

What do we know about wealth inequality in Brazil?

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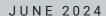
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WHAT DO WE KNOW ABOUT WEALTH INEQUALITY IN BRAZIL?

Pedro Fandiño, Celia Kerstenetzky, Tais Simões¹

ABSTRACT

Wealth inequality has gained importance in the international debate following the publication of Capital

in the 21st Century, by Thomas Piketty, which contains systematic data on the size and evolution of the

phenomenon in advanced economies over the last few centuries. In particular, Piketty's research reveals

an important decrease in wealth concentration throughout the 20th century, a decrease that has not been

sustained in the first decades of the 21st century. What can be said about the levels and historical

trajectory of wealth inequality in Brazil, one of the world's most unequal countries? We investigated

all available estimates since the 17th century. The work is organized based on the different sources and

approaches used to construct the estimates, which cannot be directly obtained from national household

surveys or censuses. Two conclusions stand out: a) wealth concentration presents extreme levels and

notable stability over time, despite profound transformations in the composition of assets; and b) all

available estimates have significant limitations. The availability of adequate public data, along with

improvements in the procedures employed so far, is essential for the development of a literature on

wealth inequality in the country – the first step towards effective public engagement with the issue.

Keywords: wealth inequality; wealth concentration; property; assets; Brazil.

JEL Codes: D31; D63; E01.

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Introduction

In the last two decades, the combination of data from household surveys, tax declarations and national accounts has allowed new conclusions regarding the historical trajectory of wealth inequality in developed countries. In the middle of the 20th century, a profound reduction in the concentration of wealth occurred in those countries, due to two world wars, the 1929 crisis, and other economic and political shocks, as well as to policies of regulation, taxation and public control of capital resulting from these shocks (Piketty, 2014) – what has been described as "the Great Leveling".

What do we know about Brazil? Was there a similar leveling? Despite being among the most unequal nations in the world, the literature on wealth concentration in Brazil is still incipient. Unlike income inequality, few assertions can be made with certainty about wealth inequality, despite the evident social and political implications of its extreme levels (Savage et al. 2024). There are estimates suggesting that half of the wealth in Brazil is concentrated in the hands of 1% of the population, while the bottom 50% do not possess any property (Shorrocks et al., 2022a; WID, 2023). However, given the sketchiness of the data – in Brazil, there are no censuses or sample surveys that estimate wealth inequality over time – how safe are these estimates? And what do they actually reveal?

In this literature review, we gather and analyze existing estimates, many provided by historians, on the levels and trajectory of wealth inequality in Brazil over four centuries of its history. Many of these estimates refer to particular periods and places and use varying indicators of inequality; rather than specific levels and dynamics, they reveal intervals and trajectories. In these works, wealth is understood as the sum of the market value of assets held by families or individuals at a given moment. Wealth consists of non-financial assets (land, jewelry, real estate, etc.) and financial assets (such as bonds, stocks and savings).²

To our knowledge, this is the first work to review available estimates of wealth inequality in Brazil over time. Two recent articles have focused on Latin America as a whole. Galli et al.

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² Works dedicated to the distribution of specific assets, as well as conjectures about wealth inequality that do not make use of estimates, are not drawn on for this review. The same approach is adopted by other literature reviews (e.g., Carranza et al., 2023; Galli et al., 2022).

(2022) carry out a comparative review of studies on economic inequalities (of income and wealth) in Latin America and Africa between 1650 and 1950, and in this, only six studies on wealth concentration in Brazil are presented. Carranza et al. (2023), although they comment on the historical trajectory of wealth inequality in Latin America, focus mainly on recent estimates.

For this review, 49 studies with original estimates were found in articles, books, reports, theses and dissertations. At the end of the paper, the main features of these studies are summarized (Appendix A). The review is organized into two parts. In the first, we present estimates of wealth inequality in Brazil, the approaches used to build these estimates, and their main limitations. In the second, we discuss their results taken together: what it is possible to infer about the levels and trajectory of wealth concentration in Brazil from them. In the concluding section, we organize our main findings, suggest paths for the development of the literature, and return to the main question that motivated this work.

1. Estimates of wealth inequality in Brazil

Below, we organize, in chronological order, the available estimates, which date back to the colonial period, based on the main sources employed: censuses and (mainly) probate inventories, for the 17th, 18th, 19th and 20th centuries; and tax data and inferences based on income distribution, used mostly for the 21st century.³ No estimates were found for the 16th century, a period in which colonial settlements, sparse and small, were hardly represented in official documents (Carrara, 2014).

As already mentioned, we discuss the limitations of the estimates and the methodologies used to build them. Our efforts to consolidate the results are to be found in Section 2, and readers interested only in the final evaluation of the results may refer directly to that section.

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³ Influential works conjecture a high concentration of wealth in the first centuries of the formation of Brazil (and Latin America in general). They are not drawn on for this review, however, as they do not estimate the distribution of wealth, being limited to identifying the unequal and exploitative political and economic institutions of the colonial period (e.g., Acemoglu et al., 2001; De Ferranti et al., 2004; Engerman; Sokoloff, 2005; Sokoloff; Engerman, 2000).

1.1 Censuses

In the absence of official national censuses and sample surveys with adequate information, occasional and discontinued censuses were used to investigate the concentration of wealth in Brazil between the 17th and 20th centuries.

The historian John Manuel Monteiro (1989, 1994) provides an estimate of wealth inequality in rural districts of São Paulo, in the second half of the 17th century, based on a census carried out when the *Donativo Real* was collected. This was a tax instituted by the Portuguese Crown in 1661 to compensate the Dutch expelled from Brazil and finance the dowry of the Portuguese infanta, Catarina de Bragança.⁴ In 1679, the richest 10% held between 31% and 54% of the wealth in the 11 rural districts analyzed by Monteiro. The calculated Gini coefficients range between 0.5 and 0.6.

Monteiro's estimates are based on the amount contributed to the *Donativo Real*, which, according to the author, was possibly determined on the basis of taxpayers' possessions. These mainly consisted of enslaved individuals – either of African origin or (in that context, mainly) indigenous people. Monteiro (1989, p.116) maintains that, created in this way, his estimates "offer some notion of wealth distribution in rural São Paulo in the 17th century, albeit preliminary and precarious". Despite their limitations, the results allow the author, upon finding "significant inequalities in the distribution of wealth among the inhabitants of rural districts", to question the reading, conventional in historiography, of a 17th century São Paulo that was relatively egalitarian (Monteiro, 1989, p. 109).

Regarding the 18th century, Alice Canabrava (1972, 1974), also a historian, uses censuses carried out between 1765 and 1767 to estimate the concentration of wealth in 20 villages and parishes that were part of the captaincy (currently state) of São Paulo.⁵ These censuses, like

⁴ For information on the origins of the *Donativo Real* and its transformations over time, see Ferreira (2014).

⁵ In the colonial period, Brazil's regions were divided into captaincies (*capitanias*). In general, after Independence (1822), the captaincies became provinces (*províncias*) and, after the establishment of the Republic (1889), the provinces began to be called states (*estados*). For simplicity, we will use the term states for both *províncias* and *capitanias*.

others carried out in the colonial period, arose from military concerns regarding the borders between Portuguese and Spanish America. Unlike in ordinary, nominal censuses, not only was the number of free citizens listed, but also the value of their property. The objective was to identify, according to their wealth, men who could be responsible for commanding the militia companies (*companhias de ordenança*) in times of war.

