

Gender and Top Lifetime Earnings Inequality: Ten New Facts from Brazil*

Tomás R. Martínez[†] Antonio Martins-Neto[‡] Ursula Mello[§]

Abstract

This paper presents ten new facts on gender and top lifetime earnings inequality in Brazil, drawing on rich administrative data covering nearly the entire formal labor market from 1985 to 2018. We document significant gender disparities in lifetime earnings, particularly among top earners, where women are both underrepresented and face larger earnings gaps compared to men. We identify key drivers of this inequality, including labor force participation, occupational segregation, employment in large firms, and job-switching patterns. Public sector employment partially mitigates these gaps.

JEL Codes: D33, J01, J30, J45.

Keywords: Life-cycle Earnings Inequality, Gender Earnings Gap, Top Earners.

*This version: January 29, 2025. This project was approved by Insper Research Ethics Committee protocol 383/2024. The authors thank Ana Rute Cardoso, Anastasia Terskaya, and Renata Narita for their helpful comments and suggestions.

[†]Insper. Email: tomas.martinez@insper.edu.br.

[‡]The World Bank. Email: asmartins@worldbank.org

[§]Insper. Email: ursula.mello@insper.edu.br

1 Introduction

Extensive research has explored the gender wage gap, documenting its size and shedding light on its underlying factors. This literature has focused on the relative roles of initial conditions, ex-post shocks, and choices that unfold over the life cycle. This dynamic view of the gender earnings gap has highlighted specific drivers, such as the effect of children on the careers of women relative to men (Adda et al., 2017; Kleven et al., 2019), gender differences in willingness to compete (Niederle and Vesterlund, 2011; Gneezy and List, 2013; Buser et al., 2014; Coffman and Klinowski, 2024), expectations and negotiations over pay (Biasi and Sarsons, 2022; Kiessling et al., 2024; Roussille, 2024), job-to-job and within establishment wage growth (Barth et al., 2021), differences in job-search and willingness to commute (Fluchtmann et al., 2024; Cortés and Pan, 2023; Le Barbanchon et al., 2020), women preferences for flexibility and job stability (Wiswall and Zafar, 2017), among others.

Cross-sectional snapshots of the earnings distribution often fall short of understanding the dynamics of the gender earnings gap, as they overlook the cumulative impact of career-long shocks and decisions that shape lifetime earnings (Boll et al., 2017; de Castro Galvao, 2022; Guvenen et al., 2020). These cumulative effects are especially relevant at the upper end of the earnings distribution, where women are notably underrepresented. Achieving the highest percentiles in earnings often requires navigating positive shocks and strategic career choices — decisions typically shaped by gender-specific constraints. Even when women break through the glass ceiling, significant pay gaps often persist. This underscores the importance of adopting a dynamic, life-cycle approach to understanding the barriers and disparities affecting women’s career trajectories, particularly at the highest earning levels.

Despite this context, few studies combine an analysis of lifetime earnings inequality by gender with a focus on top earners, and none examine these dynamics in middle- and low-income countries, where the problem tends to be more pronounced. Our paper aims to address this gap by (i) documenting the dynamics of lifetime labor earnings through a case study of Brazil; (ii) analyzing gender disparities among the country’s top earners; and (iii) identifying mechanisms that may contribute to gender inequality over the life cycle, such as career interruptions, occupational segregation, selection into the public sector, job switching, and characteristics of the first employer.

We use administrative data covering the universe of Brazilian formal jobs from 1985 to 2018, including the public sector, to study the life-cycle dynamics of more than 8 million individuals born between 1960 and 1968. Using this data, we document ten facts about inequality and the gender gap in lifetime earnings:

- (i) Lifetime earnings inequality is stark in Brazil, as the p90/p10 ratio of lifetime income

is an impressive 13.06.

- (ii) Women are underrepresented at the top of the lifetime earnings distribution, with less than 25% of the 99th percentile, and less than 15% of the 99.99th percentile being women.
- (iii) The gender earnings gap reduces as workers age, mostly due to women's increase in labor force participation over the life cycle.
- (iv) Men and women in the top 1% and 0.1% have similar labor force participation and wages over the life cycle.
- (v) Women consistently work more time in the public sector than men in all percentiles of the lifetime earnings distribution except at the very top.
- (vi) Men are more likely to start their careers at large firms in all percentiles of the earnings distribution, but the difference reduces at the very top.
- (vii) Men in the top 1% are more likely to hold managerial positions, while women are more likely to work in occupations in the public sector.
- (viii) In the top 0.1%, men and women are more likely to hold managerial positions, but women remain more likely to work in the public sector.
- (ix) Men switch jobs more often than women.
- (x) When women switch jobs they experience higher wage gains.

Related Literature – Our results contribute to multiple strands of the economic literature. First, our paper relates to a broad literature on the gender earnings gap ([Blau and Kahn, 2017, 2000](#)) and specifically on the gender earnings gap among top earners ([Bertrand and Hallock, 2001](#); [Bertrand et al., 2010](#); [Gayle et al., 2012](#); [Keller et al., 2023](#)). This literature often focuses on a limited sample of high earners, such as business executives in the U.S. corporate sector. We extend this work by examining the entire population of top earners within the *lifetime* labor earnings distribution.

Second, we contribute to an emerging literature that explores lifetime earnings inequality. Due to data limitations, few studies document inequality over workers' entire careers, and even fewer examine gender disparities among top earners. [Bönke et al. \(2015\)](#) and [Guvenen et al. \(2022\)](#) study the evolution of lifetime inequality across cohorts in Germany and the United States, respectively. While these papers focus on the dynamics of lifetime earnings of several cohorts across time, ours is more similar to [Guvenen et al. \(2020\)](#), which documents

lifetime gender inequality for cohorts born between 1956-58 in the United States. Differently than [Guvenen et al. \(2020\)](#), ours is the first paper to (i) focus on a developing economy, where both overall and gender inequality are more pronounced, and (ii) uncover mechanisms driving gender inequality across the life cycle and at the top.

In analyzing the large gender gap at the top, we build on several strands of literature that examine mechanisms driving workers' earnings or gender inequality more broadly. Specifically, we examine (i) the significance of the lifetime labor market participation and the gender wage gap, focusing on how career interruptions affect women's earnings ([Bertrand et al., 2010](#); [de Castro Galvao, 2022](#)); (ii) employment segregation, including gender differences in public employment and managerial occupations and their implications for income differentials; (iii) the effects of job switching on earnings progression ([Karahan et al., 2022](#)); and (iv) employer characteristics, drawing on recent evidence that underscores the impact of firm size and employment growth on workers' professional advancement ([Arellano-Bover, 2024](#); [Bowlus et al., 2022](#)). Our study contributes to the literature by integrating an analysis of lifetime earnings dynamics with a focus on top-income earners, offering a nuanced understanding of how these mechanisms shape inequality across the lifetime income distribution. Additionally, we emphasize the role of public sector employment in enhancing women's representation among top earners. Our findings show that public sector employment is crucial for reducing gender disparities by providing women greater access to high-paying positions.

2 Data and Methodology

We draw information from the *Relação Anual de Informações Sociais* (RAIS) from 1985 to 2018. RAIS is an annual census that covers all formal employees in Brazil, including public sector workers. Each observation in RAIS is an employer-employee match - a job spell - in a given year. For each spell, the dataset includes detailed worker information (e.g., age, gender, and education), establishment-related variables (e.g., sector, size, municipality, and legal nature), and job-specific information (e.g., tenure, salary, occupation, start and end dates, and type of contract). In addition, each worker and establishment has a unique identifier, allowing us to track individuals' lifetime employment dynamics. In recent years, the dataset includes information on over 40 million formal workers and over 3 million establishments.

Using all job spells, we build an individual-year panel that includes (i) the individual yearly income (i.e., the combined earnings from all recorded individual employment spells within a given year), (ii) the characteristics of the three highest-earning jobs during that year, and (iii) fixed individual characteristics. To correct measurement errors, we harmonize variables such as education, gender, and establishments' legal nature by taking the mode

across yearly observations. Furthermore, information on the business structure of the establishment (e.g., limited liability company, corporation, public company), which is used to identify public sector jobs, has been available since 1994. To overcome these limitations, we leverage the panel structure of our data to infer these variables from later years. Finally, we harmonize the occupation codes to a 3-digit level across all years and adjust all earnings to 2018 prices using the National Consumer Price Index (*Índice Nacional de Preços ao Consumidor*, INPC).

Despite the high quality of the data, our analysis is subject to some limitations. One shortcoming is the lack of information on the informal sector.¹ However, given that our analysis focuses primarily on workers at the top of the lifetime earnings distribution, it is unlikely that the informal sector would significantly impact their earnings. Other drawbacks are more related to top earners and may affect our results. Earnings data in RAIS are censored, with reported average monthly earnings above 120 times the national minimum wage (until 2000) and 150 times the national minimum wage (after 2000) being omitted. A Pareto tail imputation exercise suggests that censored observations correspond to a very small proportion, approximately 0.01% of the sample (Engbom et al., 2022). Furthermore, the dataset lacks information on stock-based compensation. Together, these limitations may lead to an underestimation of inequality in lifetime earnings in Brazil, particularly regarding gender inequality at the top income levels, as men are more likely to work in occupations that often receive stock-based compensation.

Sample selection. To capture the key dynamics throughout individuals’ life cycles, we follow standard restrictions from the literature and focus on workers with a strong attachment to the formal labor market (Güvenen et al., 2022). First, we limit our sample to cohorts born between 1960-1968 and restrict the analysis to individuals aged 25 to 50 years old. Second, an individual is considered to have worked in a particular year if their annual earnings equal or exceed a threshold variable, \underline{Y}_t , defined as the monthly minimum wage for that year. We only include individuals who worked for at least ten years during their 26-year lifespan. Lastly, our sample is restricted to individuals whose lifetime earnings (ranging from ages 25 to 50) exceeds $26 \times \underline{Y}_t$. It is worth noting that this criterion is cohort-specific, as \underline{Y}_t varies with the minimum wage. Since most individuals in the top 1% easily satisfy these requirements, the precise threshold values have minimal impact on our findings.

