What Lies Behind France's Low Level of Income Inequality?*

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Abstract

We document the evolution of household pre-tax and disposable income inequality in France since the late 1960s using household surveys. Disposable income inequality declined over the 1960s and 1970s and remained stable thereafter. This trend can be explained, in part, by changes in the tax and benefit system, notably through changes in employer contributions, and the evolution of the national minimum wage. Other dimensions than income bring a less positive perspective: low-income individuals are now more likely to be immigrants, have low education, and live in households with no working adults.

Keywords: inequality, tax-benefit system, gender **JEL codes**: D3, J3

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Introduction

France's motto "Liberty, Equality, Fraternity" is inscribed on the facade of city halls in France, and most official documents. It is almost a cliché to say that inequality is the object of acute attention in the French public debate, with regular publications in the media protesting against increasing inequality or, on the contrary, criticising a French misplaced passion for equality responsible for all the country's problems. The approach taken by this article is to provide an overview, based on statistical analysis at the household level, of the evolution of inequality, measured in various dimensions, since the mid-1970s.

The starting point of this narrative will be the documentation that disposable income inequality has actually decreased in France during the period from the mid-1960s to the mid-1980s and has remained stable thereafter, even when many other developed countries were experiencing increasing levels of income inequality. Against this general backdrop, surveys point regularly to the observation that the perception of inequality, or fairness, by French individuals is much more negative than what the average statistics describe (Forsé et al. 2013). In a cross-country setting, it is striking to compare the French perception of a highly unfair and unequal country with the country's rankings as one of a low-income-inequality country. We do not pretend to elucidate this dichotomy in this paper, but we will inquire whether the decline and low level of income inequality really reflect all the dimensions of inequality that can be perceived by individuals. Have inequalities by gender, educational attainment, geographical location, or migration origins, evolved differently than income inequalities? Do they matter more for the perception of unfairness than average statistics? We will also discuss the evolution of policy likely to have affected income inequality, from tax and benefit changes to labour market regulations.

The data we mobilise are both surveys from the French national statistics, notably the French Labour Force Survey, matched with social and tax information, and administrative data from tax and social security data. These descriptive statistics have been produced in the course of a collaborative effort for cross-country comparison with the IFS Deaton Review Cross-country project, and this paper is complemented with a larger set of statistics available in Bozio, Guillot, Puschnig & Tô (2023).

The main results are that France experienced a reduction in household disposable income inequality over the 1960s and 1970s and a stable evolution thereafter. This decrease in inequality can be attributed, at least in part, to changes in the tax and benefit system, combined with the extensive use of a national minimum wage. Reductions in employer social security contributions in the 1990s and 2000s have allowed further increases in the minimum wage without detrimental effects on employment. Second, we document the evolution of inequality in other dimensions than income where the picture appears less positive. While income inequality has remained stable, we find an increase in the gap between natives and immigrants, and more concentration of low-educated households, with no working adults, at the bottom of the income distribution. Whereas the gender gap became smaller in the 1970s and 1980s, this trend seems to have halted since. Spatial inequality, on the other hand, does not seem to have increased over the period.

Section 1 reviews the main evidence for the decline in inequality in France during the course of the last sixty years. Section 2 presents other dimensions of inequality than income that matter to explain heterogeneous perceptions of inequality in France, namely by gender, age, and across geographical location. Section 3 concludes.

1 The country of decreasing inequalities?

1.1 Decreasing then stable disposable income inequality

Measures of disposable income inequality at the household level are the clearest indicators of the change in inequality likely to affect directly the well-being of households. We present in Figure 1 various indicators of disposable income inequality since the 1970s, mostly based on French household surveys *Enquête Revenus Fiscaux* (ERF) available from 1970 to 1990 and the *Enquête Revenus Fiscaux et Sociaux* (ERFS) available since 1996. Both sources match survey data on households with administrative data, allowing to compute precisely income from all members of the household while taking into account of the household composition.¹

