



Institute for Fiscal Studies

Country Studies: Inequalities in Europe and North America
A parallel study to the IFS Deaton Review

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Inequality in Austria in recent decades



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Inequality in Austria in recent decades	1
1. Executive summary	2
2. Institutional background	3
3. Notes on measurement and definitions	5
4. Individual employment and earnings	8
4.1 Trends in employment	8
4.2 Trends in hourly wages (employees only)	12
4.3 Trends in hours worked (employees only)	17
4.4 Self-employment	23
5. Labour market institutions	26
5.1 Collective bargaining coverage and unions	26
5.2 Social insurance	27
6. Household incomes	30
6.1 Trends in household composition	30
6.2 Earnings and incomes among working households	33
6.3 Inequality in incomes among all households	36
6.4 Immigration	39
7. Appendix	41

1. Executive summary

Austria is a high-income country with a progressive income tax system and an extensive welfare state. Among OECD member countries, Austria ranks eighth in GDP and has the seventh lowest Gini index. Thus, income inequality in Austria is moderate compared to other countries. There were no major changes in inequality over the 15 years from 2004 to 2019. This statement is confirmed by inequality indices for three different income measures: hourly wages, individual gross earnings, and disposable household income. The indices suggest that inequality remained unchanged or even declined. Not only has overall income inequality remained stable, but also income gaps between population groups have remained fairly constant. We show that income gaps by gender and between educational categories have remained stable since the early 2000s.

The analysis of income inequality, however, hides important compositional developments. Austria has seen a sustained rise in employment rates among prime working-age (25–60-year-old) women over the last five decades, from 47% in 1968 to 74% in 2020. The employment rate for men fell from high levels above 90% in the 1970s to 85% in the late 1990s and early 2000s and has slightly increased to 87% in the last decade. Average hours worked among employees have fallen slightly for men, mostly since the early 2000s. Because the increase in female labour force participation is mostly driven by part-time jobs, the average hours worked by women have fallen substantially by 10 hours since 1988.

The expansion of professional and higher education has led to a large rise in educational attainment for both men and women. In 2020, 20% of prime working-aged people had high levels of education (ISCED 6–8), and the share of those with just compulsory schooling (ISCED 0–2) dropped from 48% in 1980 to 12% in 2020.

The share of individuals living in a working household has been roughly constant at slightly above 90% over the last two decades. But this is not the case for the lowest educational levels, among whom this share has dropped by about 10 percentage points since 1980. Over time the disposable household income of working households has increased, but it has declined among non-working households. They seem to be worse off relative to working households in 2019 than they were 15 years earlier. In line with this, we see that median real disposable household income rose from 2004 to 2019 across all education groups except the lowest educated, for whom the income profile is almost flat.

The share of immigrants in the Austrian population increased in several waves from 2% in 1970 to 20% in 2020. A significant group of immigrants comes from central and eastern European countries that joined the EU in 2004 and 2007, respectively. Austria imposed restrictions on labour market access for workers from these new EU member states for a period of 7 years. However, after full labour market access was granted, the number of immigrants from these countries began to increase in 2011. Immigrants are clustered in the lowest income deciles.

We have decided to end our observation period in 2019. Labour market statistics during the COVID pandemic are difficult to interpret due to public health measures and significant labour market interventions.

2. Institutional background

Provision of the welfare state

The Austrian public social security system is organised at the federal level. It is a mandatory system that covers all workers with private-sector contracts, which includes some workers in the public sector. Civil servants have a separate social security system which is also mandatory.

Social security contributions for health insurance, pension insurance, unemployment insurance (UI) and insurance for workplace accidents amount to 40% of gross earnings up to a contribution cap. They are paid in equal parts by employers and employees. The employee part of social security contributions is withheld from gross earnings before income tax. Over time there have been minor changes in the contribution rates of separate insurance categories, but overall these have not affected the labour costs of employers or net incomes of workers. The contribution cap is adjusted annually and reflects wage growth and inflation. This means a constant share of the workforce have earnings above the contribution cap each year.

The total expenditure per employee is the sum of the employee's gross wage, the employee's social security contributions and the employer's social security contributions. Both contributions amount to about 20% of the gross wage, and social security contributions have changed little over time. Thus, the employer's cost is about 16% (= 20/120) of the employee's gross wage plus the employee's own social security contributions.¹

Unemployment insurance benefits are available to workers with a minimum contribution period. The replacement rate of benefits is 55% of net earnings in the calendar year prior to job loss. Benefits are capped at a maximum level. In addition to basis benefit a fixed daily amount is added for each dependent family member and there is a benefit top-up for low income earners.

The duration of UI benefit payment depends on age and contribution time and varies between 20 and 52 weeks. Once UI benefits are exhausted the worker can apply for unemployment assistance (UA). UA benefits have a lower replacement rate than UI benefits and are means-tested. Apart from a reform in 1989 that extended benefit durations for older age groups and increased the benefit level for low earnings, there have not been any major changes to the UI system.

The public pension system in Austria is part of the social security system and relatively generous benefits are the main source of income of retirees in Austria. In the early 2000s Austria implemented a series of pension reforms which restricted access to early retirement by increasing entry ages and introducing benefit reductions for retiring before the statutory retirement age. These reforms are contributing to increases in the labour force participation of older workers.

Sickness leave is organised within the health insurance systems. Shorter sickness absences, up to 6 weeks per year, are covered by the employer. Absences above 6 weeks are covered by the

¹ Other countries have produced charts on the Gini coefficient over time of gross individual earnings and total employer cost and on annualised growth in gross earnings and employer cost, but that is not possible for Austria as we do not have reliable data on employer cost.

health insurance. Sickness benefits cover 100% of wage earnings up to 6 weeks, thereafter the replacement rate is reduced.

Austria has a generous system of **family benefits**. All parents receive a fixed monthly *child benefit* for each child up to the age when they leave public education. All mothers and/or fathers are eligible for *parental leave benefits* which are available for up to 3 years after the birth of a child. Parents can choose between earnings-dependent and flat-rate benefit options.

In general, public benefits are not taxable. The exception are pension benefits and sick-leave benefits.

Provision of public services

The education system in Austria is public and financed by the government. The private school sector is small. Catholic private schools are subsidised by the government.

Most public services are organised at the federal level, except for compulsory public education and social welfare benefits, which are organised at the level of the federal state (compulsory education) or the municipality (welfare benefits, childcare, housing benefits).

Tax system

In Austria, individuals are taxed on their total income, which includes income from various sources, such as employment, self-employment, capital gains, and rental income. Austria offers various deductions and allowances that can reduce your taxable income, such as deductions for mortgage interest, child allowances, and contributions to private pension plans. In particular, the single earner in a household with children can claim a deduction. The income tax system is progressive with a zero rate up to approximately €11,000. After that, marginal tax rates increase to as high as 50%. In addition, individuals are subject to social security contributions, which help fund the country's healthcare and pension systems. These contributions are usually shared between employees and employers and vary according to income. After income tax, the second most important federal tax is a value-added tax on the sale of goods and services.

Wage setting

Wage setting in Austria is dominated by collective bargaining. Wage negotiations occur at the sectoral level, where employees are represented by their particular division of the Austrian Federation of Trade Unions and employers are represented by their relevant section of the Austrian Federal Economic Chamber. Collective wage contracts are binding for all firms as well as for all employees. While there is no legal minimum wage in Austria, the agreed-upon wages in collective agreements cannot be undercut. Within firms, payments above the collective bargaining wage can be negotiated either individually or between the works council and management.

The coverage of collective bargaining agreements is almost universal for private and public sector workers, and according to the OECD has been at 98% since the 1960s. Collective bargaining coverage is independent of union membership.

3. Notes on measurement and definitions

Unit of analysis and sample:

The analysis relies on data from the Austrian Labour Force Survey (Mikrozensus, MZ). It covers quarterly cross-sectional samples of Austrian households from 1970 to 2021. The advantages are a large sample size (about 22,000 households interviewed by quarter) and detailed variables. However, before 2011 there is no income information available in the survey, with the exception of the years 1989 and 1999. In later years the only income variable is net monthly wages.

We also use Austria surveys from EU statistics on income and living conditions (EU-SILC). We use annual cross-sectional data of Austrian households from 2004 to 2019. This dataset is smaller than the MZ: about 6,000 households and 14,000 individuals are surveyed each year. But it has more detailed information on household and individual income by income components

An alternative data source we use are administrative registers from the Austrian Social Security Database (ASSD) which cover the universe of employment in the private sector from 1972 to 2019 with top-coded gross earnings measures. Education is not recorded in the social security register.

- The unit of analysis is the individual. We mostly restrict the analysis to individuals between 25 and 60 years of age. Household income is equivalised using the modified OECD equivalence scale.
- We winsorise individual income at the top 1% of the gender-specific income statistics and we winsorise household income at the top 1% overall.

Definitions:

- **Employment rate (MZ and SILC):** the fraction of the population that is employed, according to employment status.
- **Hours of work (MZ, SILC):** actual hours worked last week, including overtime and extra hours minus hours missed from work. Working hours are consistently available from 1988 onwards.
- **Wages (MZ):** monthly net income from employment in the main job, including holiday and Christmas bonus and payments for regular overtime. We convert nominal wages into real terms in calendar year 2019 or financial year 2019–20 prices, using the CPI. Hourly wages are computed by dividing monthly net income by actual hours of work (per week \times 4). Available for all years since 2011.
- **Wages (SILC):** monthly pre-tax annual earnings from employment in all jobs, including holiday and Christmas bonus and payments for regular overtime. We convert nominal wages into real terms in calendar year 2019 or financial year 2019–20 prices, using the CPI. Hourly wages are computed by dividing monthly gross income by actual hours of work (per week \times 4). Available for all years since 2007. Before 2007 it is not possible to distinguish between dependent employment and self-employed work.