To measure inequality in workers’ lifetime earnings, we aggregate yearly earnings from age 25 to 50. Let $Y_{h,i}$ be the yearly earnings of individual i with age h , we define annualized lifetime earnings of individual i as:

¹In 2019, about 41% of the Brazilian workforce was in the informal sector.

$$\bar{Y}_i = \sum_{h=25}^{50} \frac{Y_{h,i}}{26}. \quad (1)$$

Individuals are then assigned to percentiles based on their yearly average earnings. Our final sample includes 8,771,665 individuals, of which 36% are female, 30% are non-white, and 15% have a college degree (see [Table A.1](#)). The average annualized lifetime earnings amount to 23 thousand Brazilian Reais (BRL) (around 5,925 USD in 2018), which is generally lower during individuals' early years of formal employment and increases as they progress through their employment cycle. Moreover, on average, workers were employed for about eight months per year during the cycle, of which 22% were in the public sector. [Table A.2](#) and [Table A.3](#) present descriptive statistics for individuals in the top 1% and top 0.1% of lifetime earnings.

3 New Facts

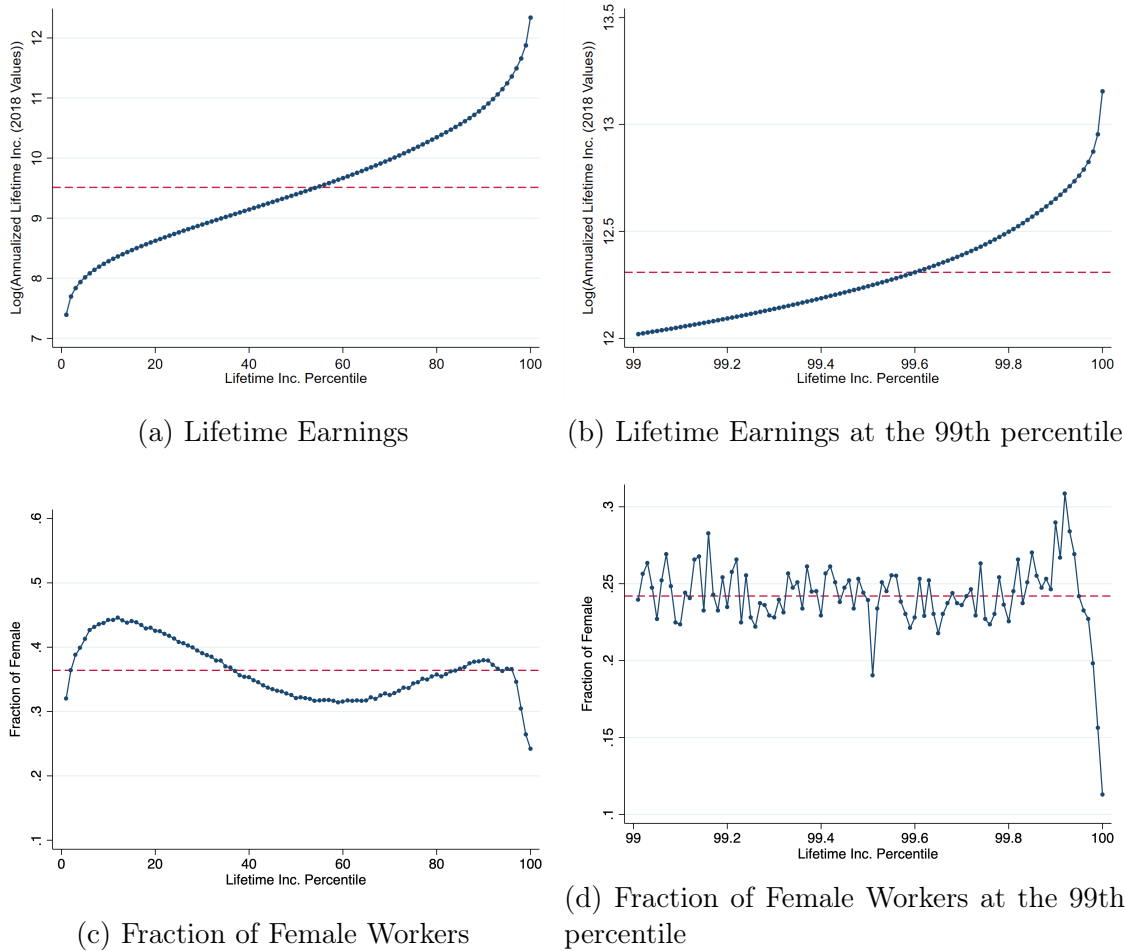
Fact 1. *Lifetime earnings inequality is stark in Brazil.*

[Figure 1a](#) and [Figure 1b](#) display the distribution of log annualized lifetime earnings for the entire distribution and for individuals within the 99th percentile, highlighting the substantial inequality in Brazil. The ratio between the 90th percentile (p90) and the 10th percentile (p10) of the lifetime earnings distribution is a remarkable 13.06, while the ratio between the 90th percentile and the median (p50) is 4.32. To put this in perspective, an individual receiving the minimum wage in 2018 (11,448 BRL annually) would need to increase their earnings by 14.5 times to reach the 99th percentile (at least 165,802 BRL per year). The gap is so significant that a person in the 99th percentile earns in just two years what a minimum wage worker would earn over 26 years.

Inequality also persists within the 99th and 99.9th percentiles. For instance, the p90/p10 ratio is 1.83 within the 99th percentile and 1.40 within the 99.9th percentile. While these ratios may seem smaller in relative terms, the magnitude of inequality within the top percentile is unparalleled when considering absolute values. Moving from the 99.1th percentile to the 99.9th percentile translates to an additional 143,540 BRL per year, which is equivalent to 150 times the monthly minimum wage.²

²As shown in [Figure A.1](#) and [Figure A.2](#), the shape of the distribution is not explained by differences across cohorts. Although the younger cohorts have lower average lifetime earnings and higher inequality, the distributions are remarkably similar across cohorts born in 1960, 1964, and 1968.

Figure 1: Lifetime Earnings Inequality and the Share of Women at the Top



Notes: Panel (a) shows the logarithm of the average annualized lifetime earnings by lifetime earnings percentile, while panel (b) focuses on the top 1%. The red line represents the average annualized lifetime earnings across the entire distribution and within the top 1%. Panel (c) displays the fraction of females by lifetime earnings percentile, and panel (d) shows this fraction within the top 1%. The red line represents the fraction of females in the overall distribution and in the top 1%

Fact 2. *Women are underrepresented at the top of the lifetime earnings distribution.*

Figure 1c and Figure 1d show the fraction of women across the lifetime earnings distribution. Women represent 36% of our sample but are underrepresented at the top of the distribution, with a sharp decline at the 99th and 99.9th percentiles. Figure 1c shows that the share of women rises from percentiles zero to 15, declines from percentiles 15 to 60, and then increases again from percentiles 60 to 90. Interestingly, there is a significant drop at the upper end, where women represent less than 25% of the 99th percentile, 23% of the 99.9th and under 15% of the 99.99th percentile.³ This steep decline in the share of females at the top is

³As shown in Figure A.3, this pattern is consistent across both younger and older cohorts, though we

evidence of the *gender lifetime earnings gap*. In our sample, the average lifetime earnings of males is 1.13 times those of female workers (see [Table A.4](#)). [Table A.9](#) shows the regression estimates of lifetime earnings on different characteristics. When conditioning on factors such as college education, average employment, cohort and municipality fixed effects, the gender gap increases to 24%.

Fact 3. *The gender earnings gap reduces as workers age.*

Lifetime earnings inequality can arise from either higher lifetime labor market participation, higher earnings while working, or both. This dynamic can be particularly relevant for the differences between men and women during the life cycle since it is well-known that women earn less and tend to decrease labor force participation during childbearing years ([Blau and Kahn, 2017](#)) or even during school holidays ([Price and Wasserman, 2023](#)). [Figure 2a](#) shows average earnings across the life cycle, indicating that men earn more during the early years. This is partially explained by gender differences in employment ([Figure 2b](#)). Women work fewer months during their early years (between 25 and 35), which is then compensated by a steep increase. After age 35, women already work more months on average.⁴ Interestingly, the early years' gap in average employment is compensated in the following years, such that women's average employment is 0.03 months larger than men's (see [Table A.4](#)).⁵ Thus, our result aligns with [Guvenen et al. \(2020\)](#), who document that, among high earners in the U.S., the gender gap peaks in their 30s and then decreases as women spend more time in the workforce in the later stages of their careers.⁶

As for the wage differences while working, [Figure 2c](#) reports a clear gender wage gap between men and women. At ages 25 and 30, men earn around 12.5% and 15.8% more. The wage gap picks at age 41 (16.7%), but by age 50, women almost catch up and earn about 6% less. These gender differences in employment and wage rates result in the overall gap observed in [Figure 2a](#). Due to lower wages and lower employment, women earn significantly less during the first five years (between 40% to 28% less). Following this period, the higher average employment overcomes the gender wage gap, and by age 50, women earn almost 6% more.

observe slightly higher participation of women at the top 1% in the most recent cohorts.

⁴This pattern is likely associated with women's childbearing years. Although the rate of first births after age 35 among women has increased, about 80% of births in Brazil occur at a maternal age of 34 or younger ([Fernandes et al., 2019](#)).

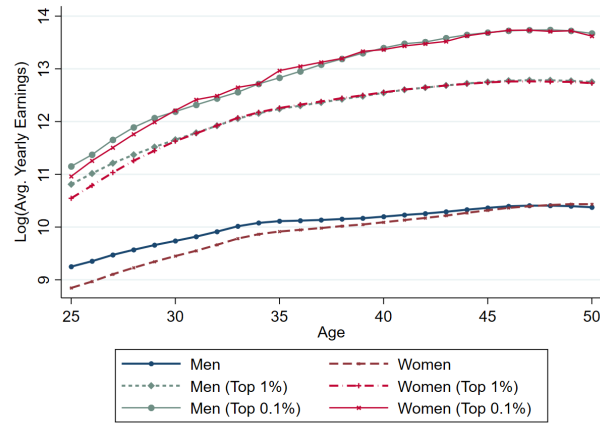
⁵It is also worth noting that women work on average 0.12 months more in earlier cohorts, but in the last cohort, men worked 0.06 months more (see [Table A.8](#)).

⁶This contrasts with most of the literature, which finds that the gender gap *increases* over the life cycle. In our case, however, the gap does not follow this pattern because our sample includes only workers with strong labor market attachment.

