Socio-occupational structure of Brazilian metropolises: what changed and what remained the same in 40 years

Estrutura sócio-ocupacional das metrópoles brasileiras: mudanças e permanências em 40 anos

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Abstract

This article analyzes the socio-occupational structure of the main Brazilian metropolises between 1982 and 2021, focusing on their composition and on the behavior of income inequalities. We seek to answer the following questions: "What changed and what remained the same in the composition of the socio-occupational structure of Brazilian metropolises?" and "How did income inequalities appear in this socio-occupational structure in the period under analysis?" PNAD data from 1982 and PNADC data from 2021, provided by IBGE, were used. Although important changes occurred in the 40-year period, the study's main results point to the maintenance of a social structure represented by the pyramidal model and to a reduction in income inequalities.

Keywords: social structure; income inequalities; metropolises

Resumo

O objetivo deste artigo é apresentar os resultados da análise da estrutura sócio-ocupacional das principais metrópoles do Brasil, entre os anos de 1982 e 2021, focando em sua composição e no comportamento das desigualdades de renda. Buscamos responder às seguintes questões: "Que mudanças e/ou permanências ocorreram na composição da estrutura sócio-ocupacional das metrópoles brasileiras?" e "Como as desigualdades de renda se apresentaram nessa estrutura sócio-ocupacional no período em análise?". Foram utilizados dados Pnad, de 1982, e PnadC, de 2021, do IBGE. Os principais resultados encontrados apontam para a manutenção de uma estrutura social representada pelo modelo piramidal, apesar de mudanças importantes ocorridas ao longo de 40 anos, e para a redução das desigualdades de renda.

Palavras-chave: *estrutura social; desigualdades de renda; metrópoles.*

Introduction

This article aims to present the results of the analysis of the socio-occupational structure of the major metropolises in Brazil between the years 1982 and 2021, focusing on its composition and the behavior of income inequalities. To achieve this, we utilized the socio-occupational structure developed and recently revised by the Observatory of Metropolises (Observatório, 2023), which is considered a representation of the social structure as it seeks to define classes, class fractions, and socio-occupational categories as expressions of the positions that agents occupy in the social space (Bourdieu, 2008). Under this approach, class positions are defined based on labor market occupation, given that this variable (occupation) can express distinct and relational positions within the social space.

The analysis of the four-decade period of the Brazilian metropolitan socio-occupational structure is conducted through the lens of the structural economic, societal, and political changes that marked this era. By the early 1980s, signs of the exhaustion of the economic development process that had shaped an urban-industrial political-economic structure in previous decades were already evident. Simultaneously, some of the social conflicts that would deepen in the subsequent decades began to emerge, stemming from the reconfiguration of the emerging political-economic structure and its material support base, which was urban and service-oriented. After forty years, we can assess the transformations that have occurred during this period, particularly stemming from the process of deindustrialization of the Brazilian productive structure, changes in information and communication technology, globalization, neo-liberalization, and the financialization of contemporary capitalism.

During the intense process of urbanization in Brazil, which occurred between 1940 and 1980, a network of cities emerged with the presence of some metropolises. These metropolises established themselves as centers of population concentration due to their economic significance and, consequently, their labor markets. These metropolises were the focal points for major industrial productive activities, as well as for command functions and modern services. However, they also accommodated informal, precarious, and low-paying economic activities, giving rise to a social structure characterized by significant inequalities during that period (Valle Silva, 2004). Over the last four decades, Brazil has experienced further urbanization, advancing the process of metropolization. This has been driven by structural changes in capitalism at large and in the Brazilian economic structure, reshaping the importance of metropolises, which have become more strategically positioned in the globalized world (Ribeiro and Rodrigues, 2019). Consequently, the analysis of the social structure forming and/or reproducing itself in these spaces has become highly relevant for understanding the country's social transformations.

Hence, in this article, to establish an analysis of the social structure based on the socio-occupational structure, we aim to address the following questions: (1) what changes and/or continuities have occurred in the composition of the socio-occupational

structure of Brazilian metropolises? and (2) how have income inequalities manifested within this socio-occupational structure during the period under examination?

For the analysis conducted in this article, data from the National Household Sample Survey (Pnad) of 1982 and the Continuous National Household Sample Survey (PnadC) of 2021 were used. Both surveys were produced by the Brazilian Institute of Geography and Statistics (IBGE). The socio-occupational structure utilized was developed by the Observatory of Metropolises, based on the labor market occupation variable, aiming to express the distinct positions within the social space (Observatório, 2023), and consequently, class positions. Using this structure, the analysis of income inequalities will also be performed, considering the primary income of individuals aged 14 and older. The entire analysis is conducted for the set of major Brazilian metropolises,[1] considering those with data availability in both surveys used.

The article is organized into six sections, including this introduction. In the second section, there will be a discussion of social structure and income inequalities, drawing from international debates on this topic as well as recent discussions in Brazil. The third section will present the theoretical-conceptual aspects that guide the construction of the socio-occupational structure. The fourth section will outline the methodological aspects for establishing the evolutionary analysis between 1982 and 2021, considering the data sources used for each of the years. In the fifth section, results will be presented and discussed to address the questions outlined above and to develop an interpretation of changes and continuities in the social structure of the major Brazilian metropolises. In the final section, as concluding remarks, the main findings will be summarized.

Social structure in recent decades

The process of Brazilian industrialization, which took place between 1930 and 1980, was the period during which capitalist modes of production became widespread across all sectors of economic activity, while still preserving earlier forms of production or subsistence. It was during this period that modern occupations in both productive and service sectors were established, alongside the expansion of traditional and routine occupations, which accompanied this dynamism, as well as the formation of middle classes (Valle Silva, 2004). By the end of this period, the major Brazilian metropolises had a more complex and diversified system of social stratification compared to what had existed until the 1930s.

Starting in the 1980s, the Brazilian economy witnessed the exhaustion of the import substitution policy that had facilitated its industrialization. In the context of significant changes occurring in the global capitalist system, the subsequent economic policies adopted in the country were characterized by trade and financial liberalization, as well as monetary stabilization from an orthodox economic perspective. These policies decisively contributed to the loss of competitiveness of the domestic industry, necessitating that

companies undergo a process of production restructuring. Consequently, there was a reduction in industrial employment – either due to changes in productive forces that increased labor productivity or due to the transfer of certain industrial activities to the service sector – and the establishment of the Brazilian deindustrialization process.

This process of deindustrialization resulting from production restructuring was associated with the effects of globalization of capitalism,[2] given the advancements in information and communication technologies that accelerated and intensified trade and financial flows between countries worldwide. In the context of global capitalism, the concept of 'global cities' emerged as central hubs for interactions among various economies, characterized by the concentration of financial activities and the command and control of economic dynamics occurring across the globe (Sassen, 2001). The formation of global cities, in turn, led to changes in their social structures, where a more dualistic structure, akin to an hourglass, tended to prevail. This involved the growth of social segments in higher positions and social segments in lower positions within the social structure, in contrast to the pyramidal social structure,[3] characteristic of the previous period.