- **Disposable household income (household equivalised income after deducting taxes and adding benefits and tax credits):** we compute equivalised disposable household income and equivalised gross household income and convert to real income using 2019 prices.
- **Earnings (ASSD):** gross annual nominal individual earnings of private sector employees.
 - Sample: Individuals employed in private sector job on 1 September each year. We use all blue- and white-collar workers, excluding apprentices and civil servants. We exclude workers with missing earnings or earnings equal to zero.
 - Gross earnings in the job with highest monthly earnings.
 - Gross earnings include employee contributions to the social security system, but exclude employer contributions.
 - Annual earnings are defined as the annualised daily gross earnings in the main job (daily earnings × 365).
 - Earnings are censored at the contribution cap which affects between 8% and 14% of males each year and between 1% and 3% of females).
 - Real earnings: price adjusted by CPI basis 2019.
 - Employment rate is defined by annual employment over the resident population at the beginning of the year (Statistical Database Statistik Austria).

Splits:

- **Sex:** female, male
- **Education (MZ):** Available in MZ since 1980. We work with the following educational groups, based on International Standard Classification of Education (ISCED) classifications: ISCED 0–2, ISCED 3, ISCED 4–5 and ISCED 6–8. In Austria we use the following mapping:

Highest educational degree	ISCED
Compulsory education or less	ISCED 0–2
Apprenticeship	ISCED 3
Vocational middle school	ISCED 3
High school	ISCED 3
Vocational high school	ISCED 4–5
University	ISCED 6–8

- **Household type:** Single without dependent children; single with dependent children; couples without dependent children; couples with dependent children; adult child; other.

Parents of adult children go in the 'other' category. A dependent child is a child aged 0–15 or 16–19 and in full-time education, living with parents.

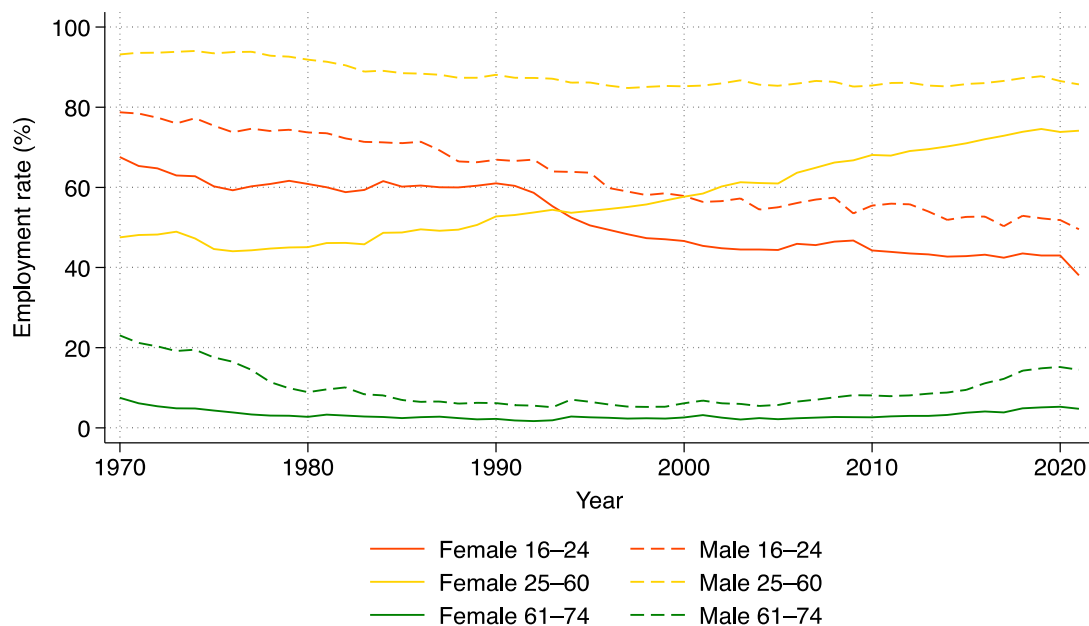
4. Individual employment and earnings

This section looks at trends in individual employment and earnings. With respect to earnings, we first look separately at hourly wages and hours worked, before bringing them together in a set of charts on earnings inequality. Due to a lack of reliable data on hours worked for the self-employed in the Austria, we restrict the analysis of hourly wages and hours to employees, but include both employees and the self-employed in the analysis on total earnings.

4.1 Trends in employment

Figure 1 shows that since 1970, Austria has seen a large increase in the employment rate of prime-age women, from 47% in the 1970s to 74% in the last decade. Men in the same age group experienced a decline in employment rates from almost full employment at rates above 90% in the 1970s to 85% in the late 1990s and a slight increase in the early 2000s to 87%. This is confirmed by Figure 43, which is based on EU-SILC data. Among young female and male workers, employment rates fell mostly during the 1990s and 2000s. Workers above age 60 are the age group with the lowest employment rates throughout. While women employment rates have been consistently low, for men they show a U-shaped pattern with the highest employment rates in the 1970s and after 2010.

Figure 1. Employment rates by age and sex, over time



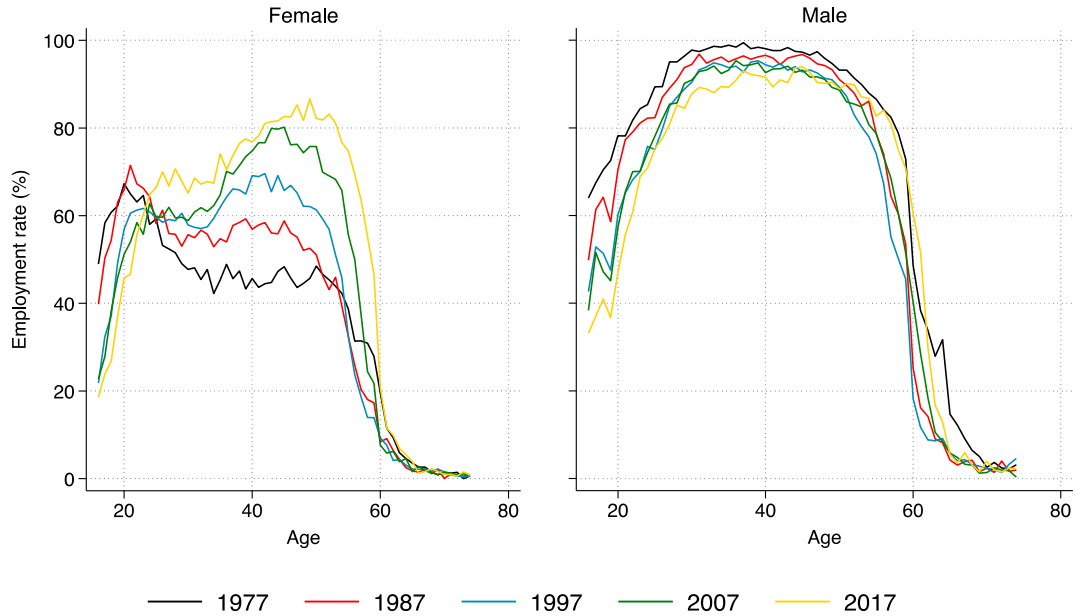
Note: Sample is individuals aged 16–75.

Source: Austrian Mikrozensus.

Figure 2 shows that life-cycle patterns in employment rates shifted to older ages between 1977 and 2019. Female and male employment rates fell during the youngest ages due to longer education and increased at older ages due to restrictions in the conditions of entry to early retirement schemes. The most dramatic changes happened to female employment rates after

the end of the childbearing periods. For women in their mid-40s employment rates almost doubled from 40% to 80%.

Figure 2. Employment rates over life cycle by sex, selected years

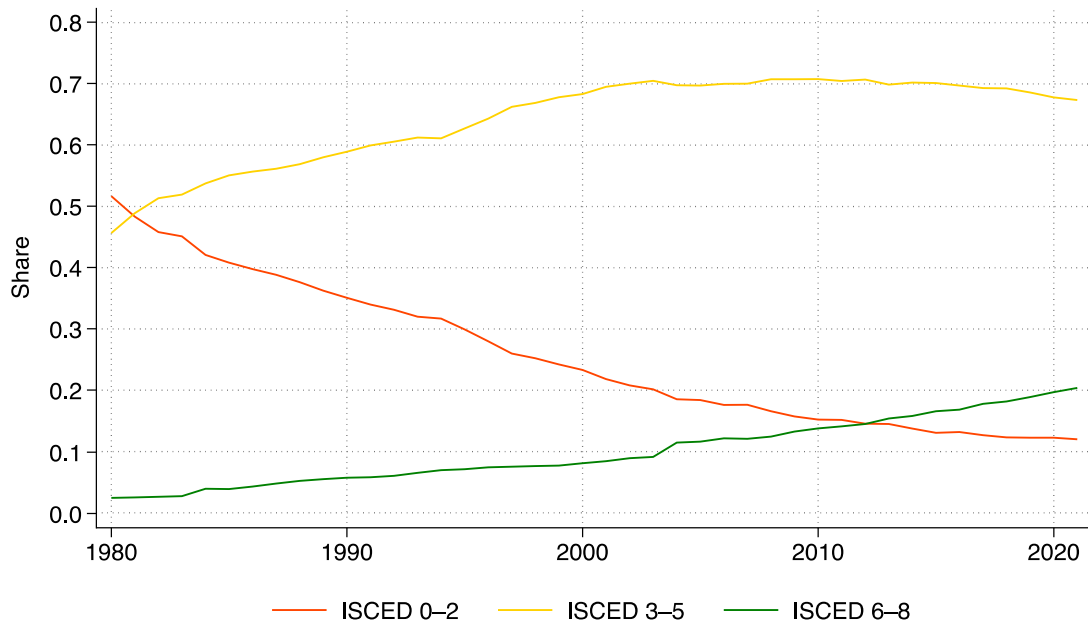


Source: Austrian Mikrozensus.