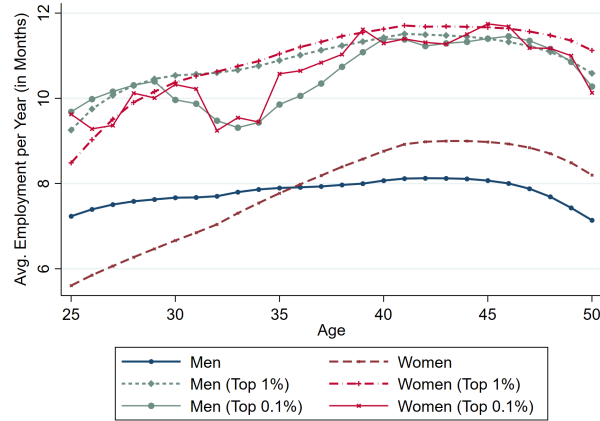
Fact 4. *Women and men at the top have similar labor force participation and wages over the life cycle.*

Gender differences in formal labor market participation are substantially smaller for earners in the top 1% and top 0.1%, as observed in [Figure 2b](#). Yet, some patterns observed for the overall distribution remain. For instance, women also work more months in the late years of their careers and fewer in the early years. In contrast, the gap in monthly wages is significantly smaller, especially for those reaching the 99.9th percentile. As a result of these differences in employment throughout the years, women at the top experience larger income growth. [Figure A.4](#) shows annual growth rates from ages 25, 35, 45, and 50 across the different percentiles of the earnings distribution. We do not observe a clear monotonic pattern across the distribution. In the top deciles, women’s earnings grow faster. For instance, annual earnings growth between ages 25 and 50 is 169%, 183%, 196%, and 229% for women and 145%, 148%, 158%, and 195% for men at percentiles 70, 80, 90, and 99. At the 99.9th percentile, gender differences in income growth are mostly absent.

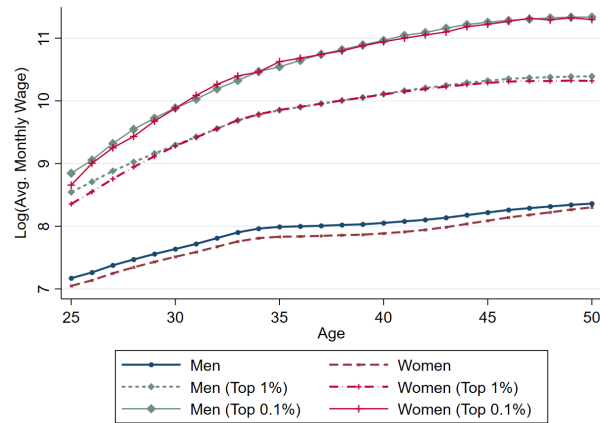
Figure 2: Avg. Earnings, Employment, and Monthly Wage over the Life Cycle



(a) Yearly Earnings



(b) Yearly Employment



(c) Monthly Wages

Notes: Panel (a) displays the logarithm of average earnings across different years in the workers' life cycle, classified by gender and lifetime income percentile. Panel (b) shows average employment levels, while panel (c) presents the logarithm of the average monthly wage.

Fact 5. *Women consistently work more time in the public sector than men in all percentiles of the lifetime earnings distribution except at the very top.*

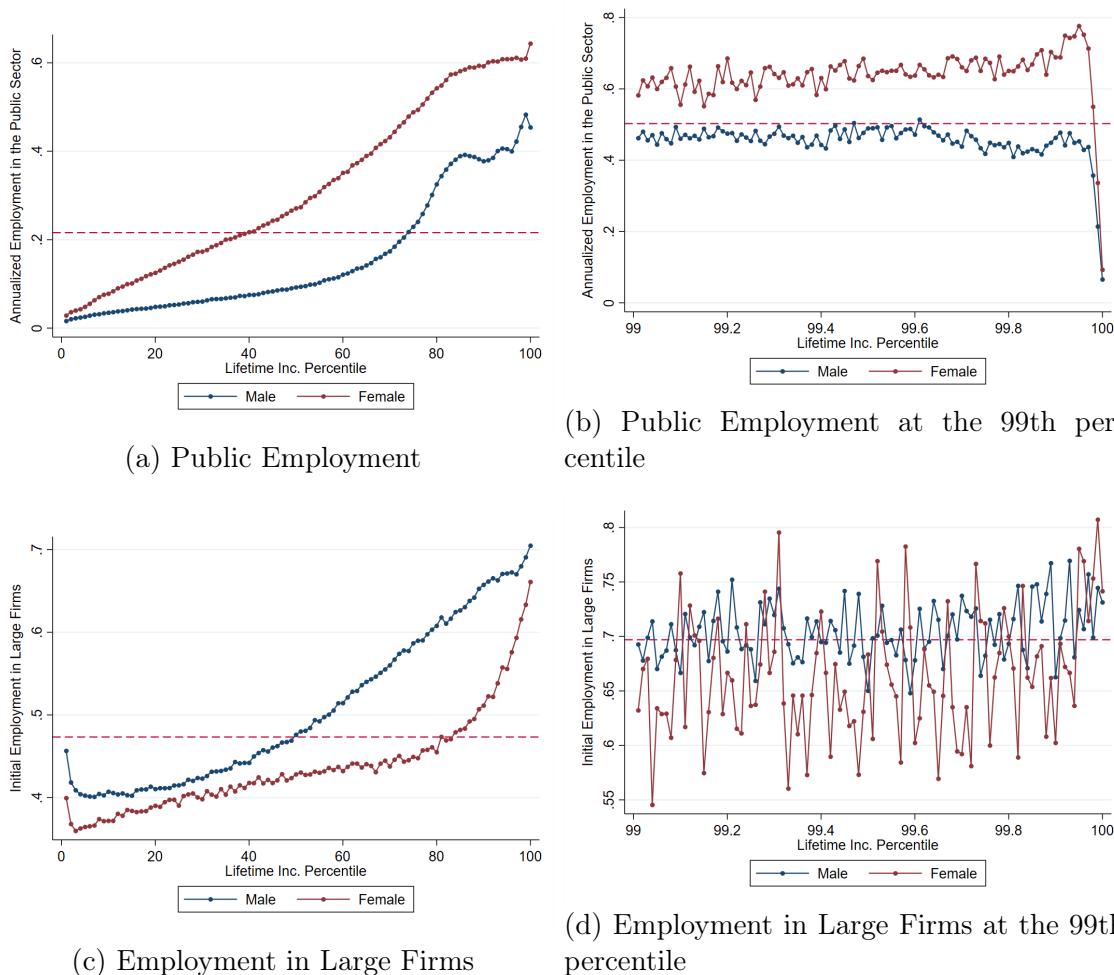
Figure 3 illustrates the importance of the public sector in understanding earnings inequality in Brazil. On average, formal employees highly attached to the labor market worked about 22% of their lifetime in the public sector. Women are substantially more likely to hold public sector positions.⁷ On average, they work about 31% of their lifetime in public jobs, compared to only 16% for men (see Table A.4). The importance of the public sector increases as we move further up the income distribution, consistent with previous research that highlights a significant public sector wage premium in developing economies, particularly for women and low-skilled workers (Gindling et al., 2020; Baez et al., 2022). Unlike these previous papers, we document the importance of the public sector in explaining gender differences in lifetime earnings, particularly among top earners.

Interestingly, there is a remarkable decline in public employment at the 99.99th percentile. Workers between the 99th and 99.9th percentiles spend an average of 50% of their lifetime in the public sector, contrasting with only 7.8% for individuals in the top 0.01%. The gender difference in public employment increases up to the 60th percentile when we observe a large increase in male participation. Importantly, these gender differences in cumulative public sector participation decrease significantly at the very top (Figure 3b). Women in the 99th and 99.9th percentiles spend around 65% of their working lives in the public sector compared to 45% for men (see Table A.5 and Table A.6). We further explore this in Fact 7, examining the role of occupations.

Finally, Figure A.5 shows that the gender gap in the likelihood of working in the public sector increases across the life cycle, going from 7% at age 25 to over 15% at age 50. At the 99% percentile, the gender gap increases from 14% to 19% between ages 25 and 50.

⁷We use firms' legal nature information from 1994 onward and sector classification to measure individuals' employment in the public sector. To estimate the employment share for the public and private sectors, we take the three highest-earning jobs each year and multiply the number of months worked in each job by a dummy equal to one if employed in the public sector. We annualize public sector employment based on these values as in Equation 1. For the previous periods, missing values are replaced by taking the mode of firms' legal nature.

Figure 3: Annualized Employment in the Public Sector by Lifetime Earnings Percentile and Gender



Notes: Panels (a) and (b) display the fraction of workers in public employment by lifetime earnings percentile for the entire distribution and within the top 1%, respectively. Panels (c) and (d) show the fraction of workers who began their careers in large firms (with 100 or more employees) across the distribution and within the top 1%. The red horizontal line represents the averages.

Fact 6. *Men are more likely to start their careers at large firms in all percentiles of the earnings distribution, but the difference reduces at the very top.*

Recent evidence underscores the significant positive impact that early job opportunities in large corporations can have on workers' career trajectories (Arellano-Bover, 2024). Panel (c) in Figure 3 shows the fraction of workers who begin their careers at age 25 in large establishments (those with more than 100 employees) across the earnings distribution, excluding those who started in the public sector.⁸ Around 47% of workers in our sample start their

⁸We exclude the public sector in this exercise as establishments in public administration are commonly

careers in large firms, but this fraction increases along the distribution, from 43% in the 1st percentile to 67% in the 99th percentile. The figure also depicts a significant gender gap. Men are more likely to start their careers in large companies across the entire distribution, with the gender gap peaking at 15 percentage points in the 80th percentile. Women then begin to close this gap, reducing it to 6% by the 99th percentile. [Figure A.6](#) further illustrates the gender gap in the likelihood of working in large firms over the life cycle. At age 25, women are 5% less likely to work in large firms, while at age 50 the gap is only 1%. Among women in the top 1%, the gap starts at about 2.5% at age 25 and grows to 4% by age 50.