This debate also fueled discussions about changes in the social structure of Brazilian metropolises, considering the country's integration into the process of globalization, particularly from the 1990s onwards, and the consequences of deindustrialization resulting from production restructuring, leading to a reduced share of industrial activity due to the bankruptcy of industrial units or their relocation to other regions of the country. On one hand, efforts were made to analyze whether the emergence of financial and command and control activities typical of global cities was occurring in the major metropolises of the country. On the other hand, attempts were made to understand the effects of the deindustrialization process on the economic structure of these metropolises. Some results supported the perspective of global cities, as evidenced by the relatively higher increase in positions at the upper end of the social structure (Ribeiro and Lago, 2000 and Ribeiro and Ribeiro, 2015).

Despite the advance of the deindustrialization process due to the 'China effect,' characterized by the expansion of exports of primary goods to China and the importation of manufactured products, and the maintenance of economic policies that discouraged the competitiveness of industrial activities, the debate on the social structure took on new dimensions from the 2000s (Cano, 2012). With the economic growth that began to take shape, primarily based on exports of primary products, increased public spending, and rising consumption, there was an expansion of employment in the labor market. This dynamic expansion of the labor market, coupled with policies to increase the minimum wage and income transfer programs for vulnerable families, contributed to a reduction in income inequalities in the country. This was due to the higher income gains experienced by lower-income segments.

In this socio-economic context, Neri (2008) introduced the idea of the formation of a new middle class in Brazilian society into public and academic discourse. This new

middle class, also referred to as class C, was characterized as the intermediate income segment of the population that expanded its capacity to consume goods and services that were previously limited to the traditional middle class. In response to this perspective, other studies in the country contested this view. Souza (2010) argued for the existence of a class of workers, characterized as 'strivers,' given the harsh conditions this segment endured to earn income and their limited cultural capital. Pochmann (2012) pointed out that there was an expansion of the working class, corresponding to the social segment at the base of the social pyramid. Salata (2015), through research on identity and class perception, demonstrated that individuals in the intermediate income position did not identify themselves as middle class. Furthermore, the perception of the middle class was associated with those of higher socio-economic power.

With the economic crisis that began in 2015 and its effects on the labor market, the debate about the formation of a new middle class virtually disappeared. Instead of this discussion, there was a return to the debate on increased poverty and extreme poverty, as well as the exacerbation of income inequalities in the country, especially in its metropolitan areas. This debate was further intensified by the outbreak of the covid-19 pandemic, which, by disrupting economic activities due to social isolation measures, led to increased unemployment and rising income inequalities, poverty, and extreme poverty. Additionally, it highlighted the precarious forms of housing in the country's metropolitan areas, especially in slum areas and urban outskirts.

However, the current discussion regarding the social structure is taking place in a context of significant transformations, considering the changes occurring in contemporary capitalism and the specific changes in the Brazilian economy. The process of financialization of capitalism, understood as a regime of accumulation dominated by finance (Chesnais, 2002), is characterized by the predominance of finance over productive processes. This has consequences for a peripheral country like Brazil, leading to the establishment of a bourgeoisie more rent-seeking than productive, where their gains are primarily oriented towards financial investments rather than productive investments. Consequently, this contributes significantly to the intensification of the deindustrialization process in the Brazilian economic structure.

Furthermore, in contemporary capitalism, new productive dynamics and commodity circulation have emerged, with changes in logistics and commercialization segments, for example, and new activities have been established because of the platformization process. Platformization arises from the emergence and advancement of microelectronics and the Internet, culminating in artificial intelligence, big data, and the Internet of Things, establishing digital platforms that reorganize economic dynamics and social life in general. This process gives rise to new occupations in the labor market, controlled by transnational companies through digital platforms. This has led to discussions about new forms of precarious work, also referred to as 'gig work' or 'platform work' (Antunes, 2020).

It is within this context of structural changes that the analysis of the socio-occupational structure will be conducted in this work.

Social structure according to social space

The social structure of Brazilian metropolises takes as a reference the socio-occupational structure developed and recently revised by the Observatório das Metrópoles (Observatório, 2023), which was originally designed to analyze processes of metropolitan socio-spatial segregation (Ribeiro and Ribeiro, 2013). In this sense, the socio-occupational structure, as a structure of class positions, serves as a representation of the social structure, while recognizing that the socio-occupational structure does not encompass all the constituent properties of the social structure.

The construction of the socio-occupational structure is based on the theoretical approach formulated by the French sociologist Pierre Bourdieu regarding the concept of social space (Bourdieu, 2008). This concept was developed from the results of various empirical research studies that the author conducted on French reality, incorporating different methodological procedures that enabled an understanding of how French society was structured during the time of these studies. Thus, it became possible to formulate the concept of social space as multidimensional, composed of various properties (occupation, race, gender, age, place of residence, education, etc.).

Nevertheless, Bourdieu (ibid.) identified three main properties that would shape the social space, which could be represented through a Cartesian plane based on the first two of these properties. The first property (vertical axis) pertained to the overall volume of capital (cultural, economic, social, and political) that differentiated agents or social groups. The second property (horizontal axis) related to the structure of capital, concerning how different forms of capital were distributed among various agents or social groups, particularly those that were most decisive as mechanisms of social distinction in the French context—cultural capital and economic capital. The third dimension was represented by the trajectories that agents or social groups followed in the social space over their lifetimes, which could be upward, downward, or characterized by social immobility.

It is worth noting that, despite the graphical representation constructed through the axes of the overall volume of capital and the structure of capital, the position of agents or groups in the social space was determined by the set of properties identified by the author. It was through the interplay of this set of properties that the concept of social space could be formulated, and subsequently, graphically represented using those key properties that shaped the French social space.

Thus, it became possible to formulate definitions of class and class fractions based on the positions occupied by different agents or groups in the social space, considering that the social space presented itself as a relational space. Furthermore, it was considered that agents or social groups occupying similar

positions in the social space were highly likely to have similar lifestyles, social practices, preferences, etc., among themselves and different from agents or social groups occupying distant social positions in the social space. Therefore, similar social positions were simultaneously an expression of social conditions, incorporated dispositions (habitus), and similar stances (ibid., 2008).