We now focus on individuals in their prime working years (aged 25–60). Since the 1980s, there has been a strong expansion of secondary education (ISCED 3–5) which stabilised around 2000 and a continuing expansion of higher education (ISCED 6–8) in Austria. As a consequence of this, educational attainment has increased significantly; as shown in Figure 3, the share of individuals with only compulsory education dropped sharply from 50% in 1980 to 12% in 2020. By 2020 the majority of women and men were in the middle education group (69%), followed by the highly educated (21%) and individuals with only compulsory education (9%).

The shifts between low education and secondary education have been more pronounced for women than for men, reducing the gender gap in education. This is because women were significantly more likely to just have compulsory education in 1980 than men (Figure 4). The increase in the share of university educated was similar for both genders and in recent years we even see women overtaking men in the share of university educated.

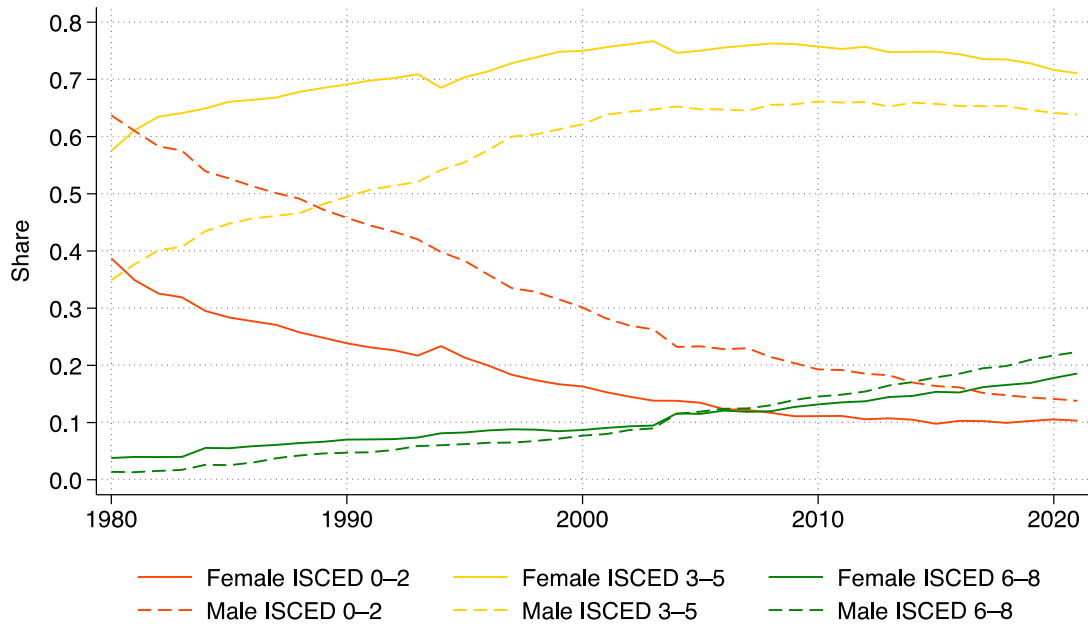
Figure 3. Educational attainment over time



Note: Sample is individuals aged 25-60 who have completed full-time education.

Source: Austrian Mikrozensus.

Figure 4. Educational attainment by sex, over time



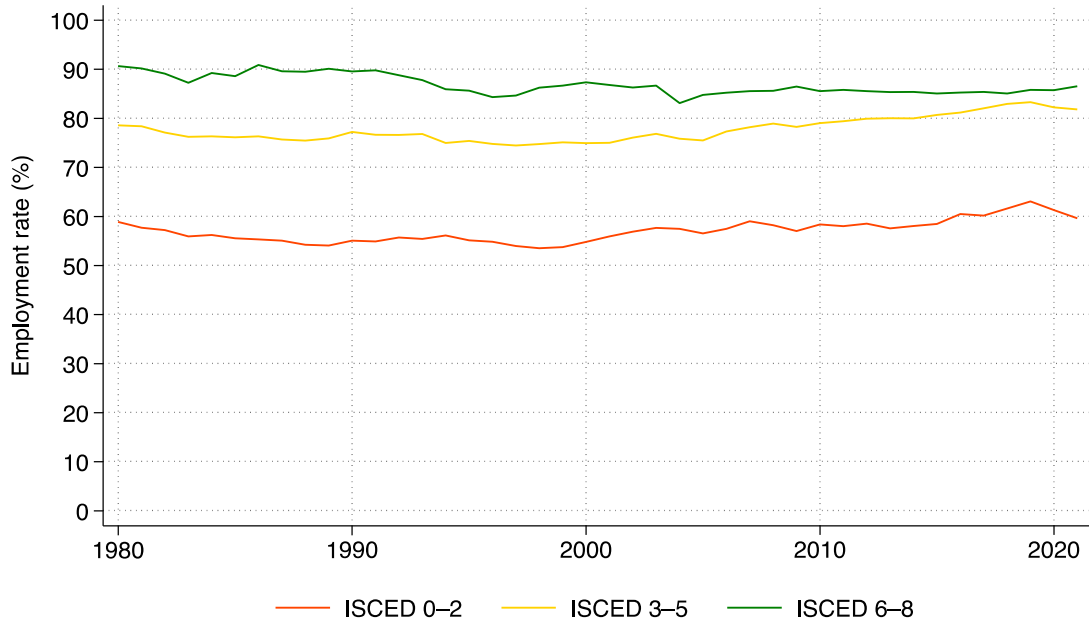
Note: Sample is individuals aged 25-60 who have completed full-time education.

Source: Austrian Mikrozensus.

Figure 5 shows that trends in employment have been relatively stable by educational background. But the gap in employment rates between secondary educated and higher educated has had

almost closed by 2020, due to an increased in employment rates of secondary school educated. These trends differ by sex, however, as can be seen in Figure 6. Male employment rates have decreased for every education group since 1980, and especially for the low educated where they dropped from 90% to 70% between 1980 and 2020. Female employment rates have risen gradually over time in all education groups and most strongly in the middle education group.

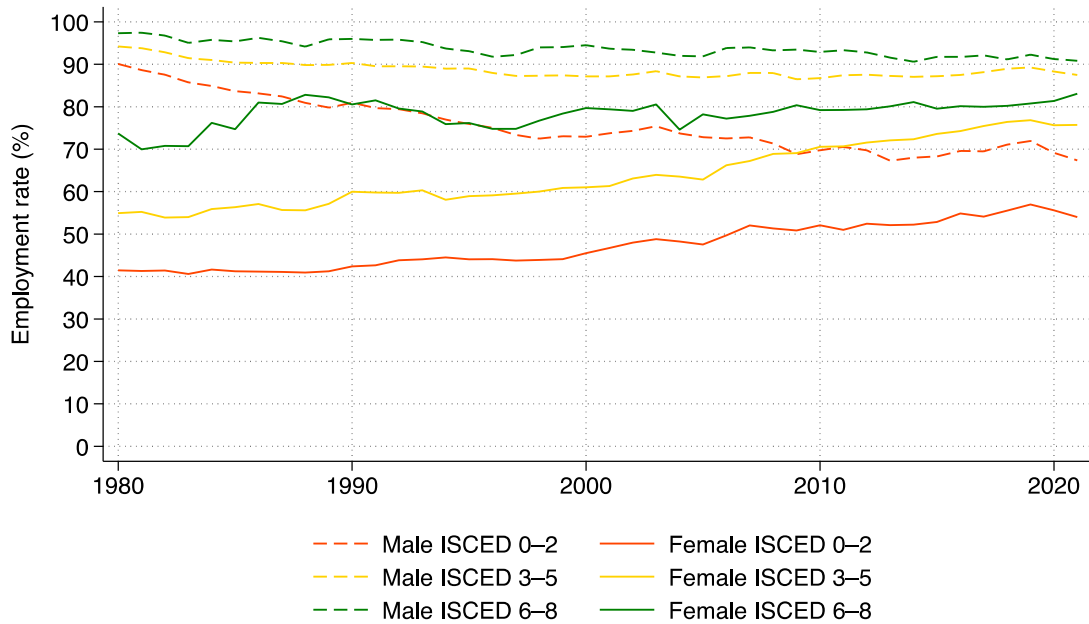
Figure 5. Employment rates by education, over time



Note: Sample is individuals aged 25–60 who have completed full-time education.

Source: Austrian Mikrozensus.