Fact 7. *Men at the top 1% are more likely to hold managerial positions, while women are more likely to work in occupations in the public sector.*

[Table 1](#), Panel A, shows the ten most common occupations by gender within the 99th and 99.9th percentiles.⁹ Around 30% of men in the top 1% hold managerial positions (support area managers, support area directors, and production and operations managers), contrasting with 15% of women. On the other hand, around 30% of women in the top 1% are high-level public servants (upper members of the legislative, executive, or judiciary powers, public auditors, and judicial and public safety lawyers), compared to 18% of men. The low participation of women in top managerial positions - the *glass ceiling* - is well documented in the literature. Factors such as discrimination and the lack of networks prevent women from advancing to top leadership positions within organizations. As a consequence, managerial positions are disproportionately occupied by men.

Another interesting feature from [Table 1](#) is the difference in occupational fields between genders. About 9% of men in the top 1% work in STEM-related fields, such as engineering, architecture, accounting, and finance - fields that do not appear among the most common occupations for women. In contrast, around 9% of women in the top 1% work as medical professionals or in law-related fields (e.g., lawyers, prosecutors, notaries), which are not common for men. Occupational segregation has been identified as a key factor contributing to the gender wage gap. From a young age, children are exposed to gender-specific expectations and stereotypes, which shape their career aspirations and choices later in life. These gendered expectations can lead to the concentration of women in certain occupations and men in others, which researchers have linked to disparities in wages. In Latin America, women remain underrepresented in STEM degrees while being overrepresented in fields such as Health and Education ([Berniell et al., 2024](#)).

It is also worth noting that most occupations highlighted in [Table 1](#) are overrepresented at the top. For instance, only 2.6% of men and 2.9% of women in our sample work as support

large.

⁹We use individuals' latest recorded occupation.

area managers and upper legislative, executive, or judiciary members, contrasting to 16.5% and 17.8% in the top 1%. Finally, the top ten occupations account for 67% of men and 81% of women in the top 1%, indicating that the occupational distribution for women at the top is more concentrated.

Fact 8. *In the top 0.1%, both men and women are more likely to hold managerial positions, but women remain more likely to work in the public sector.*

As we focus on the 99.9th percentile, we observe a significant decline in public sector employment for men (from 45% to 37%), but not for women (from 65% to 66%) (see Tables [A.5](#) and [A.6](#)). The proportion of workers occupying managerial roles (support area directors, general directors, support area managers, production and operations directors, and directors and managers in health, education, or culture) rises substantially, encompassing around 80% of workers for both men and women. However, differently than men, to reach the very top, women more frequently occupy managerial positions *within the public sector*. This means that sorting into the public sector still allows many women to reach the top 0.1% of the earnings distribution. However, the barriers that prevent women from becoming top executives explain why the share of women decreases at the very top. While women represent around 25% of the top 1%, they account for less than 15% of the top 0.01% of the lifetime earnings distribution.

Table 1: Most Common Occupations at the Top 1% and Top 0.1% by Gender

Panel A: Top 1%			
(1) Rank	(2) Occupation	(3) % Top	(4) Economy
<i>Male</i>			
1	Support Area Managers	16.5%	2.6%
2	Upper Members Of Legislative, Executive And Judiciary Power	8.9%	1.5%
3	Support Area Directors	8.7%	0.3%
4	Public Auditors	6.1%	0.3%
5	Business Organization And Administration Professionals And Similar	5.3%	0.9%
6	Production And Operations Managers	5.1%	1.4%
7	Engineers, Architects, And Similar	4.7%	0.6%
8	General Clerks, Agents, Assistants, And Administrative Auxiliaries	4.6%	4.9%
9	Accounting And Finance Clerks	3.8%	1.1%
10	Judicial And Public Safety Lawyers	3.1%	0.1%
<i>Female</i>			
1	Upper Members Of Legislative, Executive And Judiciary Power	17.8%	2.9%
2	General Clerks, Agents, Assistants, And Administrative Auxiliaries	11.6%	12.7%
3	Technicians In Administrative Sciences	10.1%	2.0%
4	Support Area Managers	10.0%	2.1%
5	Public Auditors	7.3%	0.2%
6	Business Organization And Administration Professionals And Similar	5.2%	1.7%
7	Judicial And Public Safety Lawyers	5.1%	0.1%
8	Support Area Directors	4.8%	0.2%
9	Medical Professionals	4.7%	0.5%
10	Lawyers, Prosecutors, Notaries, And Similar	4.5%	0.2%
Panel B: Top 0.1%			
(1) Rank	(2) Occupation	(3) % Top	(4) Economy
<i>Male</i>			
1	Support Area Directors	41.5%	0.3%
2	General Directors	26.6%	0.1%
3	Support Area Managers	8.1%	2.6%
4	Production And Operations Directors	6.4%	0.1%
5	General Clerks, Agents, Assistants, And Administrative Auxiliaries	2.6%	4.9%
6	Lawyers, Prosecutors, Notaries, And Similar	2.2%	0.2%
7	Business Organization And Administration Professionals And Similar	2.1%	0.9%
8	Judicial And Public Safety Lawyers	1.8%	0.1%
9	Upper Members Of Legislative, Executive And Judiciary Power	1.4%	1.5%
10	Directors And Managers In Health, Education Or Cul Services Companies	1.3%	0.1%
<i>Female</i>			
1	Support Area Directors	41.4%	0.2%
2	General Directors	21.2%	0.1%
3	Support Area Managers	12.1%	2.1%
4	Lawyers, Prosecutors, Notaries, And Similar	5.1%	0.2%
5	Judicial And Public Safety Lawyers	2.0%	0.1%
6	Directors And Managers In Health, Education Or Cul Services Companies	2.0%	0.5%
7	Production And Operations Directors	2.0%	0.0%
8	General Clerks, Agents, Assistants, And Administrative Auxiliaries	2.0%	12.7%
9	Technicians In Administrative Sciences	2.0%	2.0%
10	Business Organization And Administration Professionals And Similar	2.0%	1.7%

Notes: The table displays the most common occupations among workers in the top 1% and top 0.1%, grouped by gender (column (3)). Column (4) shows the percentage of workers in each occupation by gender for the entire sample.

Fact 9. *Men switch jobs more often than women.*

Unraveling the processes underlying workers’ transitions to different employers, whether by choice or due to job displacement and the wage gains associated with these transitions is crucial for understanding long-term earnings. On the one hand, extensive empirical literature shows that displaced workers face significant wage declines and prolonged periods of unemployment, affecting both the participation margin of employment and wage inequality (e.g., [Jacobson et al., 1993](#); [Couch and Placzek, 2010](#)). On the other hand, more recent literature stresses the importance of changing employers as a source of wage growth ([Karahan et al., 2022](#)). This section studies gender differences in the frequency of job switches across the lifetime income distribution and the associated wage effects. We measure workers’ number of job switches during their life cycle by taking yearly changes in employer identifiers. Although workers may have multiple jobs within a year and may work simultaneously in multiple firms, we only consider yearly transitions related to the primary job, i.e., the one with a higher annual income.¹⁰ Moreover, we explore information on the reason for separation to distinguish between job transitions caused by displacement versus voluntary quits.

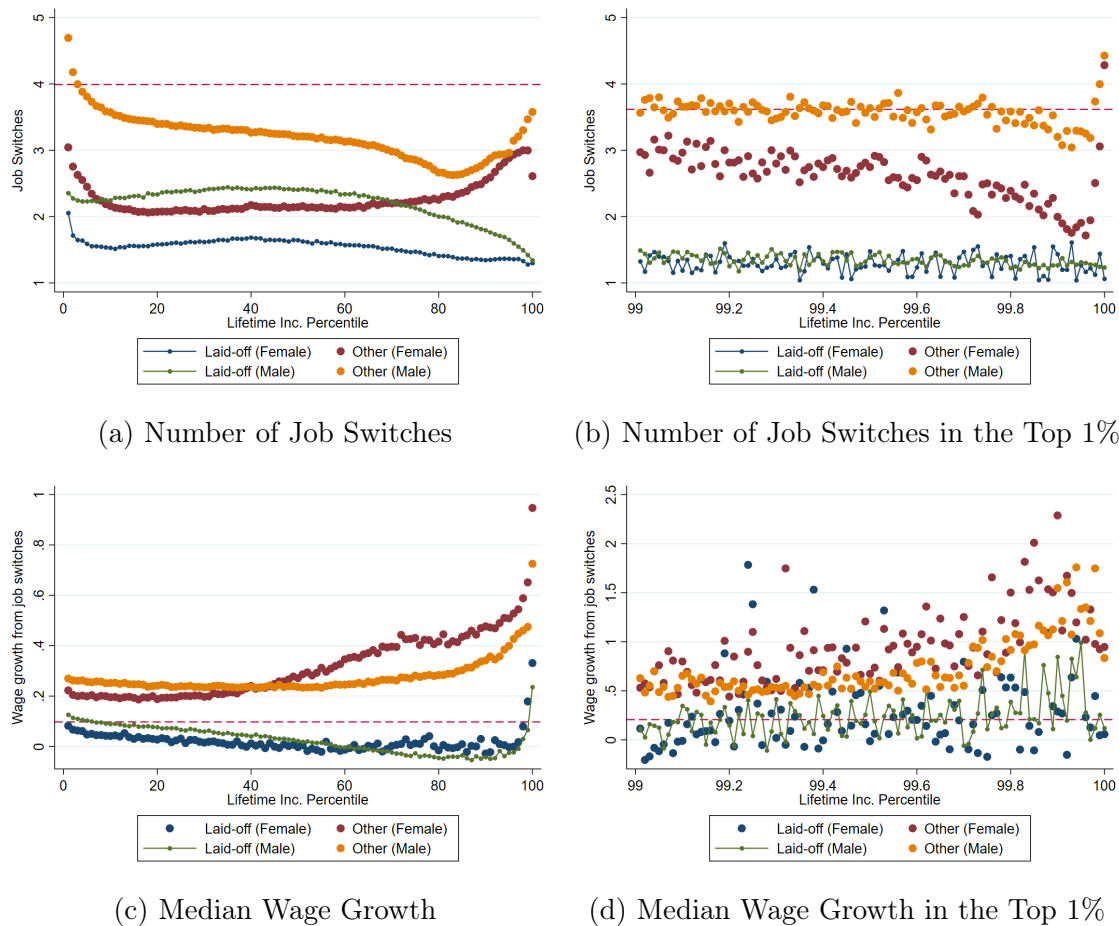
[Figure 4a](#) and [Figure 4b](#) show differences in the frequency of job switches across the distribution. Workers in the low percentiles are significantly more likely to change jobs than those at the 80th percentile. Moreover, we observe an important increase in voluntary job transitions at the higher end of the distribution, particularly for workers at the top 0.1%. Instead, workers at the top are less likely to experience involuntary job separations. More interestingly, [Figure 4a](#) and [Figure 4b](#) show that men are significantly more likely to switch jobs due to displacement or quitting (see also [Table A.5](#) and [Table A.6](#)). The gender gap is particularly pronounced at the lower percentiles and narrows as we move up the earnings distribution.¹¹

To the best of our knowledge, this is the first paper to document this pattern of gender differences in job switching across the entire earnings distribution. Such a pattern might be rationalized by gender differences in job search behavior and psychological traits. For instance, [Cortés et al. \(2023\)](#) show that women are more risk-averse during the job search, often accepting job offers earlier than men. Other possible explanations include women’s preferences towards accepting jobs geographically closer ([Le Barbanchon et al., 2020](#)), in

¹⁰Workers with multiple jobs are less frequent. For instance, in the 1968 cohort, less than 15% of worker-year observations had multiple jobs simultaneously. Furthermore, we only consider job-to-job switches, thus not accounting for transitions to and from unemployment.