Chart 1 – Class, class fraction and socio-occupational categories

Classe	Class fraction	Socio-occupational categories
Dominant class	Ruling class	11,00 Large employers 12,00 Public sector executives 13,00 Private sector executives
	Upper-Middle class	21,00 Medical professionals 22,00 Engineering and architecture professionals 23,00 Management and business professionals 24,00 Information technology professionals 25,00 University professors 26,00 Science professionals (natural, social, and human)
Intermediate class	Middle-Middle class	31,00 Small employers 32,00 Communication and arts professionals 33,00 Personal or social services professionals 34,00 Managers and supervisors 35,00 Public administration and security agents
	Lower-Middle class	41,00 Commercial agents 42,00 Technicians in production and support processes 43,00 Health technicians and agentes 44,00 Training agentes 45,00 Administrative support workers 46,00 Craftsmen and agents of culture, art, sport, and religion
Popular class	Industrial proletariat	51,00 Modern industrial workers 52,00 Traditional industry workers
	Service proletariat	61,00 Freight transport and logistics workers 62,00 Passenger transport workers 63,00 Retail workers 64,00 Repair and maintenance service workers 65,00 Surveillance service workers 66,00 Food and accommodation service workers 67,00 Personal care and beauty services workers
	Built environment production proletariat	71,00 Construction and utility workers
	Subproletariat	81,00 Delivery service workers 82,00 Cleaning service workers 83,00 Street vendors 84,00 Domestic workers
	Rural Workers	91,00 Workers in agriculture, livestock, forestry, etc.

Source: Observatório das Metrópoles (2023).

In this sense, through the social space, it was possible to construct a representation of the class structure and the class fractions that constitute it. According to Bourdieu (ibid.), the overall volume of capital could be used to divide various agents or social groups into three classes: the dominant class, the middle class, and the popular class. The dominant class was defined by a high accumulation of capital, consisting of the social agents who dominated the social space, i.e., those social agents with the highest social power and status. The middle class constituted a class with a smaller volume of capital compared to the dominant class, but a larger volume compared to the popular class; it was, therefore, an intermediary class. Despite this, the middle class had a capital structure like the dominant class and tended to establish strategies that allowed for upward mobility towards the dominant class. The popular class was defined as having the lowest volume of capital and occupying subordinate positions in the social space, especially due to the dominance exerted by the dominant class and, to a lesser extent, the middle class. Using the structure of capital, it was possible to differentiate agents or social groups within the same class, considering the different compositions of capital they possessed. Some had more cultural capital than economic capital, others had more economic capital than cultural capital, and others still had a relatively balanced amount of economic and cultural capital, which could be high or low.

These representations of class and class fractions were related through the different professions that social agents held, leading to their designation through terminologies that expressed this condition in the labor market. In terms of class fractions, these terms included the large bourgeoisie, liberal professionals, small bourgeoisie, proletarians, etc.

For the revision and elaboration of the socio-occupational structure by the Observatório das Metrópoles (Observatório, 2023), it was considered that Bourdieu's representation of the social space developed for French society would serve as an expression of the Brazilian social space, especially concerning its metropolises. This was mainly due to the establishment of the three classes that make up the social space: the dominant class, the middle class, and the popular class. When applying this class representation to the reality of Brazilian metropolises, the goal was to construct class fractions from a socio-occupational structure composed of socio-occupational categories (CAT) constructed based on occupation in the labor market.

However, the construction of the socio-occupational structure considered the particularities of Brazil's social formation and its class structure in defining class fractions and the socio-occupational categories themselves.[4] Moreover, it was based on an analysis of the transformations in the Brazilian economic structure (Ribeiro and Clementino, 2020) and its labor market (Ribeiro and Aragão, 2020), considering the emergence of new occupations, the disappearance of old ones, and changes in the position of some occupations in the social space. Thus, the following configuration of the class structure was arrived at: the dominant class composed of the class-leading and upper-middle-class fractions; the middle class (or intermediate) composed of the

middle-middle-class and lower-middle-class fractions; and the popular class composed of the industrial proletariat, service proletariat, built environment production proletariat, subproletariat, and rural workers fractions. The composition of class fractions based on socio-occupational categories is illustrated in Chart 1.

Although the formulation of the concept of social space is based on multiple dimensions as a set of properties that shape it, the socio-occupational structure was constructed solely using the variable of labor market occupation[5] as a representation of the social structure. Therefore, the perspective used in this article relies on a socio-occupational structure that is built based on Bourdieu's (2008) concept of social space – a concept constructed from multidimensional properties – adapted to the contemporary Brazilian context through the variable of labor market occupation.

Methodologic aspects

To conduct the analysis of the social structure of the main Brazilian metropolises over a four-decade period, we used household survey data produced by IBGE. These surveys were chosen because only they have the necessary scope in terms of spatial, temporal, and variable characteristics for our analysis. However, to perform this analysis, it was necessary to make some adaptations to ensure the empirical object could be compatible between the 1982 and 2021 surveys, which we describe below.

The IBGE, since its establishment in 1938, has been the Brazilian government agency responsible for conducting the Brazilian demographic census, which is the largest household survey in Brazil (Livi-Bacci, 2002). However, since the late 1960s, the IBGE started conducting the National Household Sample Survey (Pnad), which is also a household survey, alongside many others, such as the Monthly Employment Survey (PME). The Pnad was an annual household survey, except in years when the demographic census was conducted, as it provided nearly the same data as that survey. However, the Pnad, being a sample survey, only provided data at the national, state, and nine metropolitan region levels. There was no possibility of conducting municipal or even intra-urban analysis using this survey, which could only be done using data from the demographic census. The Pnad existed until 2015 when it was replaced by the PnadC (Continuous National Household Sample Survey).

The PnadC resulted from the merger of the Pnad with the PME, which was conducted monthly but provided data for only six metropolitan regions in the country. The PnadC represented a significant improvement in data collection by the IBGE because it was designed so that each selected household was surveyed in five quarterly rounds. Since a set of households is sampled each month, in practice, households are surveyed every month of the year. This results in the PnadC having three types of databases: monthly, quarterly, and annual. Furthermore, the spatial coverage of the PnadC also expanded, now providing data for 20 metropolitan regions in the country[6] – those with a state capital at their core – and for all municipalities that are state capitals in the country.

As can be observed, despite being sample household surveys, the research design for each of them is very different. The Pnad collected data concerning the month of September each year. The annual basis of the PnadC consists of data collected monthly from each of the household visits. Only the annual bases of the first and fifth visits contain data related to labor market occupations. For the year 2021, the IBGE only released the annual basis of the fifth visit, which is why we used it. Although there are these differences, we consider it possible to compare the social structure in this period using these two surveys, as we will demonstrate below.

The choice of the years 1982 and 2021 for the analysis was because the structural analysis is better understood when considering a broader period. Therefore, the most significant transformations that have occurred in Brazil in recent decades were considered, with the early 1980s marking the exhaustion of the economic development process based on industrialization through import substitution policy and consequently the emergence of the conditions that marked the subsequent period. Specifically, the choice of 1982 was made because all the variables needed for the analysis that we intended to conduct were available in this survey.[7] The year 2021 was chosen as the database that reflects the most recent period of our investigation.