Of the surveyed population, which did not include enslaved people, around half had no assets. In the village of São Paulo, today the capital of the state with the same name, around 10% of the population held 80% of the registered wealth. Canabrava (1972) estimates a Gini coefficient of 0.88. In general, similar levels were found in the other villages and parishes investigated (such as Santos, Taubaté, Mogi Mirim and Santo Amaro), including those where the rural districts analyzed by Monteiro (1989, 1994) had been located in the previous century. The author admits that her results may underestimate the concentration of wealth, due to the average values assigned to enslaved people in the censuses, which would have been below the market value, and to possible under-reporting of assets in the declarations. Published at the beginning of the 1970s, Canabrava's works (1972, 1974) are the first to estimate wealth inequality in Brazil.

Based on data from the 1872 National Census, the first to be carried out in Brazil, economist Márcio Pochmann and several co-authors estimate that 1.8% of Brazilian families held 66% of the country's wealth in the 1870s. According to the authors, this group comprised rich families, "owners of most of the enslaved individuals, large estates and commercial and financial businesses" (Pochmann et al., 2004, p. 27). We did not find any other information about the construction of this estimate.

In the same work, figures for the 21st century are presented, according to which the richest 10% held, in 2001, 75% of the national wealth. The authors explain that this estimate was "made using a methodology developed with data from PNAD/IBGE", without further details (p. 27). In a previous chapter of the same publication, they note that estimates relating to wealth were produced based on assumptions (from the 2000 National Census) about the value

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⁶ Although indigenous people were included in part of the censuses analyzed, they were not considered in Canabrava's estimates (1972, 1974) because, according to the author, they lived under guardianship, their assets were not counted, and many indigenous villages were not censused.

of properties typically occupied by the richest families. It is not clear, however, whether the above estimates were produced using this method.⁷

1.2 Probate inventories

The 17th and 18th centuries

Most of the estimates of wealth inequality during the colonial (up to 1822) and monarchical (1822-1889) periods have been created using probate inventories. These are notary documents in which a deceased person's assets are listed for distribution among their heirs. In these documents, wealth is described in detail, including assets of lesser value, as are the main characteristics of their holders (such as age, race, sex, occupation, residence and marital status). In general, inequality is not the focus of studies that use inventories, but rather events or historical processes in which wealth concentration played a relevant role. Since many individuals did not have any assets to leave to heirs, part of these studies refers only to inventoried wealth when computing its concentration. These and other limitations are discussed at the end of this section.

In most of the reviewed works that use inventories, inequality is estimated based on wealth brackets constructed using criteria established by the authors themselves — which makes comparisons sometimes precarious or unintuitive. After determining these brackets, the authors analyze the percentage of wealth corresponding to each of them. Whenever possible, we will present the values for the wealth brackets that are closest to the top 10%.

Muriel Nazzari (1991), an historian from the United States, uses inventories to carry out research into bridal dowries and the reasons for their disappearance. To this end, the author investigates around 300 inventories produced in the city of São Paulo between the 17th and 19th centuries. Her calculations reveal that the richest 10%, who held 43% of wealth between 1640 and 1651, came to hold 53% between 1750 and 1769 and 60% between 1850 and 1869. Given the main focus of Nazzari's research, these estimates are limited, being based only on

⁷ The PNADs (National Household Sample Survey) and the National Censuses of 1872 and 2000 do not contain questions from which it is possible to directly estimate wealth inequality.

inventories that concerned married daughters. Even so, the study suggests a trend towards wealth concentration between the 1640s and 1860s.

Maurício Alves (2001) estimates the concentration of wealth in the village of Taubaté (state of São Paulo), then a relevant center for Portuguese expeditions (*bandeirismo*), between 1680 and 1820. Around 500 inventories were examined, and three wealth brackets were established.

Throughout most of the 15 decades analyzed, the group corresponding to the top wealth bracket, representing between 9% and 13% of inventoried individuals, held between 30% and 60% of the wealth. Those in the bottom bracket, the subjects of between 50% and 60% of the inventories, held between 10% and 20% of the wealth.

Also concerning the colonial period, Maria Mascarenhas (1998, p. 250) concludes that the state of Bahia, in the 18th century, was "deeply socioeconomically stratified, with a great concentration of wealth". The author establishes ten wealth brackets from 322 inventories drawn up in Salvador, the capital of Bahia, between 1760 and 1808. Around 10% of the inventories, corresponding to the top wealth brackets, owned 62% of the wealth, while the bottom brackets, covering 52% of the inventories, owned only 4%.

Discussing a similar period, Augusto Fagundes (2018) draws on 283 inventories to point out the high concentration of wealth in Salvador: the richest 10% held 72% of the wealth between 1777 and 1808, while 2% held more than 40%. This reinforces Mascarenhas's (1998) conclusion regarding an "ultra-concentration of wealth in Bahia between the end of the 18th century and the beginning of the 19th century".

Still focusing on the 18th century, through the analysis of a small number of inventories (35) and three wealth brackets, Anderson Santos (2017) describes wealth inequality in Sergipe de El Rei, then capital of what is now the state of Sergipe. According to the author, 75% of the wealth was concentrated in the hands of a quarter of the individuals inventoried between 1750 and 1808.

Also drawing on a small number of inventories (43) and establishing three wealth brackets, Adriana Campos (2005) calculates that in Vitória, capital of the state of Espírito Santo, the richest 18% held 43% of wealth between 1790 and 1803. Regarding the period following that, in another study on Vitória, in which six wealth brackets were devised and a significantly larger number of inventories (140) considered, Patrícia Merlo (2018) concludes that, between 1809 and 1830, 1.4% of the inventoried population owned 25.4% of the wealth.

The 19th century

The use of inventories to investigate topics associated with wealth — such as capital composition and accumulation, the profile of elites, the characteristics and distribution of enslaved people, and the structure of households — is widespread in dozens of historical studies on the 19th century, referring to cities and subregions from the north to the south of Brazil. Part of these studies, even if only indirectly, address wealth inequality.

Wealth concentration in Rio de Janeiro, then the capital of Brazil, is analyzed in the works of João Fragoso and co-authors (Fragoso, 1987, 1998; Fragoso and Pitzer, 1988; Fragoso and Florentino, 2001). Concerning the late 18th century and the first decades of the 19th century, Fragoso and Renato Pitzer (1988) establish four wealth brackets, drawing on 130 inventories. The authors conclude that the richest group, covered by 9% to 14% of the inventories, held between 60% and 70% of the wealth in 1797-99, 1820 and 1840. Individuals in the bottom brackets, covered by around 45% of the inventories, held between 2% and 4% of the wealth in the same years.

In a later work, Fragoso (1998) employs nine wealth brackets and analyzes a larger sample of 459 inventories corresponding to the years 1810, 1815, 1820, 1825, 1830, 1840 and 1860. This new approach reveals that, in Rio de Janeiro, the top brackets, which were generally the subject of between 7% and 12% of inventories, held between 62% and 78% of the wealth in those years. At the other extreme, the bottom wealth brackets, although covered by between 40% and 50% of inventories, held no more than 4% of the wealth. The results indicate that a "brutal inequality" in wealth distribution, in Fragoso's (1998) terms, remained relatively stable throughout the 19th century.