In Figure 1a, we present the evolution of the Gini, and the relative poverty rate, and in Figure 1b, we present the main inter-percentile ratios, P90/P10, P90/P50, and P50/P10. There is a vast literature about the relative strengths and weaknesses of each inequality indicator, on the weight they put on different parts of the income distribution. For France, most indicators provide the same overall narrative for disposable income inequality: a significant reduction in inequality in the 1970s and early 1980s and thereafter relative stability. The P90/P10 ratio drops from 4.8 in 1970 to 3.7 by 1984, and then from 3.7 in 1996 to 3.6 in 2019. The Gini coefficient or the relative poverty rate presents a similar evolution. We also add in Figure 1a the evolution of the top 1% share of disposable income computed by the World Inequality Lab (WIL) from administrative tax data supplemented by estimation from ERFS. The share of the top 1% has changed more markedly over the period: it decreased in the 1970s up to 1984 from 7% to 5%, then increased until the late 1990s to reach 8%, before declining again to 6% at the end of the period.

If we use data from the Social Security Administration on labour market earnings (Fig. 4a), one can get a picture from a longer time period starting in the mid-1960s. The decline in net wage inequality over the 1960s and 1970s is striking. The ratio of P90/P10 in individual earnings fell from 3.5 in 1967 to 2.9 in 1984 and even further by 2019 at 2.7 after a small increase in the late 1980s.

¹The ERF is a survey based on the French Census (hence available only in years 1970, 1975, 1979, 1984 and 1990) matched with tax data from income tax records. The ERFS is based on the French Labour Force Survey matched with tax and benefit data from 1996 onwards.

1.2 Perception of a highly unfair French society

Against this backdrop of decreasing, or stable, income inequality, the perceptions of inequalities by the French population appear at odds with these statistics. We present in Figure 2 some of the distribution of responses to the question "Do you agree with the statement 'Differences in income in your country are too large'?" asked in 2017 with the World Value Survey. In France, 58% of respondents strongly agree with such a statement compared with 38% for the average OECD country, one of the highest rates bar Turkey and Hungary. The picture is less dramatic if one looks at the share of respondents agreeing or strongly agreeing with the statement, whereas France is closer to the average. This is not specific to cross-country comparison as in a national survey, as an overwhelming majority of French individuals considers French society as "unfair".²

The apparent discrepancy between the evolution of inequality in France and the perception of the French needs to be qualified. First, there is no evidence of perception during the period of decreasing inequality in the 1970s,³. Second, current perceptions can be influenced by movements at the top of the income distribution — where inequality tended to increase in the recent period – rather than broader inequality measures in the rest of the income distribution. Third, perceptions about inequality also reflect other dimensions than disposable income inequality (e.g., across gender, education, geography, etc.) which could determine perceptions more directly. Finally, and perhaps most importantly, in the 1970s and 1980s decreasing income inequality was not the main subject of public debate, but rather the tremendous increase in unemployment, which led to the perception of very unequal labour market outcomes between those in relatively secure jobs (permanent positions in the public sector, in large firms, and highly educated) and those at risk of unemployment, notably the low skilled workers.

1.3 The country of high unemployment?

Figure 3a presents the evolution of the unemployment rate in France since the late 1960s decomposing between long-term unemployment (more than a year of unemployment spell) and short-term unemployment (less than a year). While in the early 1970s, France exhibited unemployment rates below 3%, this rate kept increasing during the decade 1975–1984 to reach 9%, and it further increased to reach 10.5% in 1993. Not only did the overall ILO rate increase massively, but the share of unemployed looking for work for more than one year also reached one third of the total in the mid-1980s. At the time, most of the rise in unemployment was

²The question "Does French society today seem rather fair or rather unfair to you?" with results grouped by the level of education of the respondents had the following results. For those with less than high school, 80.8% consider the French society as unfair. When one looks at those with more than high school, the share of respondents characterising French society as unfair drops to 69.5%, but remains at a high level (Baromètre d'opinion de la Drees, French ministry of social affairs).