As already presented, in the Pnad, data is available for the entire country, for the federal units, and nine metropolitan regions. In the PnadC, data is available for the entire country, for the federal units, and 20 metropolitan regions. To carry out the intended analysis, it was necessary to standardize the spatial scope to examine social processes of change or continuity over the considered period in the same geographical space. Therefore, in both years, the following metropolitan regions were considered: São Paulo, Rio de Janeiro, Belo Horizonte, Salvador, Recife, Fortaleza, Belém, Curitiba, and Porto Alegre. Data for Brasília, corresponding to the Federal District, was also incorporated. The analysis was conducted for the set of these nine metropolitan regions and the Federal District, which we consider the main metropolises of the country.

Although the concept of a metropolitan region and metropolis is conceptually different, especially in Brazil, as the former results from the institutionalization of a set of municipalities through the law, and the latter represents a space of territorial, demographic, and economic integration with a leadership role in business and public management activities that influence other cities in the country's urban network, as highlighted by Regic/IBGE (2020), these first 9 metropolitan regions mentioned correspond exactly to the first metropolises in the country, incorporating Brasília, which also became a metropolis. Since the data from PNAD or PNADC related to these areas do not exactly specify which municipalities were selected for data collection, we consider them to be the most important in their formation, corresponding to the spaces referred to as metropolitan.

The choice to analyze all these spaces together resulted from the fact that we used a socio-occupational structure consisting of 35 categories for application in sample surveys, such as Pnad and PnadC. Since the data used

resulted from sample expansion to represent the entire population, we considered that there would be less sampling error in the analysis of all the metropolises together than in a specific analysis of each one of them or even through comparative analysis.

As the socio-occupational structure we used was developed considering the set of economic and labor market transformations in recent decades, to carry out the evolutionary analysis between 1982 and 2021, it was necessary to reconcile the labor market occupations presented by the occupational classifications of each survey.

The occupational classification used by IBGE in 1982 was different from that used in 2021. The socio-occupational structure we used was constructed based on the 2010 demographic census, which has the same occupational classification as the PnadC, making it very straightforward to adapt. However, since a different occupational classification was used in 1982, it was necessary to establish compatibility between occupations for the new socio-occupational structure of the Observatório das Metrópoles. This compatibility effort was carried out following the criteria used for this new socio-occupational structure. Nevertheless, it was not a matter of reconciling the occupational classifications existing in each survey but rather adapting each of these classifications to the socio-occupational structure. In other words, it was a conceptual adaptation, as it was based on the conception of what occupations represent in terms of social position and, therefore, categorization within each socio-occupational category, which justifies conducting comparative research based on data sets that result from different sampling designs.

The consequence of this procedure is that the comparative and evolutionary analysis is done from the perspective of the socio-occupational structure constructed for the present moment. We believe that this approach would be more appropriate than comparing different socio-occupational structures – one for 1982 and another for 2021 – because we would be comparing categories of social representation constructed under different criteria, which would not make sense in comparative terms for the objective we have.

For the analysis of income inequalities in the social structure, the main source of income variable, present in both databases, was used. To use this variable, people who did not have income information were excluded from the analysis, which allowed for the calculation of the average income of people with zero and positive income. The income data from 1982 were adjusted for inflation[8] to December 2021. From this, it was possible to analyze the differences in average income between the combined categories and between the years analyzed. However, for the demarcation of income inequality analysis, for each year, the average income ratio of each combined category to the average income of domestic workers was calculated, as this occupational category had the lowest income level in both years analyzed.

In the Pnad in general, the data for the economically active population, of which the employed population is a subset, was collected for individuals aged 10 years or older, as historically, in Brazil, children and adolescents entered the labor market at an early age. However, in the PnadC, the data has always been collected for individuals aged 14 years or older, as the incidence of child labor has been substantially reduced in the country, although there are still children and adolescents in the labor market. To establish a comparison between the years, individuals aged 14 years or older were considered in the analysis we conducted.

Results analysis

Composition of the socio-occupational structure

Over the course of 40 years, the composition of the socio-occupational structure in Brazil's main metropolises has undergone significant changes. Despite these changes occurring alongside an increase in the working population, which doubled during this period - going from 14.3 million in 1982 to 28.6 million in 2021 - their relative participation in the country's working population remained stable, accounting for approximately 32.5%. This indicates that the metropolises kept pace with the population growth occurring in Brazil and maintained their significance in the country's labor market. Therefore, the effect of demographic growth needs to be contextualized to analyze the changes in the composition of the socio-occupational structure in Brazilian metropolises, as well as their continuities, through an examination of their class fractions and socio-occupational categories, as presented in Table 1.

Over the span of four decades, in terms of its composition, the socio-occupational structure has continued to resemble a pyramid, albeit with a narrowing at the base and growth in the middle and top sections. Despite the observed reduction in the share of the Working Class – which accounted for 63.5% in 1982 – this class still represented over 50% of the employed population in the labor market in 2021. The decline in the Working Class's share was accompanied by an increase from 29.2% to 35.5% in the Intermediate Class and from 7.3% to 12.3% in the Dominant Class. Therefore, while the combined categories of manual workers continue to be numerically larger in the composition of the socio-occupational structure, there has been a significant increase in the categories of non-manual workers, those requiring higher levels of education and/or qualifications for their roles.

The decrease in the share of the Working Class occurred with contrasting trends among the class fractions that comprised it. While there was a reduction in the share of the Industrial Proletariat, the Built Environment Production Proletariat, the Subproletariat, and Rural Workers, there was an increase in the share of the Service Proletariat. The latter class fraction expanded its participation in the socio-occupational structure from 17.4% in 1982 to 25.3% in 2021, nearly tripling the number of employed individuals (from 2.5 million to 7.2 million). Among the other class fractions that saw a reduction in their share, only the Industrial Proletariat experienced an absolute decrease in the number of employed

Table 1 – Metropolitan Brazil[1]: absolute and relative frequency of employed people aged 14 or over according to class fractions and socio-occupational categories – 1982 and 2021