In a more recent study, covering a similar period, Fragoso and Manolo Florentino (2001) once again estimate wealth inequality in Rio de Janeiro, drawing on 653 inventories, but this time looking at population deciles rather than wealth brackets. The richest 10% held around

70% of the wealth in 1790-1807 and 1810-1835, and 62% in 1865 and 1875. Meanwhile, the poorest 50% held between 4% and 6% of the wealth in the same periods. Fragoso and Florentino (2001) reach generally similar conclusions when estimating the concentration of wealth in the rural areas of the state of Rio de Janeiro. The authors also conclude, drawing on their own and other studies, that there was a "structural permanence of inequality" (Fragoso; Florentino, 2001, p. 235).

Maria Lucília Araújo (2003) looks at wealth concentration in the city of São Paulo during the first half of the 19th century. Putting individuals inventoried in the period into three wealth brackets, the author concludes that, between 1800 and 1824, the 3% who made up the top bracket held 70% of inventoried wealth. In the following period, between 1825 and 1850, 14% of inventories fell into the top bracket and represented 74% of the wealth. The Gini coefficient went from 0.79 to 0.68 between the two periods. Araújo's (2003) estimates are the only ones for the 19th century to indicate a clear tendency towards a reduction in inequality. The author, however, uses a relatively small number of inventories (146) for a half-century period, with only three wealth brackets, and focuses her analysis on neighborhoods in the central region of São Paulo.

Katia Mattoso (1986, 1992), in a comprehensive study, investigates the concentration of wealth in the state of Bahia in the 19th century. She establishes eight wealth brackets for the 1115 inventories recorded in the capital, Salvador. According to the author, in the first half of the 19th century (1801-1850), the 4.5% richest people inventoried held 46% of the wealth. In the second half of the century (1851-1889), 3.3% of people inventoried owned 40% of the wealth. Meanwhile, those in the bottom wealth brackets, who at the beginning of the century accounted for 39% of inventories and held 3% of the wealth, were represented by 19% of inventories and held 0.6% of the wealth by the end of the second period. Mattoso (1992), who also explores other chronological periods, therefore concludes that there was an increase in the concentration (and levels) of wealth in Bahia during the 19th century.

The concentration of wealth in the state of Bahia is also investigated by João José Reis (1986, 1991). Based on 395 inventories, provided by the same database as was used by Mattoso (1986, 1992), Reis (1986, 1991) concludes that the richest 10% held 67% of inventoried wealth between 1800 and 1850. The bottom 30%, in the same period, owned only 1.1%.

According to Reis (1986, p. 22), the data he gathered illustrate a "profoundly unequal society".

Wealth inequality in the 19th century has also been investigated in areas outside the largest urban centers. These studies, which include many master's dissertations and doctoral theses in the field of history, frequently mention the pioneering work of Canabrava (1972, 1974), Fragoso (1987, 1998) and Mattoso (1986, 1992).⁸ Due to space constraints, the results of these studies are summarized in Table 1.

Table 1 – Original estimates of wealth inequality in the 19th century based on inventories (smaller cities and subregions)

Authors	Local	N° of invent.	Period	Top group	Share of wealth	Gini	Trend
Marcondes (1998)	Lorena-SP	186	1830-1879	16.7%	89.5%	0.88	_
Valentine (2006)	Vale do Ribeira-SP	678	1800-1880	5.5-6.4%	42-44%	0.67-0.68	Increase
Soares (2003)	Mogi Mirim-SP	593	1831-1880	12.6%	70%	_	_
Garavazo (2006)	Batatais-SP	492	1851-1887	8%	64.5%	0.61-0.83	Increase
Lopes (2005, 2007, 2016)	Ribeirão Preto-SP	390	1870-1900	4-16%	46-82%	0.73-0.82	Increase
Abrahão (2015)	Campinas-SP	1000	1870-1940	20%	88-93%	_	_
Oliveira (2003)	Franca-SP	750	1890-1920	4%	50%	0.68-0.78	_
Siqueira (2005)	Socorro-SP	380	1840-1895	20%	66%	_	_
Fragoso & Florentino (2001)	Vale do Paraíba-RJ	148	1825-1869	10%	48-63%	_	Increase
Sampaio (1994)	Magé-RJ	170	1850-1886	10-12%	48-52%	_	_
Almeida (2010)	Vila Rica and Rio das Mortes- MG	593	1750-1822	7.80%	47.20%	_	Increase

⁸ It is also necessary to mention the pioneering work of José de Alcântara Machado ([1929]1980) and the classic study by Zélia Cardoso de Mello (1985). Although they do not offer estimates of wealth inequality, these works have become reference points for investigations conducted using inventories to estimate the levels and composition of wealth in Brazil.

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Teixeira (2001)	Mariana-MG	319	1850-1888	7.9%	46%	0.65-0.77	Increase
Dos Reis (2014)	Araxá-MG	331	1816-1888	4-25%	30-88%	_	Increase
Martinez (2006)	Vale do Paraopeba-MG	761	1840-1914	5-25%	20-79%	_	_
Vieira (2015)	Lavras-MG	100	1870-1888	10%	66%	0.75	_
Freire (2007)	Feira de Santana-BA	200	1850-1888	two%	36%	_	_
Rocha (2015)	Cachoeira-BA	866	1834-1880	10-15%	57-74%	_	_
Sampaio (2002)	Manaus-AM	233	1840-1880	3-7%	20-30%	_	_
Batista (2004)	Belém-PA	221	1850-1870	5%	32-37%	_	Increase
Oliveira (2006)	South of Goiás	536	1843-1910	11.2%	74%	_	Increase
Biléssimo (2010)	Desterro-SC	164	1860-1880	20%	70%	_	_
Borges (2005)	Lages-SC	149	1840-1865	4%	36.8%	_	_
Farinatti (2007)	Alegrete-RS	205	1830-1860	10%	44-69%	_	Increase
Vargas (2012)	Pelotas-RS	256	1850-1890	8.5%	71%	_	_

Our own elaboration. The top groups are formed by the wealth brackets closest to the richest 10%. Further details on these studies can be found in Appendix A, which brings together information about all the reviewed works.

Limitations of inventories

Estimates derived from inventories have significant limitations. As noted, since no inventories were drawn up for individuals without possessions, or for enslaved people – that is, for two groups that often formed the majority of the population – these estimates tend to underestimate the concentration of wealth. We should also mention the small size of the samples used by some studies and the fact that the individuals inventoried have an average age that may be associated with greater wealth.

There is also a lack of standardization and systematization in the use of inventories. Some authors choose to use gross wealth rather than net wealth (which has debts subtracted). While some authors present asset values in mil-reis (the Brazilian currency until the 1940s), others prefer to convert them into pounds sterling as a deflation measure. Some studies analyze inventories in specific years; others build estimates for longer periods.

Finally, comparisons are made difficult by the *ad hoc* construction of the groups analyzed. Since they are selected according to the values chosen for certain wealth brackets, the richest groups represent varying percentages of the inventoried population, making it difficult to undertake comparisons either over time or with studies that analyze inequality focusing on specific groups of the population (deciles or percentiles), which are more commonly produced by economists.

From inventoried wealth to inequality among the living (the 19th and 20th centuries)

Also based on inventories, there are studies that carry out procedures to estimate the concentration of wealth across the total population. Instead of wealth brackets, these studies use population deciles to identify the richest groups. Thus, using information obtained from demographic censuses, these studies extrapolate from data on the deceased population to estimate inequality among the living.