¹¹[Figure A.7](#) presents the estimated probability of women switching jobs for each year (25-50) and controlling for cohort, public employment, and education. At age 25, women are 6% less likely than men to switch jobs, but by age 50, this gap narrows to around 3%. Among workers in the 99th percentile, women are slightly more likely to switch jobs than men between ages 25 and 30, but become less likely as they age.

Figure 4: Average Number of Job Switches and Median Wage Growth by Lifetime Earnings Percentile, Gender, and Type of Job Separation



Notes: Panel (a) shows the number of job switches by type of separation across lifetime earnings percentiles, and panel (b) focuses on those within the top 1%. Panel (c) displays median wage growth by type of separation and lifetime earnings percentile, with panel (d) presenting these results for the top 1%. The red lines represent the average number of switches and median wage growth for each group.

less demanding environments (Barbulescu and Bidwell, 2013) and women’s lower willingness to compete (Buser et al., 2023), all of which could limit outside options. Altogether, these factors may contribute to fewer job switches among women, potentially limiting their lifetime earnings growth.

Fact 10. *When women switch jobs they experience higher wage gains.*

Displaced individuals often experience substantial wage declines, particularly at the higher end of the distribution (Figure 4c and Figure 4d). For instance, workers at the 80th percentile typically face a 20% decline in monthly wages when laid off, while those at the bottom of the distribution face slight positive growth rates. Interestingly, workers at the top percentile

manage to mitigate the adverse effects of displacement and experience smaller wage declines or even positive growth. When examining different types of job transitions, it becomes evident that earnings inequality is influenced by high earners' ability to increase their wages through job hopping. While all workers experience positive wage growth when quitting their jobs, those in the top 1% see significant gains. In fact, the median wage growth at the 99th percentile is twice the distributional median (see [Table A.1](#) and [Table A.2](#)). Notably, starting from the 40th percentile, women experience greater wage growth than men when voluntarily changing jobs. These findings align with recent literature showing that, among top executives, women receive higher-percentage wage increases than men when changing jobs ([Groysberg et al., 2021](#)). Our findings are, however, more general, since this pattern is observed for women in lower percentiles of the lifetime income distribution as well.¹² Taken together with *Fact 9*, this suggests that women require more incentives (such as higher wage gain) to change jobs compared to men.

4 Conclusion

This paper documents new empirical facts about gender and lifetime earnings inequality, emphasizing significant gender disparities among top earners in Brazil. We find that women are underrepresented at the top, and even when they reach high-paying positions, they earn less than men in their careers. Key drivers of this gap include differences in months worked per year, occupational segregation, and differences in job switching, with public-sector employment notably mitigating the gender gap in lifetime earnings. Future research should explore the role of non-labor income and the informal sector to fully understand lifetime earnings inequality. Additionally, investigating gender differences in career progression could further illuminate the mechanisms behind the persistent gender earnings gap, especially among top earners.

¹²One potential issue is that differences in the likelihood of changing employers might be linked to other gender-related traits, particularly the substantial representation of women in the public sector. However, as depicted in [Figure A.7](#), women consistently display lower probabilities of changing employers, even when controlling for public sector employment and education. The figure further illustrates that young women are less likely to switch jobs, and even women in the 99th percentile are less prone to changing employers compared to their male counterparts within the same percentile group.

References

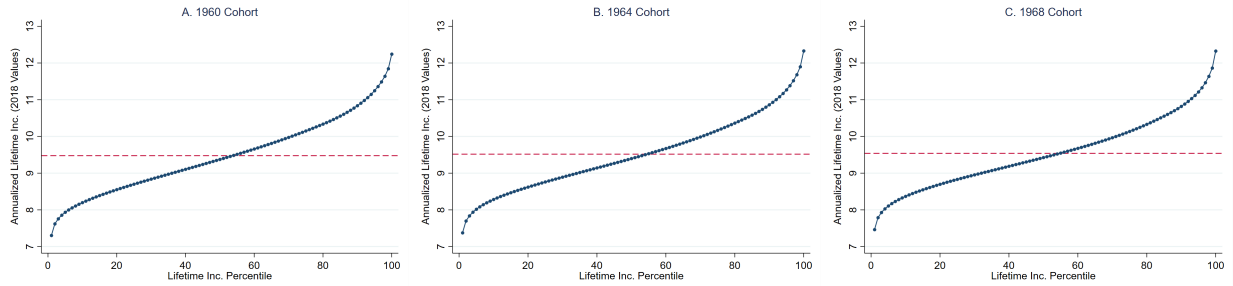
- Adda, J., C. Dustmann, and K. Stevens (2017). The Career Costs of Children. *Journal of Political Economy* 125(2), 293–337.
- Arellano-Bover, J. (2024). Career Consequences of Firm Heterogeneity for Young Workers: First Job and Firm Size. *Journal of Labor Economics* 42(2), 549–89.
- Baez, M. J., P. Brassiolo, R. Estrada, and G. Fajardo (2022). Going Subnational: Wage Differentials across Levels of Government in Brazil, Mexico, and Uruguay. *World Development* 160, 106085.
- Barbulescu, R. and M. Bidwell (2013). Do Women Choose Different Jobs from Men? Mechanisms of Application Segregation in the Market for Managerial Workers. *Organization Science* 24(3), 737–756.
- Barth, E., S. P. Kerr, and C. Olivetti (2021). The Dynamics of Gender Earnings Differentials: Evidence from Establishment Data. *European Economic Review* 134, 103713.
- Berniell, I., R. Fernández, and S. Krutikova (2024, February). Gender Inequality in Latin America and the Caribbean. Working Paper 32104, National Bureau of Economic Research.
- Bertrand, M., C. Goldin, and L. F. Katz (2010, July). Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors. *American Economic Journal: Applied Economics* 2(3), 228–55.
- Bertrand, M. and K. F. Hallock (2001). The Gender Gap in Top Corporate Jobs. *ILR Review* 55(1), 3–21.
- Biasi, B. and H. Sarsons (2022). Flexible Wages, Bargaining, and the Gender Gap. *The Quarterly Journal of Economics* 137(1), 215–266.
- Blau, F. D. and L. M. Kahn (2000, December). Gender Differences in Pay. *Journal of Economic Perspectives* 14(4), 75–99.
- Blau, F. D. and L. M. Kahn (2017, September). The Gender Wage Gap: Extent, Trends, and Explanations. *Journal of Economic Literature* 55(3), 789–865.
- Boll, C., M. Jahn, and A. Lagemann (2017). The Gender Lifetime Earnings Gap: Exploring Gendered Pay from the Life Course Perspective. HWWI Research Papers 179, Hamburg Institute of International Economics (HWWI).
- Bönke, T., G. Corneo, and H. Lüthen (2015). Lifetime Earnings Inequality in Germany. *Journal of Labor Economics* 33(1), 171–208.
- Bowlus, A., E. Gouin-Bonenfant, H. Liu, L. Lochner, and Y. Park (2022). Four Decades of Canadian Earnings Inequality and Dynamics Across Workers and Firms. *Quantitative Economics* 13(4), 1447–1491.

- Buser, T., M. Niederle, and H. Oosterbeek (2014). Gender, Competitiveness, and Career Choices. *The quarterly journal of economics* 129(3), 1409–1447.
- Buser, T., M. J. van den Assem, and D. van Dolder (2023). Gender and Willingness to Compete for High Stakes. *Journal of Economic Behavior & Organization* 206, 350–370.
- Coffman, K. and D. Klinowski (2024). Gender and Preferences for Performance Feedback. *Management Science*.
- Cortés, P. and J. Pan (2023). Children and the Remaining Gender Gaps in the Labor Market. *Journal of Economic Literature* 61(4), 1359–1409.
- Cortés, P., J. Pan, L. Pilossoph, E. Reuben, and B. Zafar (2023, 05). Gender Differences in Job Search and the Earnings Gap: Evidence from the Field and Lab. *The Quarterly Journal of Economics*.
- Couch, K. A. and D. W. Placzek (2010, March). Earnings Losses of Displaced Workers Revisited. *American Economic Review* 100(1), 572–89.
- de Castro Galvao, J. (2022, 06). Gender Inequality in Lifetime Earnings. *Social Forces* 101(4), 1772–1802.
- Engbom, N., G. Gonzaga, C. Moser, and R. Olivieri (2022). Earnings Inequality and Dynamics in the Presence of Informality: The Case of Brazil. *Quantitative Economics* 13(4), 1405–1446. _eprint: <https://onlinelibrary.wiley.com/doi/pdf/10.3982/QE1855>.
- Fernandes, F. C. G. d. M., E. G. d. O. Santos, and I. R. Barbosa (2019). Age of First Pregnancy in Brazil: Data from the National Health Survey. *Journal of Human Growth and Development* 29(3), 304–312.
- Fluchtmann, J., A. M. Glenny, N. A. Harmon, and J. Maibom (2024, May). The Gender Application Gap: Do Men and Women Apply for the Same Jobs? *American Economic Journal: Economic Policy* 16(2), 182–219.
- Gayle, G.-L., L. Golan, and R. A. Miller (2012). Gender Differences in Executive Compensation and Job Mobility. *Journal of Labor Economics* 30(4), 829–872.
- Gindling, T., Z. Hasnain, D. Newhouse, and R. Shi (2020). Are Public Sector Workers in Developing Countries Overpaid? Evidence from a New Global Dataset. *World Development* 126, 104737.
- Gneezy, U. and J. A. List (2013). *The Why Axis: Hidden Motives and the Undiscovered Economics of Everyday Life*. Random House.
- Groysberg, B., P. Healy, and E. Lin (2021). Job-Hopping Toward Equity. *MIT Sloan Management Review* 63(1).