Class fraction/socio-occupational categories	Frequency – 1982		Frequency – 2021	
	N	%	N	%
1,00 Ruling class	**641.212**	**4,5**	**1.104.767**	**3,9**
11,00 Large employers	251.319	1,8	385.604	1,3
12,00 Public sector executives	164.513	1,1	172.600	0,6
13,00 Private sector executives	225.380	1,6	546.562	1,9
2,00 Upper-Middle class	**410.109**	**2,9**	**2.416.513**	**8,4**
21,00 Medical professionals	65.762	0,5	229.901	0,8
22,00 Engineering and architecture professionals	96.386	0,7	318.794	1,1
23,00 Management and business professionals	148.558	1,0	1.280.619	4,5
24,00 Information technology professionals	42.501	0,3	369.738	1,3
25,00 University professors	27.470	0,2	123.176	0,4
26,00 Science professionals (natural, social, and human)	29.432	0,2	94.284	0,3
3,00 Middle-Middle class	**1.544.861**	**10,8**	**4.209.784**	**14,7**
31,00 Small employers	280.531	2,0	853.722	3,0
32,00 Communication and arts professionals	143.969	1,0	371.655	1,3
33,00 Personal or social services professionals	403.588	2,8	1.671.696	5,8
34,00 Managers and supervisors	349.980	2,4	609.970	2,1
35,00 Public administration and security agents	366.793	2,6	702.741	2,5
4,00 Lower-Middle class	**2.634.359**	**18,4**	**5.950.084**	**20,8**
41,00 Commercial agents	140.973	1,0	708.022	2,5
42,00 Technicians in production and support processes	137.655	1,0	772.771	2,7
43,00 Health technicians and agentes	206.853	1,4	758.106	2,6
44,00 Training agentes	84.807	0,6	210.758	0,7
45,00 Administrative support workers	1.984.795	13,8	3.079.016	10,8
46,00 Craftsmen and agents of culture, art, sport, and religion	79.276	0,6	421.411	1,5
5,00 Industrial proletariat	**2.601.531**	**18,1**	**2.215.947**	**7,7**
51,00 Modern industrial workers	1.433.456	10,0	1.134.625	4,0
52,00 Traditional industry workers	1.168.075	8,1	1.081.322	3,8
6,00 Service proletariat	**2.500.071**	**17,4**	**7.232.549**	**25,3**
61,00 Freight transport and logistics workers	246.665	1,7	910.119	3,2
62,00 Passenger transport workers	283.627	2,0	781.336	2,7
63,00 Retail workers	1.071.571	7,5	2.618.958	9,1
64,00 Repair and maintenance service workers	198.358	1,4	237.001	0,8
65,00 Surveillance service workers	234.619	1,6	454.059	1,6
66,00 Food and accommodation service workers	318.498	2,2	861.489	3,0
67,00 Personal care and beauty services workers	146.733	1,0	1.369.586	4,8
7,00 Built environment production proletariat	**1.255.111**	**8,8**	**1.830.332**	**6,4**
71,00 Construction and utility workers	1.255.111	8,8	1.830.332	6,4
8,00 Subproletariat	**2.525.347**	**17,6**	**3.390.946**	**11,8**
81,00 Delivery service workers	162.147	1,1	310.550	1,1
82,00 Cleaning service workers	747.808	5,2	1.357.896	4,7
83,00 Street vendors	483.205	3,4	630.146	2,2
84,00 Domestic workers	1.132.187	7,9	1.092.354	3,8
9,00 Rural Workers	**223.548**	**1,6**	**286.163**	**1,0**
91,00 Workers in agriculture, livestock, forestry, etc.	223.548	1,6	286.163	1,0
Total	**14.336.149**	**100,0**	**28.637.084**	**100,0**

Source: IBGE (1982) and IBGE (2021).
Notes: (1) Metropolitano Brazil: São Paulo, Rio de Janeiro, Belo Horizonte, Curitiba, Porto Alegre, Salvador, Recife, Fortaleza, Belém and Brasília.

individuals (from 2.6 million in 1982 to 2.2 million in 2021), resulting in a decline in its share from 18.1% to 7.7%. The reduction in the share of the other class fractions occurred alongside an increase in the absolute number of employed individuals.

The Intermediate Class saw an increase in its share of the socio-occupational structure in both the Lower Middle Class and the Middle Middle Class, accounting for just over a third of the employed population in the metropolitan areas. The Middle Middle Class experienced a higher increase, with a 3.9 percentage point (pp.) rise, mainly due to significant growth among Personal or Social Services Professionals (3 pp.). In the Lower Middle Class, the 2.4 pp. increase was driven mainly by Technical and Support Process Technicians (+1.7 pp.), Commercial Agents (+1.5 pp.), and Health Technicians and Agents (+1.2 pp.), compensating for the relative decrease in Administrative Support Workers (-3.1%), which, however, still had the largest share in the socio-occupational structure (10.8%). Despite small positive growth or relative reduction, all other socio-occupational categories in the Middle Middle Class and Lower Middle Class experienced an absolute increase in the number of employed individuals.

The growth in the socio-occupational structure's share observed in the Dominant Class was primarily due to the significant increase in the Upper Middle Class (+5.6 pp.), as the Ruling Class showed a slight relative reduction in its share (-0.6 pp.). This reduction in the Ruling Class resulted from a relative decrease in Large Employers (-0.4 pp.) and Public Sector Executives (-0.5 pp.), with an increase in Private Sector Executives (+0.3 pp.). In the Upper Middle Class, all categories increased their share in the socio-occupational structure, with notable growth, especially among Management and Business Professionals (+3.4 pp.) and Information Technology Professionals (+1 pp.).

In this regard, when we state that the social structure of the main Brazilian metropolises continues to be represented by a pyramid model, despite the processes of change that have led to a narrowing of its base and growth in the middle and at the top of this pyramid, we aim to provide further insight into the processes of change and continuity that have occurred over the past 40 years.

The narrowing of the social structure's base can be mainly explained by the process of deindustrialization in the Brazilian economy, which had its main presence in the metropolises. Evidence of this can be seen in the reduction of the Industrial Proletariat, which was the only class fraction that both decreased in relative and absolute numbers of occupied individuals between 1982 and 2021. The absolute reduction in Industrial Workers indicates that the deindustrialization process has been accompanied by job losses, likely due to the closure of industrial plants.

The deindustrialization process, when explained by production restructuring, also meant the transfer of jobs from the industrial sector to the services sector, especially in occupations that can be contracted by industrial firms from third-party companies. This can help explain the significant increase

in the Service Proletariat, particularly in categories such as Freight Transport and Logistics Workers and Surveillance Services Workers, but also in Cleaning Services Workers, which is part of the Subproletariat.

Another sign of the reduction in the base of the social structure is observed in the relative and absolute decrease in the number of Domestic Workers. Although the absolute reduction was only 3.5%, it contributed to halving their participation in the socio-occupational structure. This meant the stagnation of the number of jobs in this category over a period of 40 years. This fact can be explained by cultural changes in Brazilian society, where domestic work has become less common through the hiring of domestic helpers or due to a reduction in the income levels of a portion of the middle class, which has traditionally been their main employers.

Nevertheless, it's essential to consider the significant growth of the Service Proletariat, which nearly tripled over 40 years, representing a quarter of the entire employed population in the metropolises. For this reason, the narrowing of the base of the social structure is not more pronounced. This growth, partially explained by deindustrialization, can also be attributed to demographic and cultural changes in Brazilian society, which have led to the emergence of new occupations or an increase in existing ones. This is the case for occupations within the category of Personal Care and Beauty Workers. This category includes services such as hairdressing, manicures, pedicures, etc., which expanded with population growth but also due to changes in people's habits, increased access to these services, and the inclusion of male customers. This category also covers care services, including both childcare and elderly care occupations. The latter is particularly influenced by demographic changes characterized by an aging population.