Zephyr Frank (2005) estimates wealth inequality in the cities of Rio de Janeiro, São Paulo and São João del-Rei/São José (two neighboring municipalities in the state of Minas Gerais) based on 1220 inventories taken in 1820 and 1855. In Rio de Janeiro, the richest 10% owned 57% of the inventoried wealth in 1820, increasing their share to 59% in 1855. In São João/São José, wealth inequality grew at a faster pace: the top 10% held 47% of the wealth in 1820 and 57% in 1855, reaching a level similar to that observed in Rio de Janeiro. In São Paulo – for which a limited sample makes the results less reliable, according to the author – the richest 10% held 62% of the wealth in the 1850s.

For the reasons mentioned above, Frank (2005) observes that this distribution underestimates wealth inequality. The North American historian calculates Gini coefficients for the total populations based on a combination of sociodemographic evidence drawn from the Minas

when society as a whole is considered.

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⁹ Frank (2005) chooses to analyze data from São João del-Rei and São José together to estimate inequality in Minas Gerais. São José existed in the region where the city of Tiradentes is currently located. The author chooses to disregard credits and debts, which he believes are poorly represented in inventories and compensated

Gerais case and the inclusion of enslaved people as potential wealth holders. ¹⁰ This new approach suggests that, in Rio de Janeiro, the concentration of wealth measured by the Gini coefficient for the years between 1820 and 1855 remains practically unchanged (it moves from 0.70 to 0.71). In Minas Gerais (São João/São José), the wealth Gini coefficient increased from 0.64 to 0.71, following the trend for the top decile revealed by calculations based only on inventories. The limitations of the São Paulo sample did not allow for the same extrapolation.

As a next step, Frank (2005) assumes that half of the total population did not have any assets, following evidence from other studies. Based on this assumption, the wealth Gini for Rio de Janeiro was 0.85 in both periods. In Minas Gerais, the wealth Gini reaches similar levels (0.83), although the same assumption is less plausible in this case, according to the author, as ownership of real estate properties would have been more widespread in that state.

In a later study of Rio de Janeiro, Frank and fellow historian Lyman Johnson use a similar approach to correct not only the Gini coefficient, but also the wealth held by the richest 10% (Johnson; Frank, 2006). Assuming that 55% of the free population had no assets, the authors conclude that the top decile held 77% of the wealth in 1820 and 78% in 1850. Johnson and Frank (2006) further assume that, if enslaved adults are considered as potential wealth holders, this top decile would have held around 90% of the wealth. In this work, the wealth Gini coefficient is estimated at 0.87.

Probate inventories are also used to estimate the distribution of wealth among the entire population by economist Ricardo Silveira (1985). Focusing on the state of Rio de Janeiro (specifically, the cities of Rio de Janeiro, Niterói and Petrópolis), the author addresses the long period between 1870 and 1980. Six decades and more than 6,500 inventories taken in the years around the national demographic censuses are analyzed. Silveira's work (1985),

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¹⁰ Among other procedures, Frank (2005) corrects the Gini of inventoried wealth based on the average age of the population and adjusts the lower part of the distribution based on the observed proportions of ownership by living people of both real estate and enslaved people. Finally, the author considers enslaved people not only as property, but also as potentially wealth holding individuals.

which is dedicated exclusively to investigating wealth inequality, is the only one to cover much of the 20th century in depth.¹¹

The distribution of inventoried wealth is calculated only as a means to estimate (net) wealth inequality among the living population. Along with other measures, Silveira (1985) uses the national censuses to extrapolate from his inventory data to the broader socioeconomic and demographic groups to which the deceased belonged. The information in the inventories allows the author to analyze a series of variables — age, sex, marital status, occupation, economic sector, origin, etc. — both to carry out the extrapolation and to estimate the possible effects of these on the trajectory of inequality.

The share of wealth possessed by the top decile, considered by the author to be "extraordinarily high", is not mentioned for all periods. However, reading the graphs allows us to present approximate percentages. The richest 10%, who held 82% of the wealth at the end of the 19th century (1870s), experienced a significant reduction in their assets in the first decade of the 20th century (to 75%), followed by an increase that continued until the 1960s (85% in the 1920s and 1940s, and 97% in the 1960s), before a further reduction in the 1980s (to 79%).

An analysis of the trajectory of wealth inequality as measured by that of the wealthiest decile of the population is neglected by Silveira (1985) in favor of synthetic indicators — more widely used at the time he was writing than distribution tables. And although the Gini coefficient is calculated, his analysis prioritizes the Theil index, whose values are more reliable and sensitive to changes, according to the author. Analyzing the situation on this basis, after a significant reduction between the 1870s and 1900s, also indicated in the share of wealth held by the top decile, there was a continuous growth in wealth inequality throughout the 20th century. However, when tracking the Gini coefficient, which varies between 0.84 and 0.89, a reduction is found between the 1960s and 1980s. Silveira (1985) attributes this

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¹¹ Silveira (1985, p. 109) claims to be the first author to estimate wealth inequality in Brazil. As we have seen, the estimates by Alice Canabrava (1972, 1974), based on specific censuses conducted in the 18th century, were calculated in the early years of the previous decade. Silveira's work (1985), however, appears to be the first to estimate wealth inequality from inventories — the studies by Kátia Mattoso (1986), João José Reis (1986) and João Fragoso (1987) were published in the following years. Silveira's study (1985) consists of a doctoral thesis produced at the University of California, Berkeley, under the supervision of Peter Lindert and Albert Fishlow.

divergence from the upward trend to the limitations of his sample. ¹² Taking his results together, the author concludes that "the concentration indices [...] follow a path of continuous increase in inequality up to the present, after an initial sharp drop in the late 19th century" (Silveira, 1985, p. 137).

Despite the various measures adopted by Silveira (1985), Frank (2005), and Johnson and Frank (2006) to make their extrapolations robust, estimates of total wealth inequality created from inventories also suffer from limitations. Among these, assumptions based on third-party sources regarding the portion of the population that had no assets must be highlighted.

1.3 Tax data

The use of tax information to estimate wealth inequality in Brazil is still in its infancy. In some countries, inheritance tax is the main source for producing estimates, especially from a historical perspective (Piketty; Zucman, 2015). In Brazil, given the features of this tax, its limited scope and historical discontinuities, no estimates of wealth concentration have been created from it. The available estimates drawn up using tax data are based on personal income tax, called IRPF (*Imposto de Renda da Pessoa Física*).

In a pioneering work, Fábio de Castro (2014) uses IRPF declarations to estimate the concentration of wealth in Brazil in 2006, 2009, and 2012. The economist analyzes the distribution of asset values (minus debts) contained in the declarations. The wealth Gini coefficients (0.86, 0.85 and 0.84) for these years follow the reduction in income inequality (from 0.58 to 0.56) calculated by the author for the same period. The immediate limitation of these estimates is that their calculation is restricted to income tax payers, who at the time corresponded to less than 10% of the population. Still, the coefficients found are quite high.