Figure 6. Employment rates by sex and education, over time



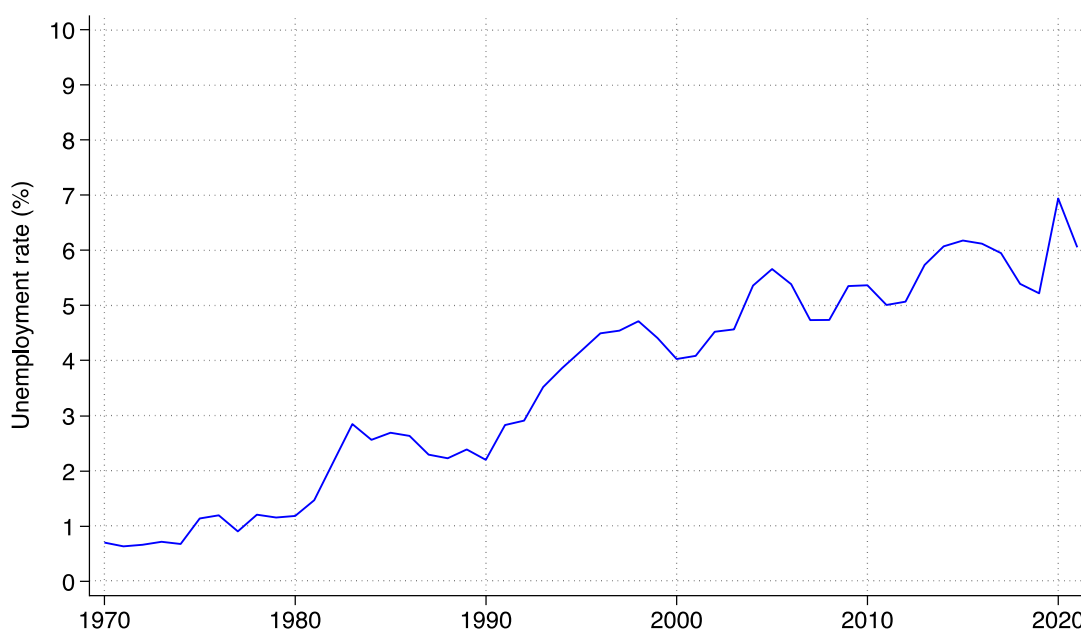
Note: Sample is individuals aged 25–60 who have completed full-time education.

Source: Austrian Mikrozensus.

During the 1970s Austria had almost full employment, with unemployment rates below 1%. The subsequent decades have seen an upward trend in unemployment rates. Compared to this trend, cyclical variation in unemployment has been modest in Austria. The peak unemployment rate of 6% in 2015 was followed by a decline in the subsequent years and a spike in 2020 due to the COVID-19 pandemic.

Unemployment rates differ strongly by education (see Figure 45 in the Appendix). Starting in 1990, the unemployment rate among the lowest educated (ISCED 0–2) grew by more than in the overall population. By 2020 the unemployment rate of workers with only compulsory education was almost three times as high as in the population as a whole. The dramatic increase in the unemployment rate among the low educated may be partly driven by selection, as this group has been shrinking a lot over time (see Figure 3). A second explanation is skill-biased technological change and the reduced job opportunities for the low educated.

Figure 7. Unemployment rate over time



Note: Sample is individuals aged 25–60. Unemployment rate is calculated as the fraction of labour force aged 25–60.

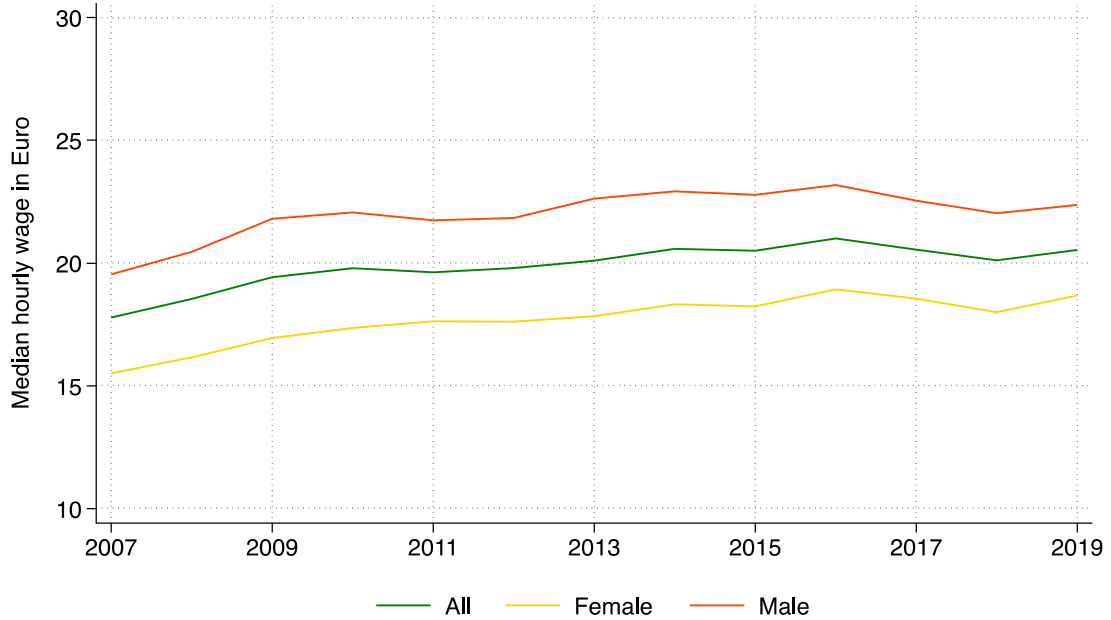
Source: Authors' calculations using the Austrian Mikrozensus, 1970–2021.

4.2 Trends in hourly wages (employees only)

Hourly wages can be observed from 2007 onwards in the EU-SILC and net hourly wages are observed from 2011 onwards in the MZ. We present results on pre-tax hourly wages for employed workers from the EU-SILC in the main text and corresponding figures based on the MZ in the Appendix for comparison (Figures 46–51). Note that no information on the working hours of the self-employed is available in Austria. In addition, the self-employed and employees can only be distinguished in the EU-SILC after 2006.

Over the observation period we see a very stable development of median real hourly wages. Figures 8 and 9 show roughly constant gaps in median wages between men and women. The largest gap is observed for university-educated workers (ISCED 6–8).

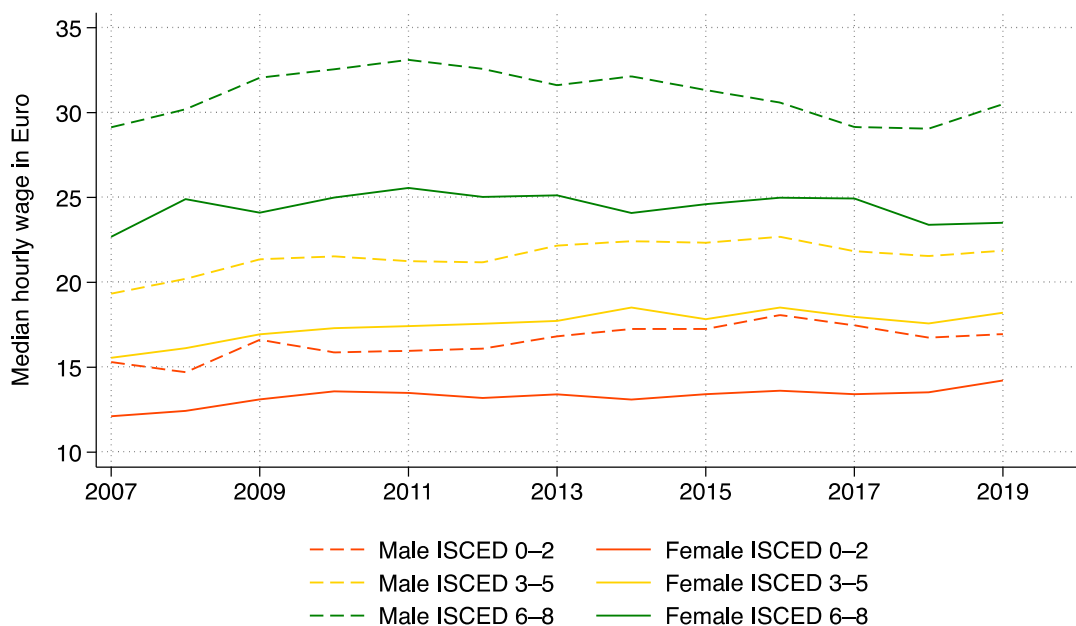
Figure 8. Median real hourly wage among employees, overall and by sex, over time



Note: Sample is employees aged 25–60. Wages are in 2019 prices.

Source: EU-SILC.

Figure 9. Median real hourly wage among employees, by sex and education, over time

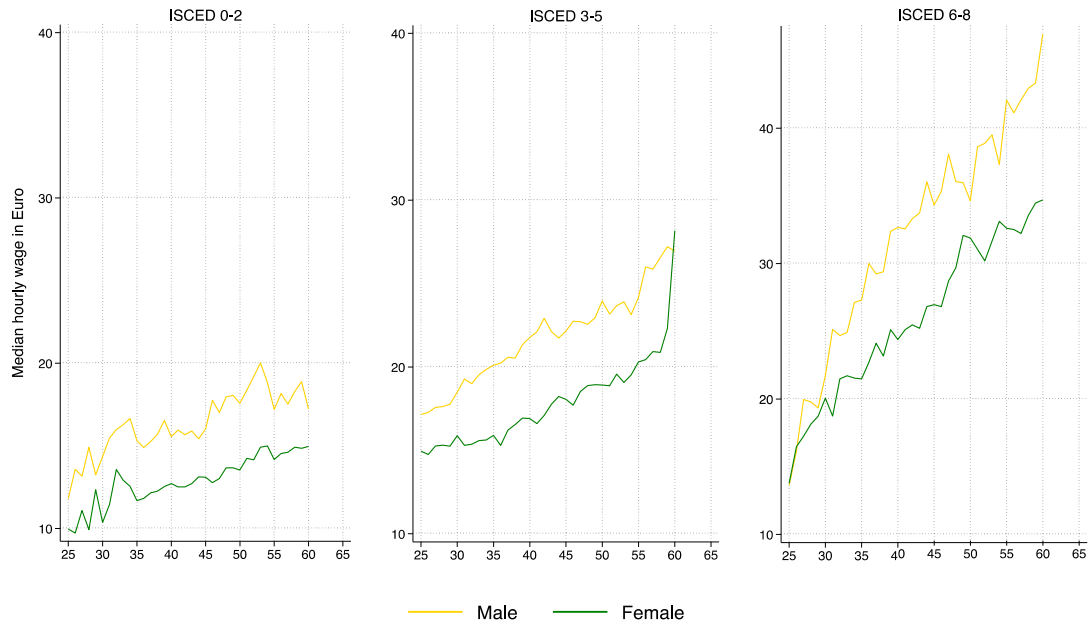


Note: Sample is employees aged 25–60 who have completed full-time education. Wages are in 2019 prices.