 $^{^{3}}$ The survey Baromètre d'opinion de la Drees is conducted since 2000 and does not allow to estimate changes in this perception during the period of significant reduction in inequality in the 1970s.

analysed in macroeconomic terms as the consequences of the two oil shocks, combined with rigid wage-setting, and therefore viewed as temporary. The fact that the unemployment rate remained stubbornly high throughout the 1980s and early 1990s, contrary to the evolution in many other developed countries, led to the view that some specific policies in France (and other continental European countries) could be responsible for this poor outcome. Debates among economists ragged whether the main issue was too rigid labour market protection laws, inadequate wage-bargaining setting, too generous unemployment insurance, inadequate training schemes or too high minimum wage (e.g., see Layard et al. 1991, Laroque & Salanié 2002).

Minimum wage. For many economists in France, the main culprit of such a high level of unemployment was the large increase in the national minimum wage. In Figure 3b we plot for the same period the level of the minimum wage as a share of the median wage (or Kaitz index). From 1967 to 1986, the minimum wage increased from 40% to 58% of the median wage, a level rarely seen at that time in other countries. The minimum wage was introduced in France in 1950 to set a floor to posted hourly wage. The regulation is decided at a national level and applies to all sectors. After the social unrest of 1968, the minimum wage was increased very significantly, which led to the first major increase evidenced on Figure 3b. In 1970, the law was changed to define a more dynamic indexation of the minimum wage. Instead to follow only inflation, the new formula sets that the minimum wage should follow at least consumer price inflation and half of the growth in the average hourly blue-collar wage rate. In addition to those automatic indexation rules, the government can push for further increases (called "coups de pouce"). In the 1970s and early 1980s, increases in the minimum wage were above the average wage growth in the economy, explaining the increase of its level as a fraction of the median wage.

Payroll taxation policy. In addition to a relatively high minimum wage, the other French specificity which became apparent in the late 1980s was that a large part of the welfare state was funded through Social Security taxes (SSCs), or payroll taxes (Bozio 2023). These SSCs are based on labour income only, and split nominally between employers and employees, with a larger share (nominally) on employers. From the late 1960s to the mid-1980s, SSCs in France increased from 11.5% of GDP to 18% of GDP. This large increase was immediately translated into increases in the labour cost of the minimum wage and prompted concerns that a high minimum wage combined with high payroll taxes could explain the high level of unemployment, particularly for unskilled workers and younger workers. From 1993 onwards, a series of payroll tax cuts targeted at the minimum wage were introduced with the stated aim of reducing unemployment. These payroll tax cuts were expanded in 1995 and 2003 and focused on a group of workers at, or slightly above, the minimum wage (up to 1.6 times the minimum wage). At the same time, some SSCs were uncapped, i.e., increased for higher

earners, again with the aim to fund welfare spending without detrimental employment effects. Evaluation of these early payroll tax cuts has led to a relatively positive appraisal of their effect on employment (Kramarz & Philippon 2001), which explains the fact that they have been maintained and reinforced until the 2010s. The last major policy in that respect has been the introduction in 2013 of a large tax credit on payroll taxes up to 2.5 times the minimum wage, which led to a much more uncertain effect on employment (Carbonnier et al. 2022). Figure 3b presents the evolution of the pre-tax (or labour cost) minimum wage over the period, incorporating all these payroll tax policies since the mid-1990s. One can see that the pre-tax minimum wage dropped from 57% of the median wage in 1993 to 44% in 2019, below its 1968 level.

1.4 Increasing pre-tax wage inequality

The picture of decreasing disposable inequality in France can be complemented with changes in the labour market. We represent such changes in wage inequality in Figure 4 which rely on social security administrative data (DADS, *Panel tous salariés*) available since 1967 on a large sample of workers. We present in the two panels two measures of wage inequality. In Figure 4a, we plot the change in the P90/P10 net wage ratio for all workers (working full-time) and separately for men and women. In Figure 4b, we compute the same ratios for the pre-tax wage, i.e., the labour cost including payroll taxes. Most of the analysis in this section relies on Bozio, Breda & Guillot (2023).