Antônio de Freitas (2017), also using personal income tax data, calculates the concentration of wealth, with debts subtracted, among groups of taxpayers distributed across income brackets — and not across wealth brackets, as Castro (2014) does. From 2007 to 2014, the

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¹² Inequality in the 1980s is probably underestimated, according to the author, as many inventories referring to those years were not available during the compilation period of the research, published in 1985. The time it takes for inventories to be completed positively correlates with the wealth levels they indicate.

richest groups represented between 7% and 9% of taxpayers and owned between 58% and 62% of the declared wealth.¹³

A similar procedure is used by the Ministry of Finance, which since 2016 has published the *Report on the Personal Distribution of Income and Wealth of the Brazilian Population*, based on IRPF declarations. The reports reach conclusions similar to those presented by Freitas (2017): about 10% of the richest taxpayers possess around 60% of the declared wealth (SPE, 2016, 2023).

The possibilities and limitations of estimates devised from the IRPF are investigated by the sociologist Marcelo Medeiros (2005, 2015). In an initial work, the author calculates that half of the assets declared in 1998 belonged to a group of taxpayers corresponding to around 1% of the population (Medeiros, 2005). In a later study, this time drawing on the same database used by Castro (2014), Medeiros (2015) observes that almost all declared wealth in those years (2006, 2009, and 2012) belonged to the richest half of taxpayers, a group equivalent to about 10% of Brazilian adults.

Medeiros (2015), however, highlights characteristics of the Brazilian personal income tax system that make it difficult or unfeasible to build reliable estimates. Among other points, he notes that: a) wealth declared by couples cannot be properly individualized; b) assets are declared as having the values at which they were acquired, values which are often outdated; c) there are evasions and under-declarations, especially by the wealthiest individuals; and d) the holding by individuals of part of their wealth in legal entities. Consequently, according to the author, estimates can vary substantially, depending on various assumptions made.

In a more recent study, Fábio de Castro, in co-authorship with Davi Bhering, produces estimates referring to the total population (Bhering and Castro, 2023). Starting from IRPF declarations, the authors estimate the distribution of wealth among taxpayers, who make up

of the state of Rio Grande do Sul.

¹³ The values calculated for the wealth Gini coefficients, between 0.61 and 0.67 in the period, are quite atypical: they are very close (between 0.57 and 0.61) to those attributed to income distribution, even in calculations carried out by the author himself. Freitas (2017) does not offer details about his methodological procedures. His estimates are briefly presented in a doctoral thesis on the distributive impact of inheritance, focused on the case

the upper part of the distribution. Then, based (among other measures) on the distribution of capital income obtained from household surveys, ¹⁴ they infer and include the assets of the non-taxpaying population. The exercise suggests that the top 1% held 44.8% of the wealth in Brazil in 2006 and 46.8% in 2021. The upward trajectory is almost entirely explained by the top 0.01%, whose share increased from 12% to 18% in the period. Bhering and Castro (2023) also observe that over 80% of the wealth of this stratum is composed of financial assets. ¹⁵

Among the limitations recognized by the authors are: the declaration of assets at their acquisition value (instead of market value) in the IRPF; the assumptions used to infer the wealth held by declaring and non-declaring populations (regarding, for example, the association between the distribution of capital incomes and the distribution of wealth); and the incomplete incorporation of national accounts data.

1.4 From income to wealth

In the last decade (2010s), information on wealth inequality from several countries has been included in comprehensive international databases. To introduce Brazil into these databases, inferences about wealth inequality based on income distribution began to be made.

The World Inequality Database (WID, 2023) — led by economists Thomas Piketty, Emmanuel Saez, Gabriel Zucman, Lucas Chancel and Facundo Alvaredo — estimates income and wealth inequality in dozens of countries based on household surveys, tax data and national accounts. In the case of Brazil, in the absence of direct information, wealth inequality is imputed from income inequality. Admitting that this is an unsatisfactory resource, the estimates are built based on the high correlation observed between the two distributions in other national cases. As a complementary step, the wealth held at the very top is corrected using data from *Forbes* magazine's annual list of billionaires (Bajard et al., 2022).

The entries for Brazil begin in 1995, when the top 10% held 74% of the wealth. On an upward trajectory, with minor fluctuations, the same group had come to hold 80% of the

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¹⁴ In this study, the authors use the PNAD Contínua (*Pesquisa Nacional por Amostra de Domicílios Contínua*).

¹⁵ No information is available regarding the richest 10%.

wealth by 2021. The top 1%, with almost identical fluctuations, held 41% of the wealth in 1995 and 48% in 2021. As the authors consider the distribution of net wealth, the assets held by the bottom 50%, always representing less than 1.6%, were sometimes negative. The Gini coefficient follows the same upward trajectory: with brief inflections, wealth inequality went from 0.85, in 1995, to 0.90, in 2021, the latter being the highest value in the annual series.

Finally, since 2010, Credit Suisse has been producing an annual Global Wealth Report (GWR), a comprehensive document with data on global wealth and its distribution. Led by Anthony Shorrocks, Jim Davies and Rodrigo Lluberas, the report includes data from more than 200 countries. In this case too, estimates of wealth concentration in Brazil are imputed based on the relationship between income and wealth distribution. The report estimates that the richest 1% in Brazil held 44.2% of the wealth in 2000, the year of the first report, and 49.3% in 2021. Measured by the Gini coefficient, wealth inequality appears to have declined moderately between 2000 (0. 84) and 2010 (0.82), after which it began to grow rapidly until 2021 (0.89) (Shorrocks et al., 2022a).

Although the WID and GWR results are similar, they differ in terms of the imputation procedures, with the Swiss bank drawing data from the *World Income Inequality Database* (WIID) (UNU-WIDER, 2023). In both cases, the quality of the estimates is admittedly "poor" or "unsatisfactory". Nevertheless, Brazilian data are presented by these reports alongside those of countries with estimates based on direct information — major methodological distinctions are explained only in supplementary documents (Bajard et al., 2022; Shorrocks et al., 2022b).

2. Discussion: extreme and inflexible

In this section, we discuss the results of the reviewed estimates taken together: what, based on them, can we say about the levels and trajectory of wealth inequality in Brazil?

Figure 1 brings together estimates of the concentration of inventoried wealth, referring to the 18th and 19th centuries, in which the upper brackets correspond to around 10% of the inventoried population. We can observe that, in those centuries, the richest 10% held

between 55% and 75% of the wealth. Even in the smaller cities or regions, whose estimates are shown in Table 1, similar levels are observed. Although in some of these places, such as Manaus and Belém, the levels of wealth were lower (in relation to those observed in larger urban centers), the concentration of wealth was not significantly lower. Regarding the previous century, the 17th, the only three available estimates (based on censuses) suggest a lower level and concentration of wealth.