Source: EU-SILC.

Figure 10 shows median wages over the life cycle by sex and education, during the period 2011–20. The slopes of wage profiles over the life cycle increase strongly with education. Men and women with only compulsory education (ISCED 0–2) have almost flat profiles over the life cycle, with a constant gap between genders. Secondary-educated men and women experience some wage growth over the life cycle, with a slightly steeper profile for men (ISCED 3–5). For those with university degrees (ISCED 6–8), wage profiles are significantly steeper. Men and women in this category start out with similar median wages at age 25, but the gender wage gap opens up from age 30 onwards.

Figure 10. Median real hourly wage among employees over life cycle, by sex and education

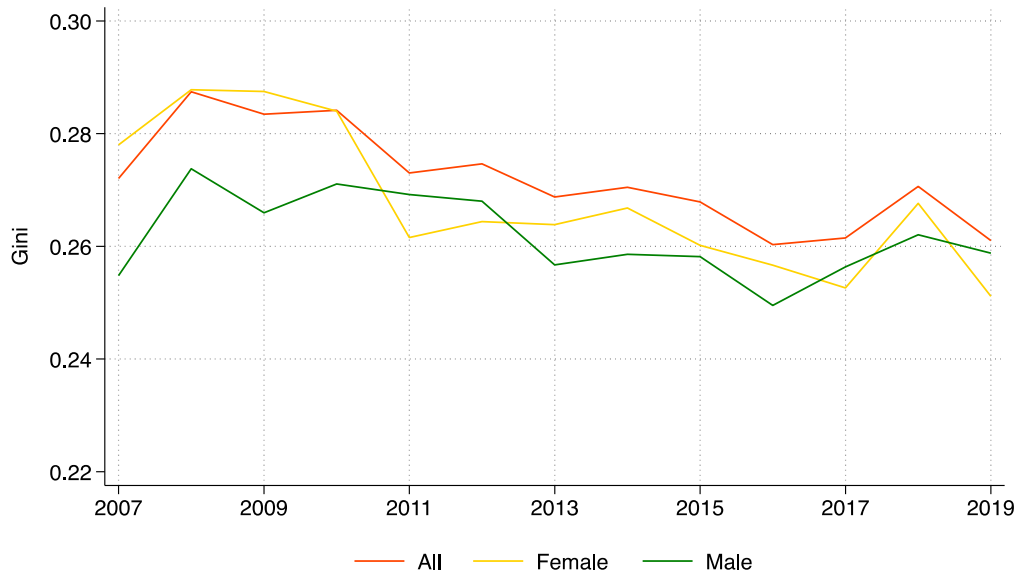


Note: Wages are shown in 2019 constant-wage terms. Individuals in the bottom and top percentiles of the gender- and year-specific hourly wage distributions are excluded.

Source: EU-SILC.

Figures 11 and 12 plot trends in wage inequality using the Gini coefficient, the 90:10 ratio and the 50:10 ratio. Wage inequality in Austria is stable or even declining over the period 2007–19. In Austria the Gini coefficient is about 26% in 2019 and the 90:10 ratio is about 3.3. There are hardly any differences in wage inequality by gender.

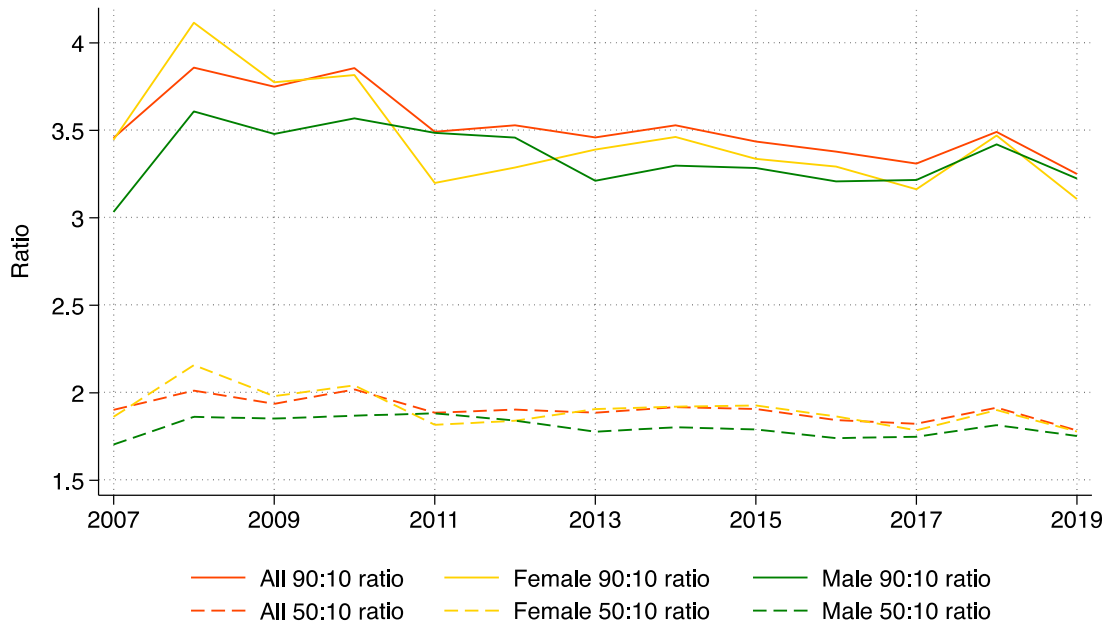
Figure 11. Gini coefficient of hourly wages among employees, overall and by sex, over time



Note: Sample is employees aged 25–60. The top and bottom 1% of the gender-specific wage distribution are excluded.

Source: EU-SILC.

Figure 12. 90:10 and 50:10 ratios of hourly wages among employees, overall and by sex, over time

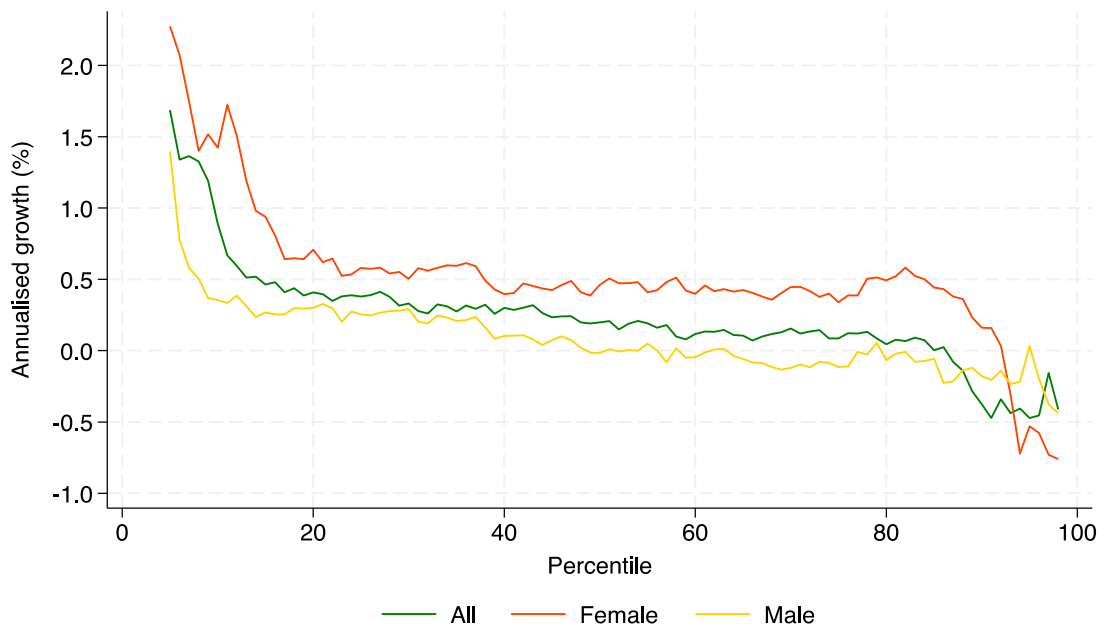


Note: Sample is employees aged 25–60. The top and bottom 1% of the gender-specific wage distribution are excluded.

Source: EU-SILC.

Figure 13 looks in more detail at changes in hourly wages across the wage distribution during the period 2010–18. Overall, real hourly increased mostly strongly at the bottom of the distribution, particularly for women. Wage increases were stable at the centre of the distribution, with higher growth for women (+0.5%) and a stagnation for men (0%). At the very top of the distribution we see negative wage growth mainly for women.

Figure 13. Annualised growth in hourly wages among employees by wage percentile, 2010-18



Note: Sample is employees aged 25–60. We do not include the bottom and top 1% when calculating the wage percentiles.