- Guvenen, F., G. Kaplan, and J. Song (2020, November). The Glass Ceiling and the Paper Floor: Changing Gender Composition of Top Earners since the 1980s. In *NBER Macroeconomics Annual 2020, volume 35*, NBER Chapters, pp. 309–373. National Bureau of Economic Research, Inc.
- Guvenen, F., G. Kaplan, J. Song, and J. Weidner (2022, October). Lifetime Earnings in the United States over Six Decades. *American Economic Journal: Applied Economics* 14(4), 446–79.
- Jacobson, L. S., R. J. LaLonde, and D. G. Sullivan (1993). Earnings Losses of Displaced Workers. *The American Economic Review* 83(4), 685–709.
- Karahan, F., S. Ozkan, and J. Song (2022, January). Anatomy of Lifetime Earnings Inequality: Heterogeneity in Job Ladder Risk vs. Human Capital. Working Papers 2022-002, Federal Reserve Bank of St. Louis.
- Keller, W., T. Molina, and W. W. Olney (2023). The Gender Gap among Top Business Executives. *Journal of Economic Behavior & Organization* 211, 270–286.
- Kiessling, L., P. Pinger, P. Seegers, and J. Bergerhoff (2024). Gender differences in Wage Expectations and Negotiation. *Labour Economics* 87, 102505.
- Kleven, H., C. Landais, and J. E. Sogaard (2019, October). Children and Gender Inequality: Evidence from Denmark. *American Economic Journal: Applied Economics* 11(4), 181–209.
- Le Barbanchon, T., R. Rathelot, and A. Roulet (2020, 10). Gender Differences in Job Search: Trading off Commute against Wage. *The Quarterly Journal of Economics* 136(1), 381–426.
- Niederle, M. and L. Vesterlund (2011). Gender and Competition. *Annu. Rev. Econ.* 3(1), 601–630.
- Price, B. M. and M. Wasserman (2023, August). The Summer Drop in Female Employment. Working Paper 31566, National Bureau of Economic Research.
- Roussille, N. (2024). The Role of the Ask Gap in Gender Pay Inequality. *The Quarterly Journal of Economics*, qjae004.
- Wiswall, M. and B. Zafar (2017, 08). Preference for the Workplace, Investment in Human Capital, and Gender. *The Quarterly Journal of Economics* 133(1), 457–507.

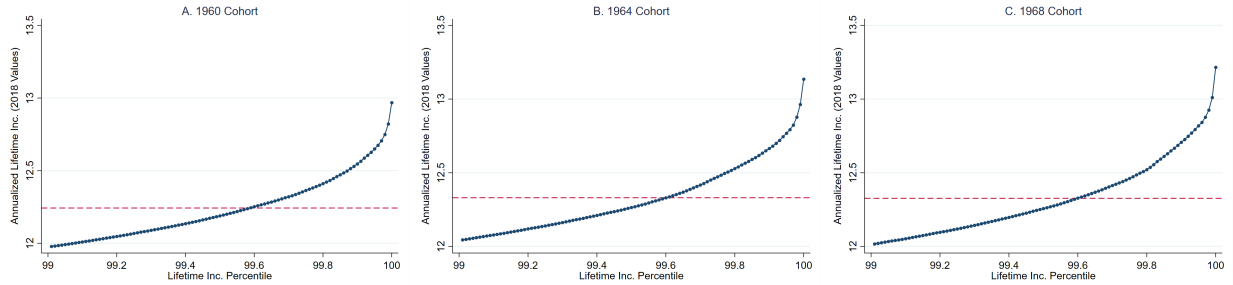
A Additional Figures and Tables

Figure A.1: Lifetime Earnings Inequality by Cohort



Notes: The figure shows the logarithm of the average annualized lifetime earnings by lifetime earnings percentile for different cohorts. The red line represents the average annualized lifetime earnings across the entire distribution.

Figure A.2: Lifetime Earnings Inequality by Cohort: Top 1%



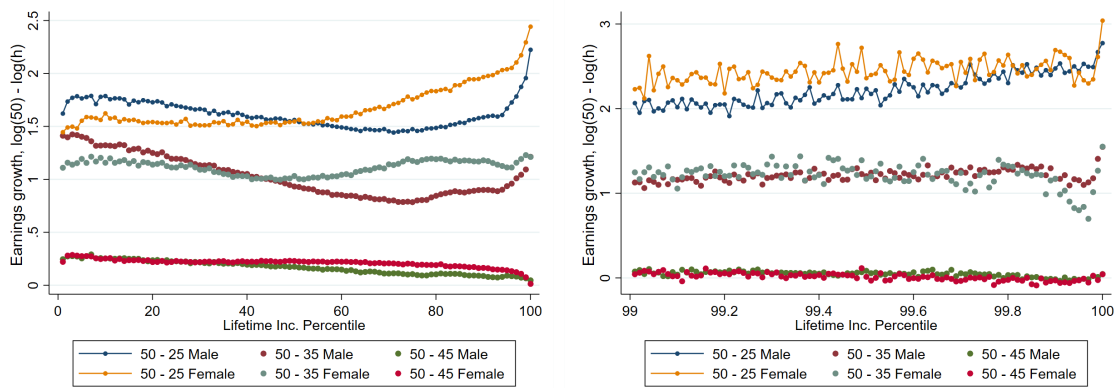
Notes: The figure shows the logarithm of the average annualized lifetime earnings by lifetime earnings percentile and cohort inside the top 1%. The red line represents the average annualized lifetime earnings in the top 1%.

Figure A.3: Fraction of Female by Lifetime Earnings Percentile: Cohorts 1960, 1964 and 1968



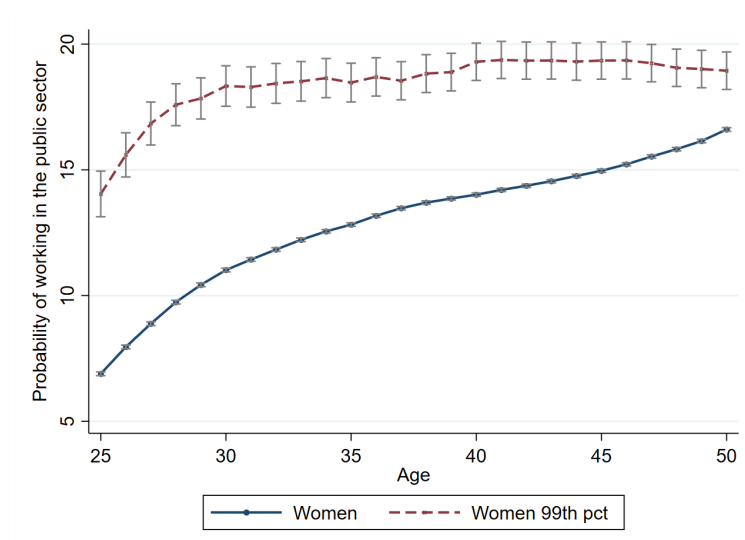
Notes: The figures show the fraction of females by lifetime earnings percentile and cohort. The red line represents the fraction of females in the overall distribution.

Figure A.4: Earnings Growth by Gender and Lifetime Income Percentile



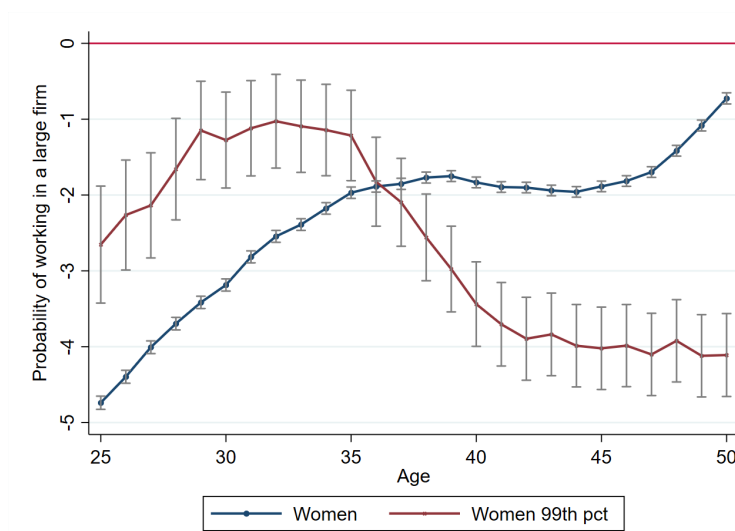
Notes: The figures show the log difference of average earnings between age 50 and ages $h = 25, 35, 45$ over the lifetime earnings distribution.

Figure A.5: Gender differences in the probability of working in the public sector



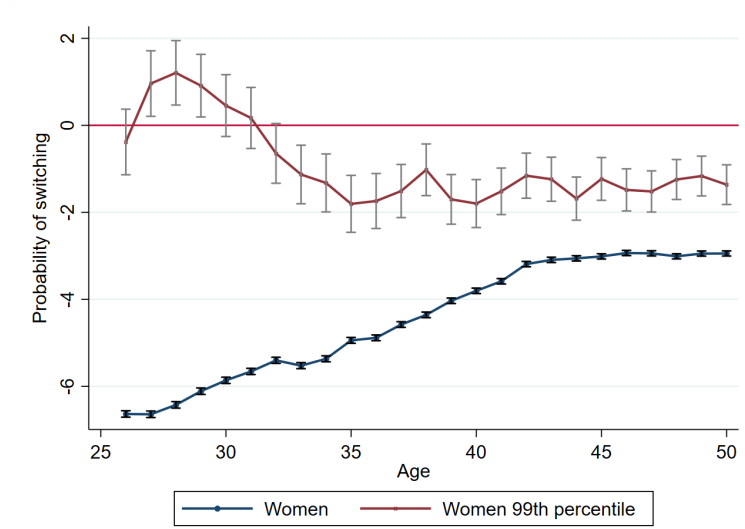
Notes: The figure plots the coefficients and 95% confidence intervals of linear regressions of a dummy equal to one for working in the public sector on workers' gender, controlling for cohort and education.