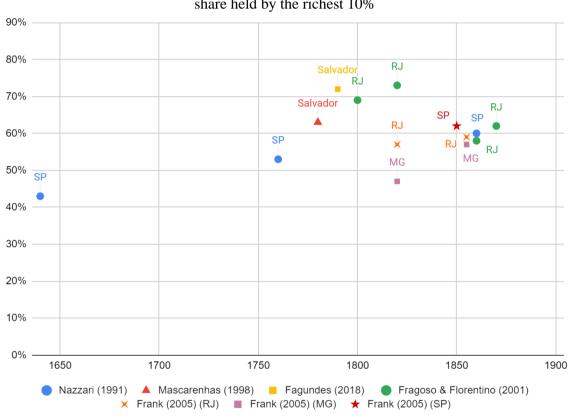


Figure 1 – Estimates of inventoried wealth inequality: share held by the richest 10%

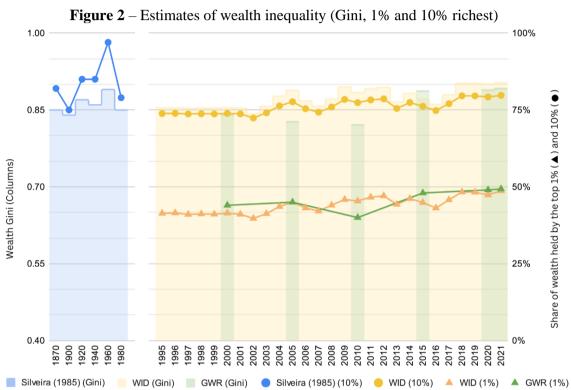
Source: Our own elaboration based on the reviewed works (Appendix A).

As previously noted, figures derived from inventories underestimate wealth inequality. Studies that employ extrapolation procedures (Frank, 2005; Johnson; Frank, 2006; Silveira, 1985) suggest that corrected distributions, ones that include non-inventory wealth as well, are similar to those estimated (by other methods) for the 21st century. As shown in Figure 2, extrapolations and imputations used to estimate **total wealth inequality between the 19th**

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¹⁶ Of the 24 cities/regions represented in Table 1, only in Magé-RJ and Mariana-MG does wealth concentration appear to be relatively lower. It is worth noting that, as discussed, direct comparisons between studies that use inventories are not always possible.

and 21st centuries find a Gini coefficient above 0.85, with 75% of the wealth held by the top 10%, and between 40% and 50% held by the top 1%. Similar levels are suggested, based on tax data, by Castro (2014) for the end of the 20th century (Gini between 0.84 and 0.86) and by Bhering and Castro (2023) for the 21st century (1% holding between 44.8% and 46.8% of the wealth).



Source: Our own elaboration based on the reviewed works (Appendix A). The lines, read from the right axis, refer to the wealth held by the richest 1% (triangles) and 10% (circles). Read from the left axis, the filled columns represent Gini coefficients. Only years with available data form the horizontal axis.

Estimates of wealth inequality are invariably accompanied by superlatives — "extreme", "very high", "extraordinary", "brutal", "ultra-concentrated". However, these adjectives do not say much: wealth concentrations, at different times, and even in the most egalitarian countries, are generally high, especially when compared to the distribution of income.

The values presented do not always allow for precise comparisons with other countries; but there are indications that they are comparatively high. For instance, Johnson and Frank (2006) note that their estimates regarding 19th-century Rio de Janeiro are close to those found in the highly unequal North American metropolises of the Gilded Age. Silveira (1985),

also drawing on data from Rio de Janeiro, finds that wealth inequality in Brazil around the 1970s was significantly higher than in developed countries (which had undergone major leveling in previous decades). In the 21st century, among the dozens of countries listed in the GWR and WID databases, Brazilian wealth inequality occupies top positions.

More certain conclusions concern not the levels, but the *trajectory* of wealth inequality. **The highlight is the remarkable persistence of wealth concentration over time.** The estimates also suggest that **three rising trends should be considered**: between the 17th and 18th centuries, throughout the 19th century and in the first two decades of the 21st century.

The upward trend between the 17th and 18th centuries is suggested based on Nazzari's (1991) data. To some extent it is corroborated by the estimates based on censuses carried out by Monteiro (1989, 1994) and Canabrava (1972, 1974). However, this trend should be considered with caution, due to the limited and fragile nature of these three estimates, and the fact that they are primarily confined to São Paulo.

With the upward trend observed in the 21st century (Figure 2), account should be taken of the fact that the estimates it is based on are not derived from direct sources. However, complementary evidence – such as the growth in the concentration of capital income (taxation of which decreased after the country's redemocratization), the deregulation of financial assets (along with the growth in their relative share), and the significant increase in the number of billionaires in the period – supports this possibility (Carranza et al., 2023; Chancel et al., 2021; Shorrocks et al., 2022a).¹⁷

Finally, **the increase in wealth inequality throughout the 19th century** indicated by studies using inventories is a trend well supported by the available evidence – as long as it is assumed, as some of these studies suggest, that there were no transformations responsible for radically hindering or facilitating the inventorying of wealth (Johnson; Frank, 2006; Frank, 2005; Nazzari, 1991). This trend can be observed in the cases of São Paulo, Bahia, Minas

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¹⁷ A factor that can also be considered is the expansion and merger of national companies resulting from the process of economic opening and privatizations (Fandiño et al., 2022; Morgan, 2018).

Gerais and Rio de Janeiro, as shown in Figure 1.18 The tendency was also towards an increase in most of the 24 smaller cities or regions – although stability is observed in some cases, there is a tendency towards a reduction in only one of them (Table 1 and Appendix A).

The increase in wealth inequality throughout the 19th century seems to be associated with the formalization of land trade and, counterintuitively, with the abolitionist movement and the legislation that preceded the Lei Áurea (1888). 19 These latter hindered the "ownership" of enslaved people, which was previously more widespread in inventories (Farinatti, 2007; Rocha, 2015; Teixeira, 2001; Vargas, 2012).

Although after 1888 it finally ceased to be legal to designate human beings as property, the effects of this milestone on the holding of wealth do not seem to have pushed it towards deconcentration.²⁰ Individuals who were no longer enslaved did not come to possess any assets. Their former "owners", who saw part of their assets disappear, seem to have found adequate time and means to preserve their wealth. The reduction in wealth inequality that could have been brought about by the abolition of slavery was also mitigated by the massive influx, which began in the 19th century, of European immigrants who generally had little or no wealth. The abolition, while representing the end of a horrible chapter in Brazilian history, does not seem to have significantly transformed secular levels of wealth concentration (Fragoso; Florentino, 2001; Mattoso, 1992; Sampaio, 2002; Silveira, 1985).²¹ In this regard, however, the available estimates only permit speculation.

compensations to former owners of freed individuals. Mattoso (1992, p. 638) observes that, in the two decades

(Silveira, 1985). Before abolition, the Ventre Livre (1871) and Sexagenários (1885) laws provided for

¹⁸ In Fragoso and Florentino (2001), the methodology and sample size are different for the two periods analyzed (1790-1835 and 1865-1875). There is an upward trend when these periods are considered separately. When both are analyzed together, as we have seen, the authors highlight the continuity of wealth inequality.

¹⁹ The *Lei Áurea* is the law that abolished slavery in Brazil on May 13, 1888.

²⁰ Data from Silveira (1985), in the main work investigating wealth concentration after the abolition of slavery, points to a significant reduction in inequality between 1870 and 1900, as observed. This reduction, however, was soon reversed in the first decades of the following century (Figure 2). In certain regions, where local economies depended almost exclusively on the work of enslaved people (such as Vale do Paraopeba-MG, investigated by Martinez (2016)), there was a pronounced decrease in wealth levels (i.e., in the existence of large fortunes) after 1888, but the estimates do not allow the same to be said about inequality levels. ²¹ From 1850, the trafficking of enslaved individuals was not permitted, and this, together with rebellions and the growing influence of the abolitionist movement, contributed to a lowering of the value of enslaved people

3. Conclusion

Taken together, the estimates discussed here suggest that wealth concentration in Brazil has extreme levels, has remained relatively unchanged over four centuries of history, and has shown an upward trend in the 19th and 21st centuries. There is no evidence to suggest any sustained reduction in wealth inequality in Brazil.