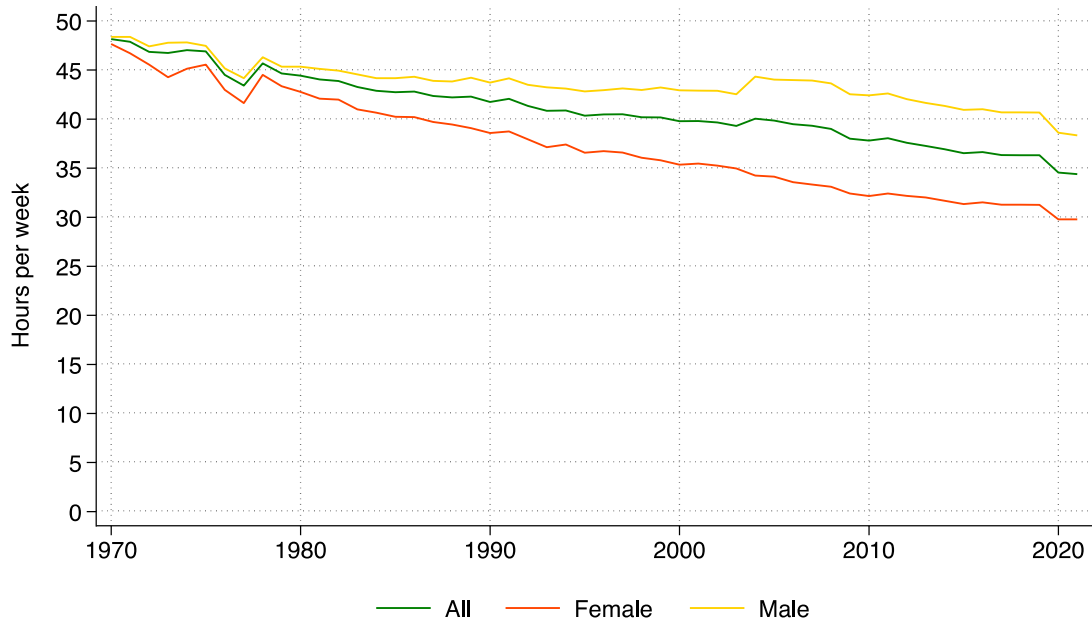
Source: EU-SILC.

4.3 Trends in hours worked (employees only)

We use the Austrian Mikrozensus to show trends in average hours worked, because this source provides a longer time series, starting in 1988.

Figure 14 shows that average hours worked among employees have declined since the late 1980s. For men, working hours declined by about 5 hours from 45 per week to 40 per week and for women they declined more from 40 hours to 30 hours, which can be explained with the increasing prevalence of part-time work among women.

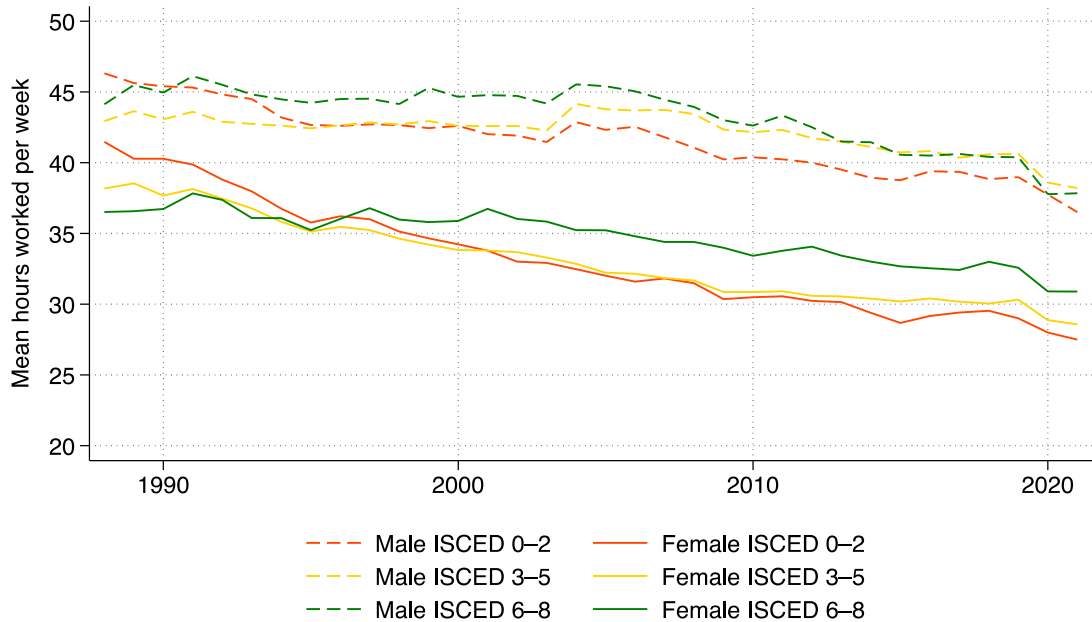
Figure 14. Mean hours worked among employees, overall and by sex, over time



Note: Sample is employees aged 25–60. Hours include regular overtime and have been top-coded to 85 hours per week.

Source: Austrian Mikrozensus.

Figure 15. Mean hours worked among employees, by sex and education, over time



Note: Sample is employees aged 25–60. Hours include regular overtime and have been top-coded to 85 hours per week.

Source: Austrian Mikrozensus.

Figure 15 shows that the decline in weekly working hours by women is driven by low- and middle-educated workers, while highly educated women had a quite stable development of average working hours. Among men working hours in all educational categories declined in parallel.

Figure 16. Annualised growth in mean hours worked among employees by hourly wage ventile, 2011–19



Note: Sample is employees aged 25–60. Hours include regular overtime and have been top-coded to 85 hours per week.

Source: Austrian Mikrozensus

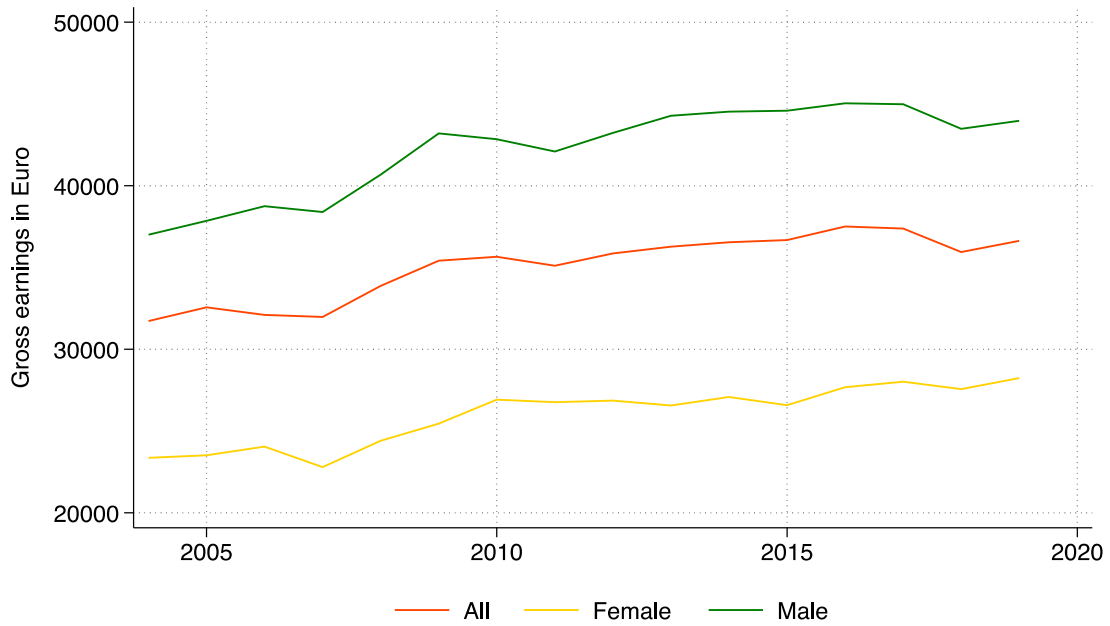
Figure 16 shows that over the period 2011–19 working hours developed uniformly over the wage distribution.

4.4 Inequality in individual earnings among those in work (employees and self-employed)

We now turn to trends in individual earnings based on the EU-SILC for 2004–19.

Figure 17 shows trends in median earning by gender. Having increased slightly until 2009, median earnings have since been stable for both men and women. The average annual earnings growth from 2008 to 2019 was 0.07% and cumulatively median earnings grew by 8.1% over this period. For comparison, the average annual growth in median earnings from 2004 to 2008 was 1.7%. The gender gap in median earnings is unchanged over time. We find that the same stable pattern holds if we consider earnings by gender and education in Figure 18.

