do here. Nonetheless, it is worth reporting these results too, since the annual salaries of Chilean MPs are very closed to that of Ministries. According to a

report of the PNUD⁶⁵, in 2013 the annual salary of Chilean MPs was so high that it was 4.7 times that of the world average. That year, corrected by PPP, Chilean MPs were paid the highest annual salary for a sample of 26 countries, well above that paid in developed countries such as Canada, Germany or the US. This MPs' salary in Chile was equivalent to around 13 times the per capita GDP of the country that year, against 3.2 times in the USA, for example. By any standard, Chilean's MPs salaries have been far too high in the last two decades.

CONCLUSIONS

During the last ten years there have been considerable advances in our knowledge of the evolution of income inequality in Chile. Yet some aspects of the dynamics of internal politics explaining income distribution were unexplored. For example, previous authors did not analyse the decisions taken by the executive power to set their own salaries and those of the workers below them. This is of consequence because one of the drivers of inequality is the assessment a society makes itself about what is a tolerable level of income inequality. Within this valuation, the authorities' standing and actions undoubtedly influence people's perceptions.

In this paper we have provided a new indicator of salary inequality that has not been used before for Chile. This is an important contribution because those within the top income group concentrate not only far more disposable income than ordinary citizens, but also far more political power. The salary gap between them and the lowest paid workers is a powerful message about how the political elite regard inequality. The differences between the earnings of Ministers and the earnings of the lower paid workers, either in government or in the private sector, reflects, among other facts, social norms such as the level of tolerance of a society towards these differences, and the bargaining powers of both groups. Some may argue that they also reflect differences in labour productivity, but the ferocity of the social unrest which started in October 2019 would suggest that few would now publicly maintain that it was caused by differences in productivity.

In Chile, between 1845 and 1900, according to our new ratio, salary inequality was extremely high, declining between c.1900 and 1930, further declining be-

65 PNUD. Dietas parlamentarias de diputados y dedicación exclusiva parlamentaria Experiencia Comparada. Santiago, PNUD, 2016.

tween 1935 and 1970, reaching its lowest level around 1960. Thereafter, it was stable between 1975 and 1990, declining marginally during 1995-2000. Yet, despite this temporary improvement, it increased sharply in 2005-2015, reaching similar levels to that of the early twentieth century. If compared to other countries, Chilean salary inequality, according to our indicator, is far higher than in developed countries, as well as in Uruguay and Argentina. Its value is currently at similar levels to other well-known unequal Latin American countries. That is, our ratio is in line with alternative evidence such as that provided by GINI coefficients of personal income.

The history of income and salary distribution has always been mainly a political issue: a social construct based on specific rules and compromises⁶⁶. Our ratio richly reflects this construct for Chile. The extremely high minister/doorman ratio observed during the second half of the nineteenth century was not only immoral but also unjustified, as most inequalities are. The ratio mirrored Chile's society at that time, characterized as it was by an indolent economic and political elite, who cared little about the living standards of the bulk of the population. It was also the result of powerless unions. There was a complete lack of policies to improve public servants' salaries. On the contrary, the salaries of those at the bottom of the pay roll were reduced whenever there was a fiscal deficit. The improvement shown by our ratio during the early decades of the twentieth century coincides with the emergence of new and stronger workers' organizations, and when many laws were passed to improve public servants' salaries: public servants, whose salaries needed to be improved by the elite, became key players during the presidential and parliamentary elections.

The fluctuations of our ratio in the long run cannot be attributed to changes in the education level of both groups: of Ministers on the one hand and of unskilled workers on the other hand. It would be difficult to maintain that the relative productivity of both groups was the same, say, in the 1850s as in the 2010s. That would also reflect badly on the Chilean education system, suggesting no progress at all in over 150 years, which is not the case. It was Piketty, in his celebrated book⁶⁷, who last reminded us that "inequality is not necessarily bad in itself: the key question is to decide whether it is justified, whether there are reasons for it." In the case of Chile, it would be difficult to find a reasonable explanation to justify the high level of our ratio after 2000 as a fair situation for a developing country to be in.

66 Piketty, *Capital in the Twenty First Century*.

67 *Ibíd.*

The reasons for the high level of our ratio in recent decades are that social policies have been fully subordinated to growth considerations; there was a technocratization of political activity. The political elites were not concerned with income distribution. Furthermore, during the dictatorship unions lost most of the influence they had achieved during the 1930s-1960s. The high level could also be explained in terms of a fact already highlighted: it has been observed that most societies have progressed from being a rentier society to a society of highly paid managers: for the first-time talent paid better than inheritance⁶⁸. These “managers” may work in the private or public sector, as high government officers. The opportunity cost for Chilean ministers can be seen as they had renounced their chance to work as directors of large companies or highly paid managers elsewhere (including private and public universities); this was particularly true of those serving under President Piñera.

Finally, we have shown that the lowest value in our ratio was achieved during the 1930s-1960s, when policies of social incorporation were promoted, leading to the emergence of a welfare state, and a more democratic political project. The Chilean middle-class was strengthened and a powerful democratization process took place; workers became more influential, and in particular public employees became stronger as a political group. As far as our indicator is concerned, this was the most positive period in Chilean history, as it was for Rodríguez Weber’s GINI coefficient on income distribution. This is also consistent with the evolution of alternative welfare indicators now available that provide a favourable record of this period: interpersonal violence decreased dramatically, adult male height also increased, the average years of schooling increased significantly, and the poverty rate declined, while social government expenditure was on the increase. By looking beyond per capita GDP as a welfare indicator, the idea that the 1930s-1960s was a good time for Chilean workers gains momentum.

68 Piketty, *Capital in the Twenty First Century*.

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