The inexorability of this trend is particularly intriguing given the enormous transformations in the composition of the assets that have made up wealth over time.

In the 17th century, indigenous people were among the most prominent Brazilian "assets", although they were not legally enslaved. Even though they were listed in inventories, after being inherited or captured in expeditions, they often had no monetary value. Likewise, land generally had zero value, even when listed in inventories – possibly because it was received free of charge via *sesmarias*.²² Only improvements to the land, such as houses, fields and warehouses, had value. Cattle, jewelry, furniture, tools and household utensils also had a place, as did clothing items that, as indicators of social status, could be worth as much as real estate. Enslaved people of African origin, although formally traded, were still not predominant in some regions.

By the 19th century, the composition of wealth had been entirely transformed. Clothes and household utensils barely appeared in inventories. The inclusion of cattle and jewelry

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before abolition, enslaved people already "figured in fewer than half of the inventories. Liberal professionals, priests and senior officials no longer had them for domestic service. Those who remained as domestic slaves were elderly women, kept on in the home out of compassion or custom [...]. The prestige previously associated with ownership of enslaved people faded: it even became fashionable not to possess them, with householders resorting to salaried domestic employees or simply to the circle of people who populated affluent homes". Sampaio (2002, p. 66) also concludes that, "apparently, the liberation of enslaved people was being brought in, progressively, with the collaboration of owners who, at that time, had already substantially modified their investments".

²² Sesmarias were parcels of land given by the government in exchange for a commitment to colonize them within a specified period of time.

decreased significantly. Enslaved people became the main "asset" in most parts of the country. Land gradually began to be traded and inherited: the sesmarias grants ceased with Independence in 1822, and land formally became a commodity with the Land Law of 1850. In urban centers, financial and commercial assets gained prominence. Real estate and land, increasingly relevant after the abolition of slavery in 1888, became the main asset in the composition of wealth in the 20th century, until they were overtaken by financial assets in the 21st century.

In short, even after profound changes in the relative importance of the components of wealth, its concentration has continued at extreme and undeviating levels. Taking as a measure the wealth held by different social groups, stratification has been preserved despite this metamorphosis.²³ These findings lead us to conclude that the great leveling of wealth inequality observed in developed countries during the 20th century did not occur in Brazil. The concentration of wealth in the country is still strikingly similar to that estimated for European servile societies at the end of the 19th century.²⁴

It seems certain that, in mid-20th-century Brazil, factors associated with the leveling process that took place elsewhere were less present – occurrences such as the destruction of assets resulting from wars and economic shocks; capital regulation and nationalization policies; and the substantial taxation of wealth and income. It should also be mentioned that there had been no significant agrarian reform.

In addition to what did not occur in Brazil, future research should focus on investigating factors associated with the inertia of inequality – despite the metamorphosis of wealth. What institutional transformations could have allowed wealth concentration to remain at extreme levels, even after profound changes in the composition of wealth? How, for example, could

²³ In a recent work, Carranza et al. (2023, p. 3) suggest that this persistence extends to Latin America as a whole. In countries where household surveys include wealth (Chile, Colombia, Mexico and Uruguay), current estimates "and estimates for wealth inequality in the postcolonial period have surprisingly similar values, suggesting a fairly stable trend in wealth inequality" over time.

²⁴ In Europe, during the *Belle Époque*, the richest 1% also held 50% of the wealth. The Gini coefficient was 0.85, compared to 0.89 in recent Brazil (Piketty, 2014; WID, 2023).

changes in property rights and capital taxation have contributed to accommodating wealth disparities between social groups over the centuries?

Finally, this review has also been concerned with *what we do not know* about wealth inequality in Brazil. The assertions made above, although pointed to by many works, are speculative and, to some extent, result from a patchwork: the lack of standardization of approaches, their local specificities, and the scarcity of information about some periods need to be highlighted once again. All the estimates we currently have suffer from significant limitations. It is necessary, however, to recognize the precious work of producing possible approximations that has been carried out by historians, economists and sociologists, in the conspicuous absence of adequate public data on the real concentration of wealth in Brazil.

For the further development of literature on wealth inequality in the country, direct information is essential. To this end, we suggest the adoption of certain measures. Firstly, the inclusion of wealth-related questions in household surveys. A guide produced by the Organization for Economic Cooperation and Development (OECD) offers detailed recommendations, including measures to be adopted by census takers for a more accurate assessment of the market value of assets (OECD, 2013). Secondly, adjustments in tax declarations, in order to overcome problems such as the (non) individualization of assets declared by couples and the listing of the acquisition values of properties (rather than their current market value). Thirdly, tax data with detailed information on capital income in IRPF declarations, which could facilitate the use of the "capitalization method". These and other measures are employed in several developed countries and even in neighboring countries in Latin America.

It is also worth noting that probate inventories, rich in details about wealth and its holders, constitute a source to be revisited, this time systematically, for the study of wealth concentration in a historical perspective. Existing extrapolation methods make it possible to infer the distribution of total wealth from inventoried wealth, consolidating a view of the historical trajectory of inequality in the country.²⁵

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²⁵ In addition to the procedures carried out by Frank (2005), Johnson and Frank (2006) and Silveira (1985), Piketty and Zucman (2015) observe that, based on the distribution of wealth among the dead, inequality among the living can be estimated through the "mortality multiplier" method. Implemented since the first decade of the

To summarize, the use of inventories, together with improved tax and household data for more recent periods, constitutes a promising path that may lead to answers to the questions discussed in this review that, for now, elicit only conjecture.

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Appendix A – Original estimates of wealth inequality in Brazil (1640-2021)

Author(s)	Locality	Method	Period	Top group	Share of wealth	Gini	Trend	Publication
Monteiro (1989, 1994)	São Paulo (rural districts)	Census (Royal Donation)	1679	10%	31-54%	0.5-0.6	_	Article; Book
Canabrava (1972, 1974)	São Paulo	Census	1765-1767	10%	80%	0.88	_	Article
Pochmann et al. (2004)	Drogil	1872 National Census	1872	1.8%	66%	_	_	Dook
Pocimalin et al. (2004)	004) Brazil	Household survey (PNAD-IBGE)	2001	10%	75%	_	_	Book
Nazzari (1991)	Sao Paulo-SP	Inventories (300)	1640-1651; 1750-1769; 1850-1869	10%	43-60%	_	Increase	Book
Alves (2001)	Taubaté-SP	Inventories (500)	1680-1820 (decennial)	9-13%	30-60%	_	_	Doctoral thesis
Mascarenhas (1998)	Salvador BA	Inventories (322)	1760-1808	10%	63%	_	_	Doctoral thesis
Fagundes (2018)	Salvador BA	Inventories (283)	1777-1808	10%	72%	_	_	Article