Decreasing net wage inequality. Figure 4a confirms that the decreasing disposable income inequality is driven by a declining net wage inequality. The ratio of the 90th percentile to the 10th percentile of the net wage distribution (P90/P10) decreased by 18.9% over the 1967-2019 period. This fact has been much commented on as a French exception to the general trend observed in the 1970s and 1980s in increasing wage inequality, and therefore as a possible counter-argument to the skill-biased technological change argument: if France which had similar development of information and communication technologies (ICT) as its neighbours was not suffering increased wage inequality, how one could attribute to technological changes most of the inequality trends? Researchers have tried to test whether changes in the supply of skilled vs unskilled workers could explain the differential wage inequality in France, but with only partial success (e.g., Verdugo 2014).

But increasing pretax wage inequality. Bozio, Breda & Guillot (2023) offers a complementary explanation to this seemingly French exception by incorporating the tax and benefit changes into the picture. The reforms to payroll taxation in particular imply that the labour cost (or pretax) wage inequality series have evolved in a very different way to the net wage inequality generally used in cross-country settings. Figure 4b shows the evolution of the log ratio of P90/P10 for pretax wage. Over the period 1967 to 2019, the P90/P10 pretax wage ratio has actually increased in France by 15.4%. The difference can be attributed to changes in the progressivity of payroll taxes, which were reduced for low-wage earners and increased for high-wage earners. As a result, pretax wage inequality has effectively increased in France in a similar manner to other developed countries, making France less of an exception with respect to these increasing trends in inequality. It also reinforces explanations like the skill-biased technological changes and other demand-driven changes (see for instance Giupponi & Machin 2022, Katz & Murphy 1992, Autor et al. 2008).

2 Going Beyond Income Inequalities

In this section, we document how inequalities have unfolded in France along four dimensions: household composition, gender, migration status, and geographical location. Perception of inequalities can be influenced by much more than only vertical inequalities along the income gradient, but also along other margins which matter greatly to individuals in their current perceptions.

2.1 Household composition

In Figure 5 we present the share of individuals of a particular group in each decile of the disposable household income distribution, comparing the year 1996 with 2019. In Panel A, we look specifically at the composition of households with 0, 1 or 2 working adults. The striking change over the period is the increase in the share of individuals living in households with no working adults who end up in the first two deciles of the household income distribution. In Panel B, we look at the education composition, and we find that individuals with less than high-school equivalent education are more likely to be in the first two deciles of household income distribution in 2019 than in 2016, while those with more than high school are more likely to be in the top 9 and 10 deciles.

Although income inequality has barely changed over the period 1996 to 2019, there is a significant change in the composition of low incomes in France who become dominated by workless and low-educated households.

2.2 Gender inequalities: progress with slowdown

It is impossible to consider the change in household inequalities in France over the last 50 years without paying attention to the major shift in household income composition that was induced by rising female labour market participation. In Figure 6 we present some evidence to document how gender inequality has evolved over the period and how it helps explain the overall change in household inequality.

In Figure 6a we show how the general increase in education in France has been very favourable to females. While in 1975 more than 80% of the French workforce had less than high school education, this fraction is reduced to less than 40% by 2019. But more specifically, the share of females with more than high school education reached 47% in 2022 against 40% for males, from a low level of 7 and 9% in 1978. If all French workers have become more educated — starting from a low level in international comparison — French women have become on average even more educated. In Figure 6b, we present the employment rate gap, defined as the female employment rate relative to male for a given education level. We see that for all education levels females have improved their labour force participation as compared to their male counterparts, but the gap remains very high, in particular for the low-educated group. Whereas females with more than high school have close to 90% of the employment rate of males is still 60% of that of males. This means that a convergence in employment rate has largely occurred, even if a large gap in participation remains by education.

Figures 6c and 6d present the evolution of female median gross earnings and median hourly wage relative to males, by education level. Although we see a reduction in the gender wage gap in the 1980s and 1990s, the recent period shows no sign of further improvements. What is more, the reduction of the female/male wage gap is concentrated in the mid- and higher-education groups. The gender gross earnings gap is significantly larger as women are more likely to work part-time. Overall the gender inequalities story over the last 50 years is one of major progress in terms of labour market participation and education level, but with stagnating wage gap since the late 1990s. Recent research on the gender wage gap highlights that it is now mostly related to the wage penalty of motherhood (Meurs & Pora 2019).