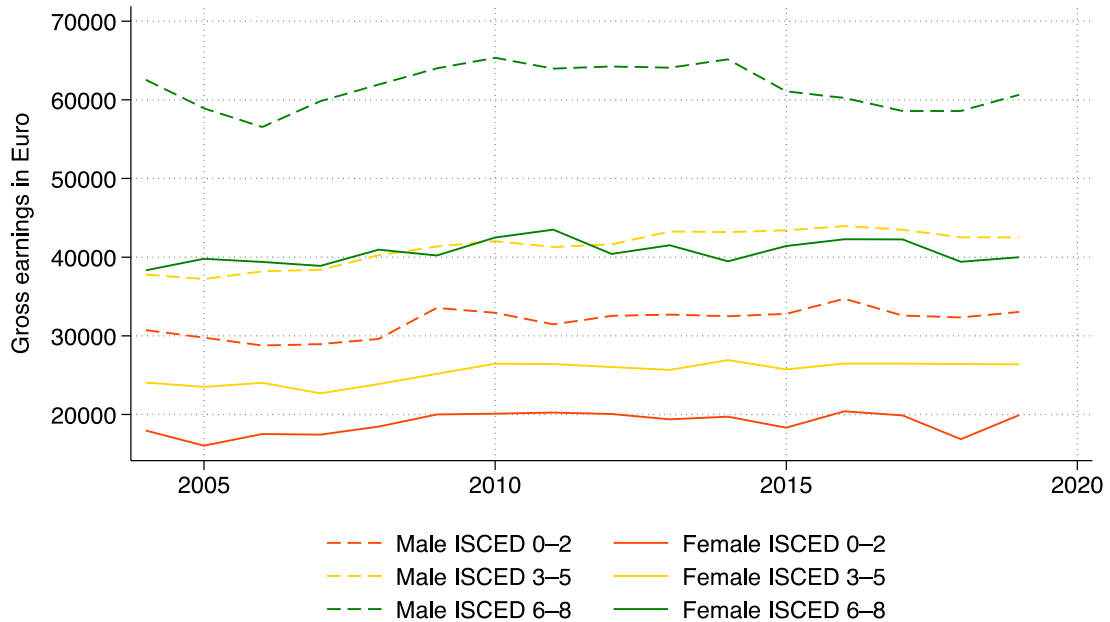
Figure 17. Median real gross individual earnings, overall and by sex, over time



Note: Sample is individuals in work aged 25–60. Gross earnings are in 2019 prices.

Source: EU-SILC.

Figure 18. Median real gross individual earnings, by sex and education, over time



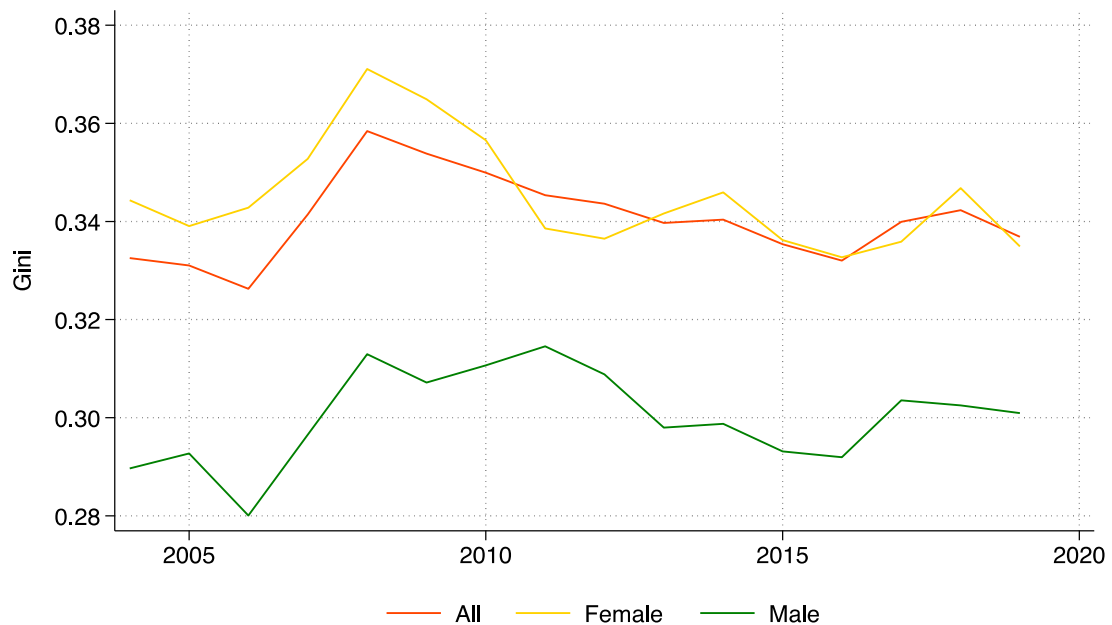
Note: Sample is individuals in work aged 25–60. Gross earnings are in 2019 prices.

Source: EU-SILC.

Figure 19 shows that overall earnings inequality as measured by the Gini coefficient has been broadly stable over the last 15 years. The time patterns confirm the results based on hourly wages in Figures 11 and 12. In recent decade there is evidence of a slight decline in inequality and gender gaps are stable. The Gini is higher for women than for men due to the variation in working hours. The overall Gini coefficient for real earnings is about 34% in 2019.

Figure 55 in the Appendix presents the Gini coefficient for earnings of private-sector workers based on Austrian register data over the last four decades. This graph reveals an increase in inequality mostly during the 1990s and a slower growth of the Gini for men since the start of the 2000s. In comparison, the female Gini was more stable over this period.

Figure 19. Gini coefficient of gross individual earnings, overall and by sex, over time

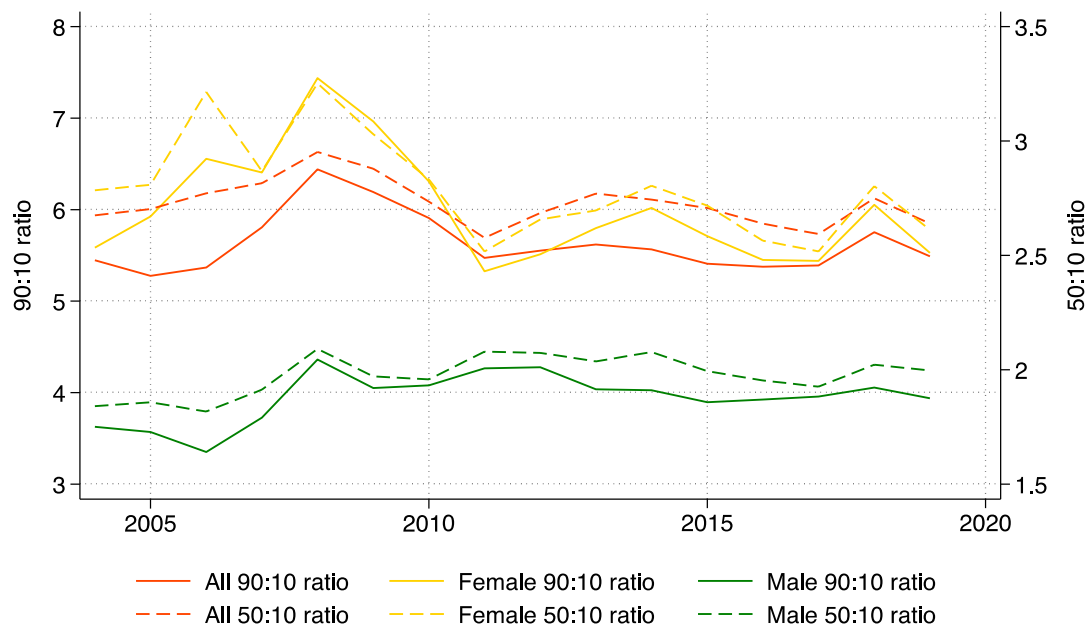


Note: Sample is individuals in work aged 25–60. Gross earnings are in 2019 prices.

Source: EU-SILC.

Figure 55 shows that Gini coefficients in earnings have been increasing more strongly for men than for women. The strongest increase in inequality of male earnings occurred during the 1990s. Over the whole period there is a substantial gap in inequality between female and male earnings.

Figure 20. 90:10 and 50:10 ratios of gross individual earnings, overall and by sex, over time



Note: Sample is individuals in work aged 25–60.

Source: EU-SILC.

Figure 20 shows that the 90:10 and 50:10 ratios confirm the previous patterns. Inequality seems to have fallen slightly since the early 2000s. Gender gaps and gaps by educational categories have remained stable over time, despite the marked shifts in employment rates by gender and the changes in educational attainment we documented in earlier sections.

From these figures, we conclude that Austria did not follow the international pattern of strong increases in earnings inequality. But earnings inequality remained stably modest in Austria.

Figure 21, showing annualised growth in individual earnings over the earnings distribution, confirms the pattern shown for hourly wages in Figure 13.

Figure 21. Annualised growth in gross earnings by earnings percentile, overall and by sex, 2010–18.



Note: Sample is individuals in work aged 25–60.

Source: EU-SILC.

To show developments over a longer period, we use data from the ASSD for the analysis of gross individual earnings. These data include the universe of workers in the private sector. We focus on blue- and white-collar workers and exclude apprentices and civil servants. Self-employed workers are also excluded. See Figures 54–57 in the Appendix.