Figure A.6: Gender differences in the probability of working in a large firm



Notes: The figure plots the coefficients and 95% confidence intervals of linear regressions of a dummy equal to one for working in a large firm (more than 100 employees) on workers' gender, controlling for cohort, public employment, and education.

Figure A.7: Gender differences in the probability of switching



Notes: The figure plots the coefficients and 95% confidence intervals of linear regressions of a dummy equal to one for switching jobs between years on workers' gender, controlling for cohort, public employment in the previous year, and education.

Table A.1: Characteristics of workers

	(1) Mean	(2) Median	(3) SD	(3) Min	(5) Max	(6) N
Female	0.36	0.00	0.48	0	1	8771665
Non-white	0.30	0.00	0.46	0	1	7767925
High-school (including college)	0.47	0.00	0.50	0	1	8771665
College	0.15	0.00	0.36	0	1	8771665
Average Lifetime Income (BRL)	23301.55	12242.71	32654.86	509	1191194	8771665
Average Lifetime Income (25-30)	12201.13	6510.13	17359.06	0	1558238	8771665
Average Lifetime Income (31-40)	22393.46	11512.81	32899.88	0	1541348	8771665
Average Lifetime Income (41-50)	30869.89	15077.52	49180.44	0	2116164	8771665
Log(Average Lifetime Income)	9.51	9.41	0.99	6	14	8771665
Log(Average Lifetime Income) (25-30)	8.82	9.02	1.46	0	14	7604371
Log(Average Lifetime Income) (31-40)	9.36	9.38	1.22	0	14	8617434
Log(Average Lifetime Income) (41-50)	9.73	9.71	1.22	1	15	8167169
Average Lifetime Employment (months)	7.80	7.81	2.76	0	12	8771665
Average Lifetime Employment (25-30)	7.00	8.00	4.30	0	12	8771665
Average Lifetime Employment (31-40)	7.87	8.50	3.60	0	12	8771665
Average Lifetime Employment (41-50)	8.21	9.70	4.05	0	12	8771665
Employment in the Public Sector (%)	0.22	0.00	0.34	0	1	8771665
Number of Jobs Switches	3.99	3.00	3.21	0	25	8771665
Average Wage Growth per Job Switch	0.23	0.10	0.90	-1	259	7672261
Employment in Large Firms (%)	0.37	0.00	0.48	0	1	8771665

Table A.2: Characteristics of workers at the 99th percentile

	(1) Mean	(2) Median	(3) SD	(3) Min	(5) Max	(6) N
Female	0.24	0.00	0.43	0	1	87,717
Non-white	0.14	0.00	0.35	0	1	74,841
High-school (including college)	0.99	1.00	0.10	0	1	87,717
College	0.87	1.00	0.34	0	1	87,717
Average Lifetime Income (BRL)	228,629.57	208,410.00	63,190.47	165802	1191194	87,717
Average Lifetime Income (25-30)	78,966.43	75,018.05	46,993.23	0	1558238	87,717
Average Lifetime Income (31-40)	210,530.79	196,045.17	76,556.37	0	1541348	87,717
Average Lifetime Income (41-50)	336,526.24	314,040.25	119,375.87	0	2116164	87,717
Log(Average Lifetime Income)	12.31	12.25	0.24	12	14	87,717
Log(Average Lifetime Income) (25-30)	11.09	11.25	0.84	2	14	85,024
Log(Average Lifetime Income) (31-40)	12.19	12.19	0.38	6	14	87,637
Log(Average Lifetime Income) (41-50)	12.67	12.66	0.35	6	15	87,593
Average Lifetime Employment (months)	10.88	11.35	1.35	3	12	87,717
Average Lifetime Employment (25-30)	9.94	11.67	3.11	0	12	87,717
Average Lifetime Employment (31-40)	10.99	12.00	1.77	0	12	87,717
Average Lifetime Employment (41-50)	11.32	12.00	1.71	0	12	87,717
Employment in the Public Sector (%)	0.50	0.65	0.43	0	1	87,717
Number of Jobs Switches	3.62	3.00	2.89	0	19	87,717
Average Wage Growth per Job Switch	0.76	0.21	2.97	-1	155	77,416
Employment in Large Firms (%)	0.36	0.00	0.48	0	1	87,717

Table A.3: Characteristics of workers at the 99.9th percentile

	Mean	Median	SD	Min	Max	N
Female	0.23	0.00	0.42	0	1	8,772
Non-white	0.11	0.00	0.31	0	1	7,387
High-school	1.00	1.00	0.07	0	1	8,772
College	0.95	1.00	0.22	0	1	8,772
Average Lifetime Income (BRL)	372,222.00	352,974.12	61,529.79	315570	1191194	8,772
Average Lifetime Income (25-30)	118,025.67	114,275.28	62,918.37	0	1558238	8,772
Average Lifetime Income (31-40)	337,806.96	338,912.02	87,319.26	0	1541348	8,772
Average Lifetime Income (41-50)	559,154.85	518,827.75	150,326.69	0	2116164	8,772
Log(Average Lifetime Income)	12.82	12.77	0.14	13	14	8,772
Log(Average Lifetime Income) (25-30)	11.53	11.66	0.74	3	14	8,544
Log(Average Lifetime Income) (31-40)	12.69	12.73	0.30	9	14	8,764
Log(Average Lifetime Income) (41-50)	13.20	13.16	0.24	11	15	8,771
Average Lifetime Employment (months)	10.82	11.15	1.26	4	12	8,772
Average Lifetime Employment (25-30)	9.84	11.17	3.01	0	12	8,772
Average Lifetime Employment (31-40)	10.78	11.90	1.91	0	12	8,772
Average Lifetime Employment (41-50)	11.46	12.00	1.32	0	12	8,772
Employment in the Public Sector (%)	0.44	0.36	0.44	0	1	8,772
Number of Jobs Switches	3.43	3.00	2.86	0	15	8,772
Average Wage Growth per Job Switch	1.29	0.28	4.49	-1	146	7,558
Employment in Large Firms (%)	0.39	0.00	0.49	0	1	8,772

Table A.4: Descriptive statistics by gender

	(1) All Mean	(2) SD	(3) Male Mean	(4) SD	(5) Female Mean	(6) SD	(7) Difference Diff
Non-white	0.30	0.46	0.32	0.46	0.26	0.44	-0.05***
High-school (including college)	0.47	0.50	0.38	0.48	0.64	0.48	0.26***
College	0.15	0.36	0.10	0.30	0.24	0.43	0.14***
Average Lifetime Income (BRL)	23301.55	32654.86	24287.31	34416.50	21579.74	29245.49	-2,707.57***
Average Lifetime Income (25-30)	12201.13	17359.06	13639.73	18481.26	9688.34	14871.34	-3,951.40***
Average Lifetime Income (31-40)	22393.46	32899.88	23807.11	34707.48	19924.26	29314.81	-3,882.86***
Average Lifetime Income (41-50)	30869.89	49180.44	31156.05	51705.40	30370.05	44422.84	-786.00***
Log(Average Lifetime Income)	9.51	0.99	9.55	0.99	9.44	0.99	-0.11***
Log(Average Lifetime Income) (25-30)	8.82	1.46	8.90	1.43	8.65	1.52	-0.25***
Log(Average Lifetime Income) (31-40)	9.36	1.22	9.43	1.20	9.23	1.25	-0.20***
Log(Average Lifetime Income) (41-50)	9.73	1.22	9.72	1.23	9.75	1.19	0.02***
Average Lifetime Employment (months)	7.80	2.76	7.79	2.78	7.82	2.73	0.03***
Average Lifetime Employment (25-30)	7.00	4.30	7.49	4.02	6.15	4.61	-1.35***
Average Lifetime Employment (31-40)	7.87	3.60	7.88	3.51	7.84	3.75	-0.04***
Average Lifetime Employment (41-50)	8.21	4.05	7.87	4.07	8.80	3.94	0.94***
Employment in the Public Sector (%)	0.22	0.34	0.16	0.31	0.31	0.37	0.15***
Number of Jobs Switches	3.99	3.21	4.59	3.37	2.94	2.57	-1.66***
Average Wage Growth per Job Switch	0.23	0.90	0.21	0.82	0.26	1.04	0.05***
Employment in Large Firms (%)	0.37	0.48	0.41	0.49	0.28	0.45	-0.13***

Notes: The table shows descriptive statistics by gender. The last column presents the coefficients of a linear regression of each variable on a dummy equal to one if the individual is female. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A.5: Descriptive statistics by gender at the 99th percentile

	All		Male		Female		Difference
	Mean	SD	Mean	SD	Mean	SD	Diff
Non-white	0.14	0.35	0.14	0.34	0.17	0.38	0.03***
High-school (including college)	0.99	0.10	0.99	0.11	0.99	0.08	0.01***
College	0.87	0.34	0.85	0.36	0.93	0.26	0.08***
Average Lifetime Income (BRL)	228629.57	63190.47	229252.63	64633.33	226677.82	58399.01	-2,574.80***
Average Lifetime Income (25-30)	78966.43	46993.23	81189.13	47019.66	72003.74	46224.73	-9,185.40***
Average Lifetime Income (31-40)	210530.79	76556.37	209800.86	77449.50	212817.29	73643.56	3,016.42***
Average Lifetime Income (41-50)	336526.24	119375.87	337542.48	124376.25	333342.81	102076.85	-4,199.67***
Log(Average Lifetime Income)	12.31	0.24	12.31	0.24	12.30	0.23	-0.01***
Log(Average Lifetime Income) (25-30)	11.09	0.84	11.12	0.81	10.96	0.91	-0.16***
Log(Average Lifetime Income) (31-40)	12.19	0.38	12.19	0.38	12.21	0.36	0.02***
Log(Average Lifetime Income) (41-50)	12.67	0.35	12.67	0.36	12.67	0.30	0.00*
Average Lifetime Employment (months)	10.88	1.35	10.86	1.37	10.92	1.27	0.06***
Average Lifetime Employment (25-30)	9.94	3.11	10.06	3.03	9.57	3.32	-0.48***
Average Lifetime Employment (31-40)	10.99	1.77	10.96	1.80	11.10	1.67	0.14***
Average Lifetime Employment (41-50)	11.32	1.71	11.24	1.80	11.56	1.35	0.32***
Employment in the Public Sector (%)	0.50	0.43	0.45	0.44	0.65	0.39	0.20***
Number of Jobs Switches	3.62	2.89	3.88	2.94	2.79	2.56	-1.09***
Average Wage Growth per Job Switch	0.76	2.97	0.71	2.86	0.94	3.28	0.23***
Employment in Large Firms (%)	0.36	0.48	0.39	0.49	0.25	0.44	-0.14***