2.3 Migrant vs natives

The question of migration, and the integration of migrants into the French labour market, has been politically very divisive in France. In Figure 7 we present a similar analysis for education attainment, employment, earnings and hourly wage, comparing the evolution of migrant workers to native workers. In France, it is unlawful for surveys to ask about ethnicity, so research on discrimination and minorities rely often on the migrant status or the information about the place of birth of parents (Aeberhardt et al. 2010).

In Panel a, we see that those born abroad are predominantly represented in the first two deciles of household income, and this pattern was somewhat reinforced over the 1996-2019 period: The share of those born in France in the first decile has increased from 20% to 23%. The employment rate of immigrants (Panel b) is also lower than those born in France, especially for women, and the gap has actually grown over time since the 1980s for both males and females. Given that relative hourly wages do not exhibit any sign of convergence towards the wage level of those born in France, the relative earnings (Panel c) of immigrants have

tended to decline, notably for women.

Overall, we see that over the period of study, the relative position of migrants has tended to deteriorate relative to French natives. This means that although income inequality has decreased over the period, the inequality between migrants and natives has tended to increase, leading to a higher concentration of migrants among the poorer sections of French society.

2.4 Spatial inequalities: Paris and the French desert?

Another dimension that matters in assessing the evolution of inequalities is geography. France is a highly centralised country, where both economic and political activities are concentrated in the Paris region. Recently, the yellow vest riots have highlighted that there was a specific feeling of being left aside by inhabitants of the urban periphery. In Figure 8 we present similar statistics to Figures 6 and 7, but this time splitting the sample according to the place of residence. We distinguish the evolution of employment and earnings along residence in Paris, large urban, other urban and rural areas.

In Panel a, we see that there is no great movement in the distribution of individuals in the income distribution by location: individuals in rural areas are less likely to be in the first two deciles and individuals in Paris are more likely to be in these bottom deciles. Employment rates (Panel b) used to be higher in Paris than in the rest of the country, and it is now higher in rural areas (See Kramarz et al. 2022, for a detailed analysis of spatial inequalities in labour earnings.). In terms of hourly wage and earnings, there is somewhat of a catch-up between rural and other urban locations relative to the position of Paris, even though there remains a gap, even from large urban areas compared to the capital.

Overall, these trends do not point to dramatic increases in inequality across location in France over the period of study.

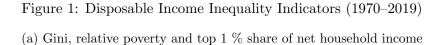
3 Conclusion

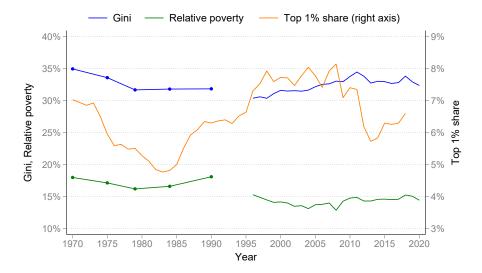
We document the evolution of household pre-tax and disposable inequality in France since the late 1960s using household surveys. Disposable income inequality declined over the 1960s and 1970s and remained stable thereafter.

Other dimensions than income might affect the perception of inequality. We have thus analysed changes in household composition, gender, immigration and geography as potential margins where the inequality could be more salient. We have found that while income inequality remained stable, the social composition of households in low-income deciles has changed towards more low-educated individuals, more individuals born abroad and more households with no working adults.

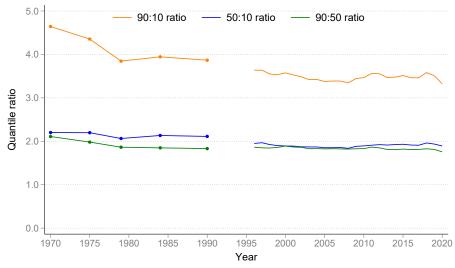
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(b) Inequality ratios of disposable household incomes



NOTES: The figure depicts measures of disposable income inequality indicators, from the Gini, the relative poverty rate, the top 1% share (panel A) to inter-percentile ratios (Panel B).