Changes in production processes associated with new information and communication technologies can contribute to explaining the increase in the number of employed individuals in categories such as Freight Transport and Logistics Workers, Passenger Transport Workers, Retail Workers, and Accommodation and Food Service Workers, all of which fall under the Service Proletariat. Additionally, the category of Delivery Service Workers within the Subproletariat has also seen growth. These occupational categories, characterized by manual labor, are likely the ones most affected by the process of platformization in capitalism, leading to labor precarization or “gig work”.

Although there has been a reduction in their relative share, the categories of Repair and Maintenance Workers and Street Vendors have seen an absolute increase. These categories, which emerged during Brazil's urbanization and industrialization process, continue to be significant in the labor market of the country's major metropolitan areas. Largely characterized as informal and precarious occupations, their absolute growth highlights the persistence of past forms of precarious work.

The growth in the middle and at the top of the social structure demonstrates that the model it has taken on is not of the hourglass type, as the increase in the share

of the Intermediate Class in the composition of the socio-occupational structure was proportionally greater than the increase in the Dominant Class. Unlike the representation of the social structure referred to in global cities (Sassen, 2001) and that had been observed for some Brazilian metropolises based on a socio-occupational structure constructed before structural changes in the economy (Ribeiro and Lago, 2000, and Ribeiro and Ribeiro, 2015), the analysis shows that the intermediate segment remains significant and has even increased in importance in the social structure of the country's major metropolises.

The category of Technicians in Productive and Support Processes showed the highest proportional growth in the Lower Middle Class. This growth can be partially explained by the productive restructuring that occurred in manufacturing industries, which, by modifying their capital composition, began to require more highly skilled labor. It may also have been due to the expansion of the extractive industry, especially in the oil and gas sector, where the workforce tends to be more highly qualified. It could also be a result of the mechanization of agricultural production in the country, which now requires more specialized technical work. Or it may be due to the expansion of activities related to new communication and information technologies. All these types of occupations are included in that socio-occupational category, making it challenging to interpret. However, the contemporary productive structure increasingly demands technical, specialized, and qualified work.

The other socio-occupational categories of the Lower Middle Class also showed relative and absolute growth in the number of occupied individuals over the 40 years. Given their characteristics, it appears evident that this growth was due to the expansion of the economic structure itself – Commercial Agents and Administrative Support Workers – as well as population growth – Health Technicians and Agents, and Craftsmen and Agents in Culture, Arts, Sports, and Religion. Despite Administrative Support Workers adding more than 1 million occupied individuals, their share of the socio-occupational structure decreased, although they still maintained the largest share among all socio-occupational categories.

The significant growth in the participation of Personal or Social Services Professionals, who belong to the Middle-Middle Class, highlights the increase in professional occupations related to care services, such as nursing, psychology, or social work professionals, for example. The increase in these professionals is likely the result of various transformations occurring in society, especially those related to demographics, culture, and even the economy, which affect the overall health, social, and emotional conditions of people.

The other socio-occupational categories within the Middle Class are linked to activities involving command or control of the economic structure (public or private) – Small Employers, Managers and Supervisors, and Public Administration and Security Agents – or artistic and communication activities. The significant growth of Small Employers is noteworthy

because it reflects the increase in a type of occupation where people seek to be their bosses, as well as become employers. This behavior has been present in Brazilian society since the abolition of slavery (Cardoso, 2010) and is now redefined through the ideology of entrepreneurship. Naturally, the analysis of this ideology does not apply solely to Small Employers, but they tend to be an expression of its occurrence.

The highest increases in the Upper Middle Class occurred in the categories of Information Technology Professionals and Management and Business Professionals. These categories are indicative of societal and productive changes involving the incorporation of modern technologies and a deepening of a new economic structure that relies on professions related to management, planning, control, and command, typical of global cities. This implies that the fact that the social structure in these peripheral capitalist metropolises doesn't resemble an hourglass doesn't mean that professions, characteristic of global cities, haven't developed and expanded. This expansion is likely a result of the growing urbanization and service-oriented economy.

Many of the occupations within the Management and Business Professionals category existed before the transformations that occurred in the last four decades. However, their significant relative and absolute growth makes it evident that there has been a deepening of the urban and service-oriented economy. This argument is further supported by the fact that there has also been substantial growth in the number of University Professors, despite their still relatively small presence in the socio-occupational structure. Nonetheless, the fact that the number of people employed in this category has more than quadrupled highlights the increasing importance of professional education and knowledge generation in society.

The other socio-occupational categories within the Upper-Middle Class – Medical Professionals, Engineering and Architecture Professionals, and Science Professionals – consist of traditional professions, although there has been greater diversification and specialization in the training of engineers and doctors. In general, these categories represent high social positions in the social structure and have expanded over the past four decades due to the growth of economic activities and population in the country's metropolises.

In the Ruling Class, there is significant growth in Private Sector Executives, a category that more than doubled in the last four decades due to the expansion of the economic structure. Something similar happened with Large Employers, as their growth was nearly half of what it was four decades ago. However, the slow growth of Public Sector Executives can be explained by the establishment of a public sector organization based on the outsourcing of companies and limited public job openings, as the country sought to adopt the concept of a minimal state since the Administrative Reform of the 1990s.

As we have seen, the socio-occupational structure of the main Brazilian metropolises has become more diversified, primarily through the expansion of categories that occupy

intermediate and upper positions in the social structure, although a pyramidal representation of this structure still prevails. How have these changes translated into income inequalities? That is what we will now explore.

Socio-occupational structure and income inequalities

We observed that there was virtually no change in the average and median earnings of the employed population in the labor market over a period of 40 years. The average income from the main job for all employed individuals was R$2,951.72 in 1982 and increased to R$3,025.12 in 2021, a mere rise of R$73.40. Meanwhile, the median income increased by R$58.79, going from R$1,641.21 to R$1,700.00 over the same period, as shown in Table 2. The fact that the average income is higher than the median income by similar amounts signifies that income inequalities exist, with over half of the employed individuals earning less than the average income. In other words, this reflects a structure of inequalities in which a smaller portion of the employed population has higher income levels (above average), while the majority earns lower incomes.

In general, when considering the class fractions, despite changes in the average and median incomes of some of them, the income inequality structure remained virtually unchanged between 1982 and 2021. The most significant changes occurred with the reduction of average and median incomes in the Upper-Middle Class and Lower-Middle Class, indicating a loss of internal income within each group, and an increase in the average income and maintenance of the median income in the Middle-Middle Class, demonstrating increased internal inequalities. There was also a reduction in the average income of the Ruling Class, Industrial Proletariat, Service Proletariat, and Built Environment Production Proletariat, even though they maintained the same level of median income, respectively. This means that, with the reduction in average income and the maintenance of median income, income inequality decreased within each class fraction. The Subproletariat and Rural Workers' class fractions showed an increase in both average and median incomes, indicating increased income within each of them. Despite the changes observed in each of these class fractions, there was no alteration in the income hierarchy among them. Thus, the class fractions in higher positions continued to have higher incomes, and those in lower positions had lower incomes.