Notes: The table shows descriptive statistics by gender within the top 1%. The last column presents the coefficients of a linear regression of each variable on a dummy equal to one if the individual is female. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A.6: Descriptive statistics by gender at the 99.9th percentile

	All		Male		Female		Difference
	Mean	SD	Mean	SD	Mean	SD	Diff
Non-white	0.11	0.31	0.10	0.30	0.14	0.34	0.04***
High-school	1.00	0.07	1.00	0.07	1.00	0.06	0.00
College	0.95	0.22	0.94	0.23	0.96	0.19	0.02***
Average Lifetime Income (BRL)	372222.00	61529.79	376291.69	64481.01	358574.92	47941.59	-17,716.77***
Average Lifetime Income (25-30)	118025.67	62918.37	116719.94	63006.84	122404.23	62437.25	5,684.29***
Average Lifetime Income (31-40)	337806.96	87319.26	335686.00	90787.15	344919.27	74100.00	9,233.27***
Average Lifetime Income (41-50)	559154.85	150326.69	572640.43	155837.75	513932.98	119553.79	-58,707.45***
Log(Average Lifetime Income)	12.82	0.14	12.83	0.15	12.78	0.12	-0.04***
Log(Average Lifetime Income) (25-30)	11.53	0.74	11.53	0.71	11.54	0.82	0.01
Log(Average Lifetime Income) (31-40)	12.69	0.30	12.68	0.32	12.73	0.24	0.04***
Log(Average Lifetime Income) (41-50)	13.20	0.24	13.23	0.25	13.13	0.21	-0.10***
Average Lifetime Employment (months)	10.82	1.26	10.78	1.31	10.98	1.04	0.20***
Average Lifetime Employment (25-30)	9.84	3.01	9.93	2.98	9.53	3.08	-0.40***
Average Lifetime Employment (31-40)	10.78	1.91	10.68	1.99	11.10	1.54	0.42***
Average Lifetime Employment (41-50)	11.46	1.32	11.38	1.40	11.73	0.95	0.34***
Employment in the Public Sector (%)	0.44	0.44	0.37	0.42	0.66	0.40	0.29***
Number of Jobs Switches	3.43	2.86	3.78	2.90	2.24	2.35	-1.55***
Average Wage Growth per Job Switch	1.29	4.49	1.29	4.75	1.27	3.33	-0.03
Employment in Large Firms (%)	0.39	0.49	0.43	0.50	0.24	0.43	-0.19***

Notes: The table shows descriptive statistics by gender within the top 0.1%. The last column presents the coefficients of a linear regression of each variable on a dummy equal to one if the individual is female. * p < 0.10, ** p < 0.05, *** p < 0.01.

Table A.7: Descriptive statistics by cohort

	(1) All Mean	(2) SD	(3) 1960 Mean	(4) SD	(5) 1968 Mean	(6) SD	(7) Difference Diff
Female	0.36	0.48	0.35	0.48	0.37	0.48	0.02***
Non-white	0.30	0.46	0.28	0.45	0.32	0.47	0.04***
High-school	0.47	0.50	0.41	0.49	0.52	0.50	0.11***
College	0.15	0.36	0.14	0.35	0.15	0.36	0.01***
Average Lifetime Income (BRL)	23301.55	32654.86	22801.16	31279.23	23251.54	32618.03	450.38***
Average Lifetime Income (25-30)	12201.13	17359.06	14833.70	19947.01	13291.87	19261.72	-1,541.83***
Average Lifetime Income (31-40)	22393.46	32899.88	21916.31	30440.89	21317.92	32695.20	-598.40***
Average Lifetime Income (41-50)	30869.89	49180.44	28466.48	47466.74	31160.96	47796.38	2,694.48***
Log(Average Lifetime Income)	9.51	0.99	9.48	1.02	9.54	0.96	0.06***
Log(Average Lifetime Income) (25-30)	8.82	1.46	8.97	1.54	9.00	1.31	0.02***
Log(Average Lifetime Income) (31-40)	9.36	1.22	9.33	1.25	9.34	1.18	0.01***
Log(Average Lifetime Income) (41-50)	9.73	1.22	9.61	1.29	9.78	1.17	0.17***
Average Lifetime Employment (months)	7.80	2.76	7.83	2.72	7.72	2.78	-0.11***
Average Lifetime Employment (25-30)	7.00	4.30	7.76	4.17	6.43	4.31	-1.33***
Average Lifetime Employment (31-40)	7.87	3.60	7.95	3.49	7.90	3.60	-0.05***
Average Lifetime Employment (41-50)	8.21	4.05	7.75	4.31	8.31	3.90	0.57***
Employment in the Public Sector (%)	0.22	0.34	0.24	0.35	0.19	0.32	-0.05***
Number of Jobs Switches	3.99	3.21	3.96	3.18	4.01	3.21	0.05***
Average Wage Growth per Job Switch	0.23	0.90	0.21	0.97	0.21	0.75	0.00
Employment in Large Firms (%)	0.37	0.48	0.38	0.49	0.34	0.47	-0.04***

Notes: The table shows descriptive statistics by cohort for the cohorts 1960 and 1968. The last column presents the coefficients of a linear regression of each variable on a dummy equal to one for the cohort 1968. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.8: Descriptive statistics by gender and cohort

	(1) Male Mean	(2) SD	(3) Female Mean	(3) SD	(5) Difference All	(6) 1960	(7) 1968
Non-white	0.32	0.46	0.26	0.44	-0.05***	-0.04***	-0.06***
High-school	0.38	0.48	0.64	0.48	0.26***	0.26***	0.25***
College	0.10	0.30	0.24	0.43	0.14***	0.13***	0.15***
Average Lifetime Income (BRL)	24287.31	34416.50	21579.74	29245.49	-2,707.57***	-2,993.77***	-2,601.47***
Average Lifetime Income (25-30)	13639.73	18481.26	9688.34	14871.34	-3,951.40***	-5,235.02***	-3,777.17***
Average Lifetime Income (31-40)	23807.11	34707.48	19924.26	29314.81	-3,882.86***	-4,112.64***	-3,572.30***
Average Lifetime Income (41-50)	31156.05	51705.40	30370.05	44422.84	-786.00***	-530.14***	-925.21***
Log(Average Lifetime Income)	9.55	0.99	9.44	0.99	-0.11***	-0.11***	-0.12***
Log(Average Lifetime Income) (25-30)	8.90	1.43	8.65	1.52	-0.25***	-0.31***	-0.22***
Log(Average Lifetime Income) (31-40)	9.43	1.20	9.23	1.25	-0.20***	-0.18***	-0.22***
Log(Average Lifetime Income) (41-50)	9.72	1.23	9.75	1.19	0.02***	0.07***	-0.00
Average Lifetime Employment (months)	7.79	2.78	7.82	2.73	0.03***	0.12***	-0.06***
Average Lifetime Employment (25-30)	7.49	4.02	6.15	4.61	-1.35***	-1.58***	-1.20***
Average Lifetime Employment (31-40)	7.88	3.51	7.84	3.75	-0.04***	0.06***	-0.22***
Average Lifetime Employment (41-50)	7.87	4.07	8.80	3.94	0.94***	1.21***	0.79***
Employment in the Public Sector (%)	0.16	0.31	0.31	0.37	0.15***	0.17***	0.13***
Number of Jobs Switches	4.59	3.37	2.94	2.57	-1.66***	-1.74***	-1.56***
Average Wage Growth per Job Switch	0.21	0.82	0.26	1.04	0.05***	0.04***	0.03***
Employment in Large Firms (%)	0.41	0.49	0.28	0.45	-0.13***	-0.14***	-0.11***

Notes: The table shows descriptive statistics by gender. Columns 5 to 7 present the coefficients of a linear regression of each variable on a dummy equal to one if the individual is female. Column (5) uses the entire sample, while columns (6) and (7) focus on the cohort 1960 and 1968, respectively. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.9: The gender gap in lifetime earnings

	(1)	(2)	(3)	(4)	(5)	(5)
	Log(Lif. Inc.)	Log(Lif. Inc.)	Log(Lif. Inc.)	Log(Lif. Inc.)	Log(Lif. Inc.)	Log(Lif. Inc.)
Female	-0.0982*** (0.001)	-0.240*** (0.000)	-0.262*** (0.000)	-0.276*** (0.000)	-0.275*** (0.000)	-0.257*** (0.000)
College Degree		0.976*** (0.001)	0.955*** (0.001)	0.925*** (0.001)	0.917*** (0.001)	0.710*** (0.001)
Avg. Employment (Months)		0.233*** (0.000)	0.230*** (0.000)	0.219*** (0.000)	0.219*** (0.000)	0.209*** (0.000)
N. of Job Switches (Non-Fired)			0.00450*** (0.000)	0.00681*** (0.000)	0.00842*** (0.000)	0.00469*** (0.000)
N. of Job Switches (Fired)			-0.0424*** (0.000)	-0.0360*** (0.000)	-0.0370*** (0.000)	-0.0239*** (0.000)
Avg. Public Employment (Months)				0.0194*** (0.000)	0.0136*** (0.000)	0.00964*** (0.000)
Size of First Estab. (log)					0.0196*** (0.000)	0.0221*** (0.000)
Constant	9.548*** (0.000)	7.636*** (0.001)	7.706*** (0.001)	7.750*** (0.001)	7.660*** (0.001)	7.747*** (0.001)
Cohort	Yes	Yes	Yes	Yes	Yes	Yes
First Municipality	Yes	Yes	Yes	Yes	Yes	Yes
Occupation (3 dig.)						Yes
Observations	8,771,639	8,771,639	8,771,639	8,771,639	8,647,425	8,612,502
R-squared	0.104	0.709	0.713	0.716	0.718	0.764

Notes: The table shows estimates of regressions of log lifetime earnings on several characteristics. * p < 0.10, ** p < 0.05, *** p < 0.01.