SOURCE: Enquête Revenus Fiscaux et Sociaux, Insee; for the series on top 1% disposable income, world inequality lab (WIL).

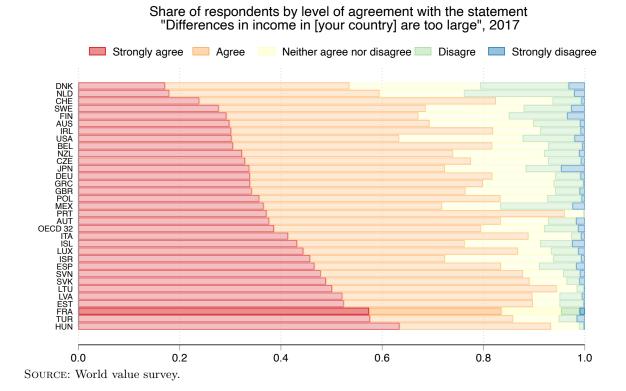


Figure 2: Perception of inequality by country

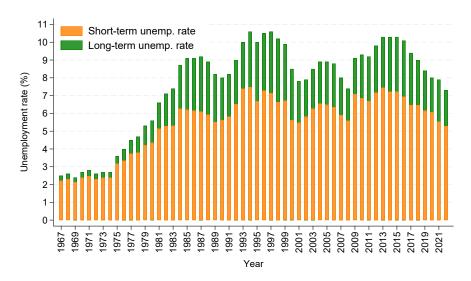
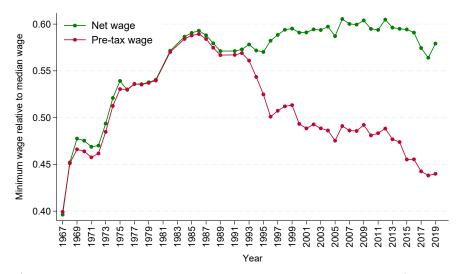


Figure 3: Unemployment and the minimum wage (1967–2022)

(a) Unemployment rate by duration of unemployment

(b) Minimum wage relative to median wage

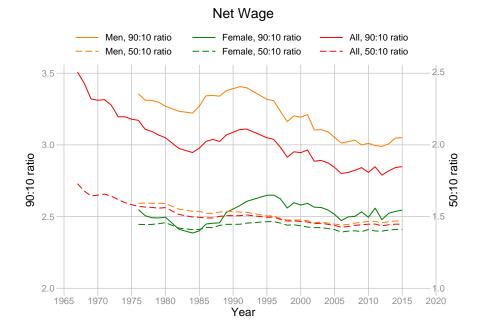


NOTES: Panel a) presents series of the ILO unemployment rate split into long duration (more than a year) and short duration (less than a year). Panel b) presents the evolution of the national minimum wage as a fraction of median wage, either in net terms (i.e., net of employee and employers' social security contributions) or in pre-tax term (or labor cost).

SOURCE: Insee, French Labour Force surveys, séries longues sur le marché du travail (panel a); panel DADS 1967-2019 (panel b).

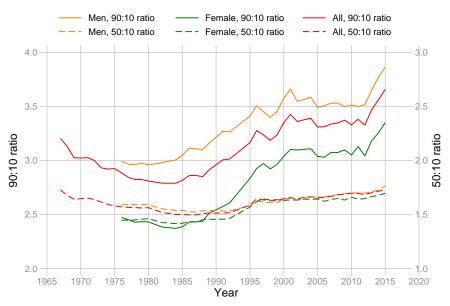
Figure 4: Pre-Tax vs Net Wage Inequality Ratios