Author(s)	Locality	Method	Period	Top group	Share of wealth	Gini	Trend	Publication
Santos (2017)	Sergipe SE (São Cristovão)	Inventories (35)	1750-1808	25%	75%	_	_	Doctoral thesis
Campos (2005)	Vitória-ES	Inventories (43)	1790-1803	18%	43%	_	_	Article
Merlo (2018)	Vitória-ES	Inventories (140)	1809-1830	1.4%	25.4%	_	_	Book
Fragoso (1987); Fragoso & Pitzer (1988)	Rio de Janeiro - RJ	Inventories (130)	1797-1799; 1820; 1840	9-14%	60-70%	_	Increase	Article
Fragoso (1998)	Rio de Janeiro - RJ	Inventories (459)	1810; 1815; 1820; 1825; 1830; 1840; 1860	7-16%	62-84%	_	_	Book
Fragoso & Florentine (2001)	Rio de Janeiro - RJ	Inventories (653)	1790-1807; 1810-1835; 1865-1875	10%	62-70%	_	_	Book
Fiorentine (2001)	Vale do Paraíba-RJ	Inventories (148)	1825-1853; 1855-1869	10%	48-63%	_	Increase	
Araújo (2003)	São Paulo (neighborhoods in the central region)	Inventories (146)	1800-1824; 1825-1850	3-15%	70-74%	0.68-0.79	Reduction	Doctoral thesis

Author(s)	Locality	Method	Period	Top group	Share of wealth	Gini	Trend	Publication
Mattoso (1986, 1992)	Salvador BA	Inventories (1115)	1801-1850; 1851-1889	3.3-4.5%	40-46%	_	Increase	Book; Doctoral thesis
Reis (1986, 1991)	Salvador BA	Inventories (395)	1800-1850	10%	67%	_	_	Book
Marcondes (1998)	Lorena-SP	Inventories (186)	1830-1879	16.7%	89.5%	0.88	_	Doctoral thesis
Valentine (2006)	Vale do Ribeira-SP	Inventories (678)	1800-1840; 1841-1860; 1861-1880	5.5-6.4%	42-44%	0.67-0.68	Increase	Doctoral thesis
Soares (2003)	Mogi Mirim-SP	Inventories (593)	1831-1880	12.6%	70%	_	_	Masters dissertation
Garavazo (2006)	Batatais-SP	Inventories (492)	1851-1887	8%	64.5%	0.61-0.83	Increase	Masters dissertation
Lopes (2005, 2007, 2016)	Ribeirão Preto-SP	Inventories (390)	1870-1879; 1880-1888; 1889-1900	4-16%	46-82%	0.73-0.82	Increase	Article; Doctoral thesis
Abrahão (2015)	Campinas-SP	Inventories (1000)	1870-1890 1895-1915 1920-1940	20%	88-93%	_	_	Doctoral thesis
Oliveira (2003)	Franca-SP	Inventories (750)	1890-1920	4%	50%	0.68-0.78	_	Doctoral thesis
Siqueira (2005)	Socorro-SP	Inventories (380)	1840-1895	20%	66%	_	_	Book

Author(s)	Locality	Method	Period	Top group	Share of wealth	Gini	Trend	Publication
Sampaio (1994)	Magé-RJ	Inventories (170)	1850-1886	10-12%	48-52%	_	_	Doctoral thesis
Almeida (2010)	Vila Rica and Rio das Mortes-MG	Inventories (593)	1750-1822	7.80%	47.20%	_	Increase	Book
Teixeira (2001)	Mariana-MG	Inventories (319)	1850-1888	7.9%	46%	0.65-0.77	Increase	Masters dissertation
Dos Reis (2014)	Araxá-MG	Inventories (331)	1816-1820; 1826-1829; 1836-1839; 1846-1848; 1856-1858; 1866-1868; 1876-1878; 1886-1888	4-25%	30-88%	_	Increase	Article
Martinez (2006)	Vale do Paraopeba- MG	Inventories (761)	1840-1914 (decennial)	5-25%	20-79%	_	_	Doctoral thesis
Vieira (2015)	Lavras-MG	Inventories (100)	1870-1888	10%	66%	0.75	_	Masters dissertation
Freire (2007)	Feira de Santana- BA	Inventories (200)	1850-1888	two%	36%	_	_	Masters dissertation
Rock (2015)	Cachoeira-BA (Recôncavo Bahia)	Inventories (866)	1834-1880	10-15%	57-74%	_	_	Masters dissertation
Sampaio (2002)	Manaus-AM	Inventories (233)	1840-1880 (decennial)	3-7%	20-30%	_	_	Article

Author(s)	Locality	Method	Period	Top group	Share of wealth	Gini	Trend	Publication
Batista (2004)	Belém-PA	Inventories (221)	1850- 1859;1860- 1870	5%	32-37%	_	Increase	Masters dissertation
Oliveira (2006)	South of Goiás	Inventories (536)	1843-1910	11.2%	74%	_	Increase	Doctoral thesis
Biléssimo (2008, 2010)	Desterro-SC (Florianópolis)	Inventories (164)	1860-1880	20%	70%	_	_	Book; Masters dissertation
Borges (2005)	Lages-SC	Inventories (149)	1840-1865	4%	36.8%	_	_	Masters dissertation
Farinatti (2007)	Alegrete-RS	Inventories (205)	1830-1860 (decennial)	10%	44-69%	_	Increase	Doctoral thesis
Vargas (2012)	Pelotas-RS	Inventories (256)	1850-1890	8.5%	71%	_	_	Article
	Rio de Janeiro - RJ		1820; 1855	10%	57-59%	0.85 (total pop)	Increase	
Frank (2005)	São João / São José-MG	Inventories (1220)	1820; 1855	10%	47-58%	0.83 (total pop)	Increase	Article
	Sao Paulo-SP		1850	10%	62%	_	_	
Johnson & Frank (2006)		Inventories (539)			57-59%	_		Article
	`	Inventories (539) (free population)	1820;1850	10%	77-78%	0.87	Increase	

Author(s)	Locality	Method	Period	Top group	Share of wealth	Gini	Trend	Publication
		Inventories (539) (total population)			~90 %	_		
Silveira (1985)	Rio de Janeiro - RJ	Inventories (6500) (total population)	1868-1875; 1898-1905; 1918-1922; 1938-1942; 1958-1962; 1978-1982	10%	75-97%	0.84-0.89	Increase	Doctoral thesis
Medeiros (2005)	Brazil	Tax data (IRPF)	1998	1%	50%	_	_	Article
Castro (2014)	Brazil	Tax data (IRPF)	2006; 2009; 2012	_	_	0.84-0.86	Reduction	Doctoral thesis
Freitas (2017)	Brazil	Tax data (IRPF)	2007; 2010; 2014	7-9%	58-62%	0.61-0.67	_	Doctoral thesis

Author(s)	Locality	Method	Period	Top group	Share of wealth	Gini	Trend	Publication
SPE (2016, 2023)	Brazil	Tax data (IRPF)	2015-2022	~10%	~60%	_	_	Report
Bhering; Castro (2023)	Brazil	Tax data (IRPF) and household survey (PNADC)	2006-2021	1%	45-47%	_	Increase	Article
World Inequality	Desci1	Imputation	1995-2021	10%	72-79%	0.94.0.00	Increase	Report / Database
Database (WID, 2023)	Brazil	(income concentration)	(annual)	1%	39-48%	0.84-0.90		
Global Wealth Report (Shorrocks et al., 2022a)	Brazil	Imputation (income concentration)	2000-2021 (quinquenni al)	1%	40-49%	0.82-0.89	Increase	Report / Database

Our own elaboration based on the reviewed works. The top groups closest to the richest 10% are shown.