However, despite the income hierarchy remaining largely the same, there was a reduction in income inequality between 1982 and 2021. We conducted an analysis of income inequality by calculating the ratio of the average income of each class fraction or socio-occupational category to the average income of Domestic Workers, as they had the lowest income category in both years considered. Even though Domestic Workers' average income increased by 53.7%, it remained the lowest average income in the socio-occupational structure. In 1982, the average income for this category was R$667.66, and the minimum wage was R$757.14. In 2021, the average

income was R$1,023.03, and the minimum wage was R$1,212.00. In other words, despite the increase in average income, Domestic Workers consistently earned, on average, less than the basic reference wage in the labor market. The reduction in income inequality is partly due to this positive variation in the average income of Domestic Workers because even the socio-occupational categories that had positive variations did so at a lower level than domestic workers.[9] Most socio-occupational categories experienced negative variations in their average incomes, resulting in their income ratio in 2021 being lower than that observed in 1982.

As most socio-occupational categories reduced their income ratio relative to Domestic Workers due to the negative variation in their average incomes, maintaining the average income level of the entire occupied population at the same level, especially in a situation of reduced inequality, required some socio-occupational categories to have higher income gains. The socio-occupational categories that had positive variations in their average incomes were: (1) Large Employers, (2) Public Sector Executives, (3) Medical Professionals, (4) Small Employers, (5) Personal or Social Services Professionals, (6) Public Administration and Security Agents, (7) Health Technicians and Agents, (8) Construction and Utility Workers, (9) Delivery Service Workers, (10) Cleaning Service Workers, and (11) Rural Workers. However, only the first six categories had average incomes above the average income of the entire occupied population. It is worth noting that among them, Public Administration and Security Agents had a 55% increase in their average income, Medical Professionals had a 36.5% increase, and Large Employers had a 30.4% increase. Therefore, maintaining the average income of the entire occupied population, in a situation of reduced inequality, occurred with a proportionally higher increase in these socio-occupational categories.

However, only Medical Professionals, Small Employers, and Personal or Social Services Professionals, who had a positive gain in their average income level, also simultaneously increased the proportion of occupied people between 1982 and 2021. All other categories that had income gains showed a reduction or maintenance of their relative participation in the socio-occupational structure. The categories that had negative variations in their average incomes saw an increase in their relative participation in the composition of the socio-occupational structure. In other words, in general, the relative increase in the number of people in socio-occupational categories led to their devaluation in terms of income. The relative closure of the composition of socio-occupational categories led to an increase in the income average.

Table 2 – Metropolitan Brazil[1]: average, median income, and income ratio from the main job of employed people aged 14 or over and percentage variation in average income, according to class fractions and socio-occupational categories – 1982 and 2021

Class fraction/socio-occupational categories	1982 Income from main job[2]			2021 Income from main job[2]			Var. % Average Income
	Average	Median	Ratio[3]	Average	Median	Ratio[3]	
1,00 Ruling class	**13.033,43**	**10.170,34**	**19,5**	**12.287,01**	**10.000,00**	**12,0**	**-5,7**
11,00 Large employers	13.595,19	9.117,82	20,4	17.731,93	14.000,00	17,3	30,4
12,00 Public sector executives	9.295,46	7.522,20	13,9	10.215,63	8.069,00	10,0	9,9
13,00 Private sector executives	15.135,49	13.585,55	22,7	9.099,70	6.000,00	8,9	-39,9
2,00 Upper-Middle class	**10.167,47**	**8.661,93**	**15,2**	**7.454,93**	**5.000,00**	**7,3**	**-26,7**
21,00 Medical professionals	9.268,61	6.838,37	13,9	12.653,24	10.000,00	12,3	36,5
22,00 Engineering and architecture professionals	13.292,31	12.764,95	19,9	7.729,89	5.000,00	7,5	-41,8
23,00 Management and business professionals	8.545,80	6.838,37	12,8	6.609,33	4.100,00	6,4	-22,7
24,00 Information technology professionals	10.614,86	9.345,77	15,9	6.750,60	5.000,00	6,6	-36,4
25,00 University professors	10.263,78	9.117,82	15,4	8.582,44	7.000,00	8,4	-16,4
26,00 Science professionals (natural, social and human)	9.391,90	8.206,04	14,1	6.624,22	5.300,00	6,5	-29,5
3,00 Middle-Middle class	**3.566,35**	**2.917,70**	**5,3**	**3.936,32**	**3.000,00**	**3,8**	**10,4**
31,00 Small employers	3.260,53	3.191,24	4,9	3.411,07	3.000,00	3,3	4,6
32,00 Communication and arts professionals	5.042,65	3.979,93	7,6	3.679,09	2.400,00	3,6	-27,0
33,00 Personal or social services professionals	3.320,87	2.279,46	5,0	3.946,02	3.000,00	3,8	18,8
34,00 Managers and supervisors	3.664,60	3.419,18	5,5	3.272,12	2.500,00	3,2	-10,7
35,00 Public administration and security agents	3.397,14	2.735,35	5,1	5.263,90	4.000,00	5,1	55,0
4,00 Lower-Middle class	**3.099,75**	**2.142,69**	**4,6**	**2.549,13**	**1.800,00**	**2,5**	**-17,8**
41,00 Commercial agents	6.518,55	4.558,91	9,8	3.791,18	2.300,00	3,7	-41,8
42,00 Technicians in production and support processes	4.607,12	3.373,59	6,9	3.259,66	2.300,00	3,2	-29,2
43,00 Health technicians and agentes	2.010,16	1.631,18	3,0	2.391,19	2.000,00	2,3	19,0
44,00 Training agentes	2.994,32	1.823,56	4,5	1.969,10	1.500,00	1,9	-34,2
45,00 Administrative support workers	2.889,74	2.051,51	4,3	2.189,20	1.600,00	2,1	-24,2
46,00 Craftsmen and agents of culture, art, sport, and religion	2.616,46	2.051,51	3,9	2.363,43	1.600,00	2,3	-9,7
5,00 Industrial proletariat	**2.133,25**	**1.550,03**	**3,2**	**1.677,97**	**1.500,00**	**1,6**	**-21,3**
51,00 Modern industrial workers	2.720,95	2.051,51	4,1	1.977,23	1.700,00	1,9	-27,3
52,00 Traditional industry workers	1.412,04	1.139,73	2,1	1.363,96	1.200,00	1,3	-3,4
6,00 Service proletariat	**2.062,88**	**1.458,85**	**3,1**	**1.678,29**	**1.400,00**	**1,6**	**-18,6**
61,00 Freight transport and logistics workers	2.746,62	1.960,33	4,1	2.000,75	1.700,00	1,9	-27,2
62,00 Passenger transport workers	2.564,41	2.279,46	3,8	2.114,57	1.800,00	2,1	-17,5
63,00 Retail workers	2.048,99	1.367,67	3,1	1.636,91	1.300,00	1,6	-20,1
64,00 Repair and maintenance service workers	2.297,29	1.823,56	3,4	1.859,45	1.500,00	1,8	-19,1
65,00 Surveillance service workers	1.853,98	1.557,10	2,8	1.940,59	1.700,00	1,9	4,7
66,00 Food and accommodation service workers	1.390,20	1.139,73	2,1	1.338,99	1.200,00	1,3	-3,7
67,00 Personal care and beauty services workers	1.522,72	957,37	2,3	1.389,33	1.200,00	1,4	-8,8
7,00 Built environment production proletariat	**1.806,37**	**1.367,67**	**2,7**	**1.553,92**	**1.400,00**	**1,5**	**-14,0**
71,00 Construction and utility workers	1.806,37	1.367,67	2,7	1.553,92	1.400,00	1,5	-14,0
8,00 Subproletariat	**1.149,08**	**775,01**	**1,7**	**1.254,01**	**1.100,00**	**1,2**	**9,1**
81,00 Delivery service workers	1.142,36	1.048,55	1,7	1.388,26	1.200,00	1,4	21,5
82,00 Cleaning service workers	1.011,14	914,52	1,5	1.340,64	1.200,00	1,3	32,6
83,00 Street vendors	2.492,83	1.367,67	3,7	1.396,38	1.000,00	1,4	-44,0
84,00 Domestic workers	667,66	615,45	1,0	1.026,03	1.100,00	1,0	53,7
9,00 Rural Workers	**1.063,92**	**820,60**	**1,6**	**1.221,80**	**1.100,00**	**1,2**	**14,8**
91,00 Workers in agriculture, livestock, forestry, etc.	1.063,92	820,60	1,6	1.221,80	1.100,00	1,2	14,8
Total	**2.951,72**	**1.641,21**	**4,4**	**3.025,12**	**1.700,00**	**2,9**	**2,5**