(a) P90/P10 Net Wage Ratios, France 1967-2019

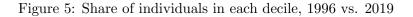




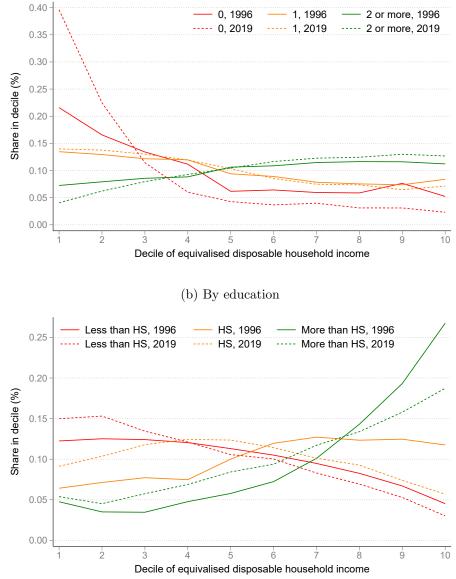
Labour cost



NOTES: Pre-tax wage refers to the labour cost, i.e., posted wage and employer social security contributions, including reductions to employer contributions; net wage refers to the wage net of employer and employee social security contributions. Source: DADS 1967–2019.



(a) By number of working adults in the household



NOTES: Theses graphs represent the share of individuals in a particular category in each decile of equivalised disposable household income. For instance, in 2019 40% of individuals in household with no working adults are in the decile 1.

SOURCE: Fiscal survey, ERFS, Insee.

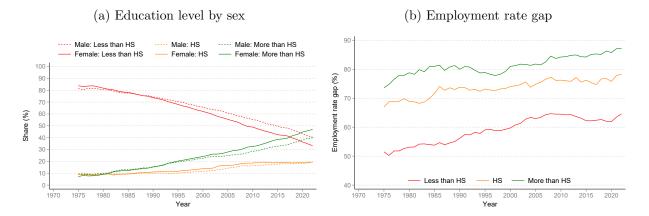


Figure 6: Gender inequalities

(c) Earnings gap (female relative to male of the same (d) Hourly wage gap (female relative to male of the same education level)



education level)

NOTES: The employment rate gap is computed as female relative to male of the same education level, likewise for the earnings gap and hourly wage gap. SOURCE: DADS data 1994-2019.

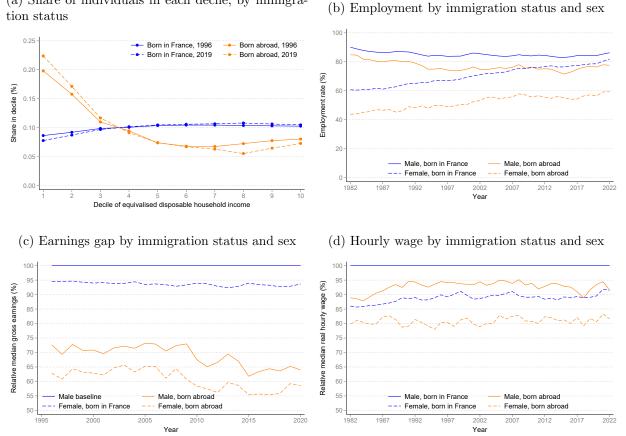


Figure 7: Immigration status inequalities

(a) Share of individuals in each decile, by immigra-

NOTES: The baselines in Panels 7c and 7d are per immigration status. SOURCE: Fiscal survey for panels (a) and (c). Labor force survey for panel (b) and (d).

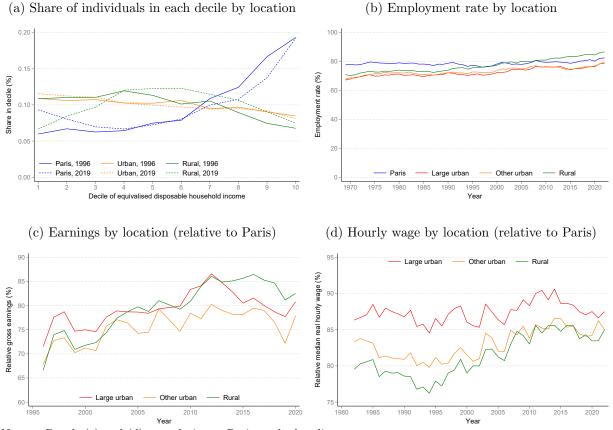


Figure 8: Spatial inequalities

NOTES: Panels (c) and (d) are relative to Paris as the baseline.

SOURCE: Fiscal survey for panels (a) and (c). Labour force survey for panels (b) and (d).