Source: IBGE (1982) and IBGE (2021).
Notes: (1) The main metropolitan regions are: São Paulo, Rio de Janeiro, Belo Horizonte, Curitiba, Porto Alegre, Salvador, Recife, Fortaleza, Belém and Brasília.
(2) Deflated by INPC, December 2021, based on the "Calculadora do Cidadão" of the Central Bank of Brazil.
(3) Ratio of the average income of each class fraction and socio-occupational categories in relation to the average income of domestic workers.

Conclusion

The social structure of the main Brazilian metropolises has undergone significant changes in the last four decades but continues to be represented by a pyramid model, despite a narrowing at its base and growth in the middle and top of this pyramid. Furthermore, this pyramidal social structure continues to exhibit similarities in the structure of income inequalities between class fractions and socio-occupational categories, although these inequalities have decreased over 40 years.

We have sought to explain the changes in the composition of the socio-occupational structure based on the most significant (de) structuring economic processes that have occurred in the analyzed period, such as the process of deindustrialization. Additionally, we have considered the most significant technological changes of contemporary capitalism that have had an impact on the labor market dynamics. Furthermore, we have also addressed important societal changes, such as demographic and cultural shifts, which can help elucidate the behavior of some socio-occupational categories.

The reduction in income inequality primarily occurred due to the devaluation of socio-occupational categories that experienced a proportionally larger increase in the number of employed individuals. It's important to note that the categories that had a relative reduction in the number of employed individuals managed to increase their income levels. However, this reduction conceals the fact that it was also a result of a proportionally larger increase in the average income of Domestic Workers, which we used as a reference in calculating inequalities. If the increase in the average income of this category had not occurred, the reduction in income inequalities would have happened but to a lesser extent. However, the increase in the average income of that category was not sufficient to even reach the value of the minimum wage used as a reference in the labor market, highlighting that income levels are generally low in the labor market of the country's metropolitan areas. Nonetheless, some socio-occupational categories managed to raise their income levels. This occurred even with a relative increase in the number of employed individuals. Notably, Medical Professionals, Small Employers, and Personal or Social Services Professionals were able to increase their average income, despite a relative increase in their number of employed individuals.

It is worth noting that the income inequality structure observed in 2021 occurred in a challenging socioeconomic context for the Brazilian labor market, characterized by the adverse effects of the economic crisis that began in 2015 and the COVID-19 pandemic in 2020. This context reflects the reversal of the economic growth, income expansion, and reduction in inequalities that took place between 2004 and 2014. It means that, without the economic and health crises, the income inequality situation would likely have been less pronounced than what we observed. Nevertheless, the income inequality structure in 2021 remained lower than what was

observed in 1982, during the period of military dictatorship. This indicates that, despite various processes that had negative consequences for the Brazilian economy, such as the process of deindustrialization, for example, the democratic dynamics established in Brazil since 1985 are much more conducive to building a less unequal society.

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Notes

(1) The metropolises used in this study were: São Paulo, Rio de Janeiro, Belo Horizonte, Curitiba, Porto Alegre, Salvador, Recife, Fortaleza, Belém, and Brasília.

(2) Globalization, in general terms, has meant a change in the pattern of commercial relationships between nation-states through transnational companies and changes in the very forms of productive organization and related work processes, transforming the space-time relationship (Ianni, 2001).

(3) The image of the pyramid structure used to depict the social structure aims to reflect the idea that its base, representing the lower positions, is occupied by the largest portion of the population, while its top is occupied by a very small contingent. The middle positions would be numerically smaller than the base positions but more significant than those at the top.

(4) An illustration of this is the fact that the Brazilian middle class is identified as occupying the top of the social hierarchy (Salata, 2015), which is why the upper middle class in this study was considered as part of the dominant class.

(5) Other variables from the database are also used, such as differentiation filters for the social position of occupations, like public and private sectors for executives, and the economic activity sector for some occupations in the working class. See more on this in Observatório (2023).

(6) In addition to these metropolitan areas, data is also provided for the Integrated Administrative Region of Greater Teresina (PI), which includes municipalities from both Piauí and Maranhão states.

(7) The broader research from which this article originated involves cross-referencing with other variables. It's worth noting that data on race/ethnicity is available in the Pnad starting from 1982. Before that, there was only limited racial data available in the 1976 Pnad, but it was challenging to operationalize.

(8) This procedure was carried out using a deflation index obtained from the "Calculadora do Cidadão," which is available on the website of the Central Bank of Brazil.

(9) The only exception was the Public Administration and Public Safety Agents, who had a positive variation of 55%.

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