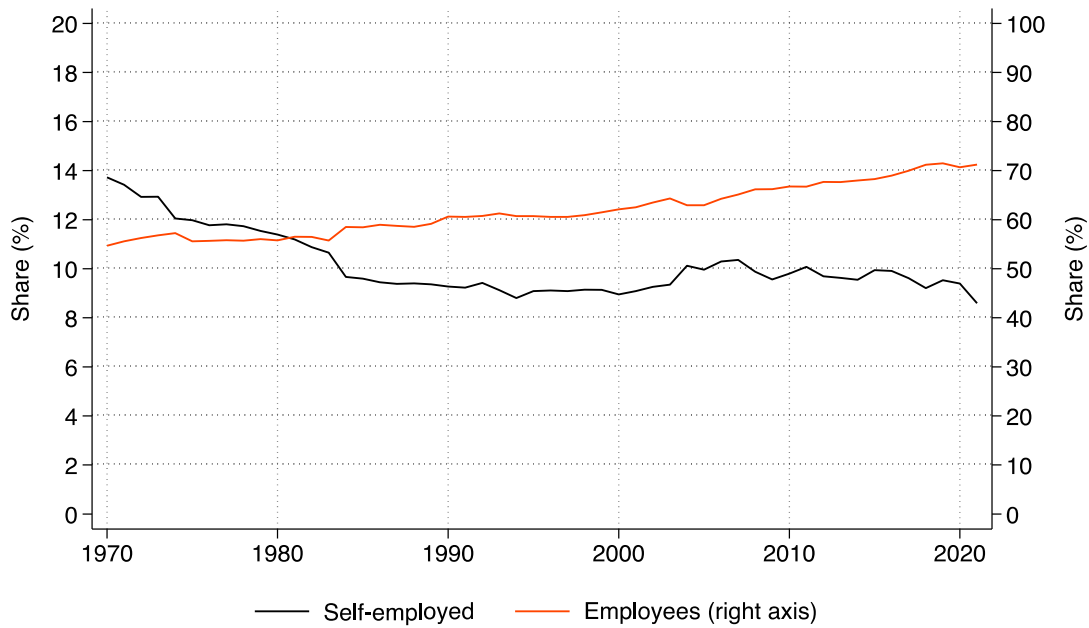
4.4 Self-employment

The share of self-employed in the population declined until the mid-1980s and has been relatively stable around 10% since (Figure 22). Self-employment has thus not followed the positive trend in employment rates in Austria. The share of self-employment is higher among men than among women, for whom it has been consistently below 8%.

Splitting by age and education in Figure 23 results in a more differentiated picture. In the early 1980s the groups with the highest share of self-employment were highly educated men and low-educated men, both with a share of close to 20%. Over time highly educated men retained their position as the group with highest share of self-employed. But for low-educated men the self-employment share drastically declined to about one-third. The time trends in self-employment by education are similar for women but less pronounced.

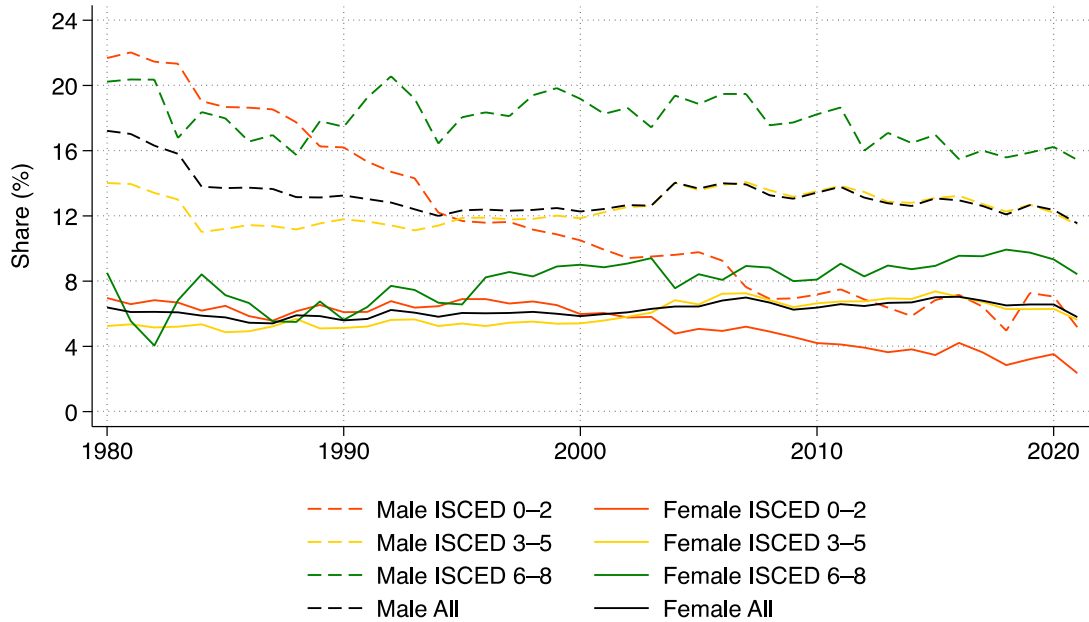
Figure 24 shows U-shaped patterns of self-employment rates by income deciles in the years 2008 and 2018, which reflect the patterns by education.

Figure 22. Share of employees and self-employed workers, over time



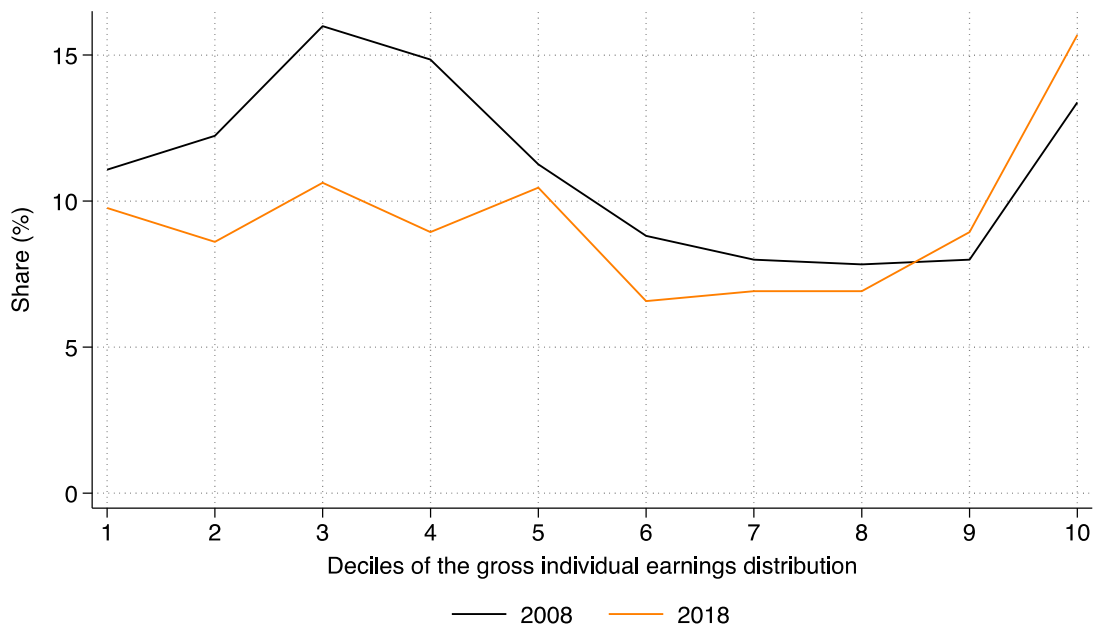
Note: Individuals age 25–60 years of age. Self-employed and dependent employees as share of the population.
Source: Austrian Mikrozensus.

Figure 23. Share self-employed by sex and education, over time



Note: Individuals age 25–60 years of age. Self-employed and dependent employees as share of the population.
Source: Austrian Mikrozensus.

Figure 24. Share of self-employed by percentile of individual earnings, selected years



Note: Individuals age 25–60 years of age. Self-employed and dependent employees as share of the population.
Source: EU-SILC

5. Labour market institutions

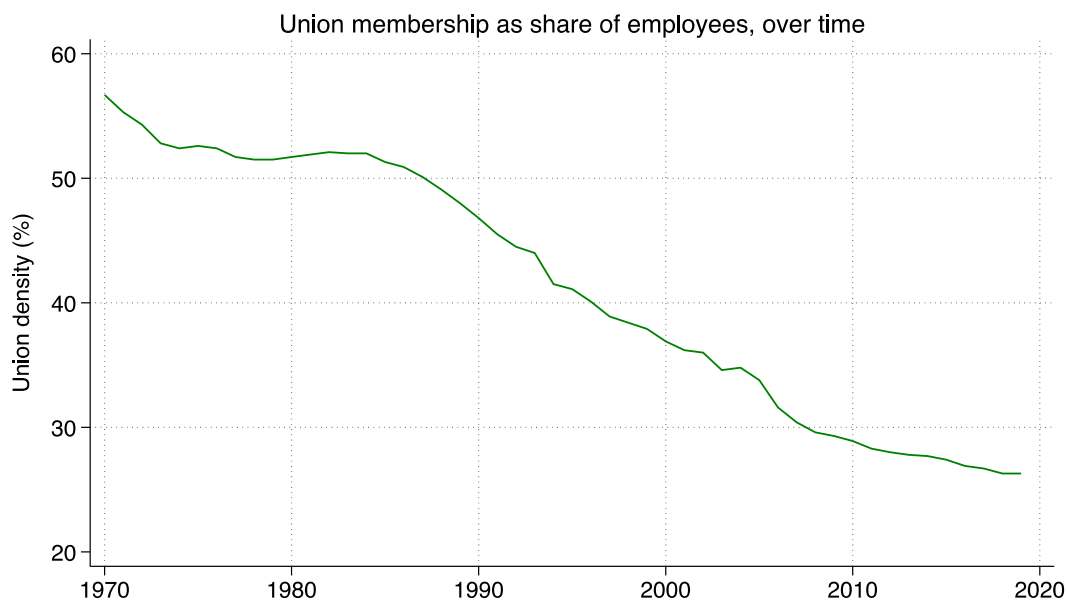
This section looks at labour market institutions that affect earnings and incomes: collective bargaining, self-employment, and social insurance. As in most of the report, all analysis is restricted to workers aged 25–60.

5.1 Collective bargaining coverage and unions

Wage setting in Austria is dominated by collective bargaining. Wage negotiations occur at the sectoral level, where employees are represented by their particular division of the Austrian Federation of Trade Unions and employers are represented by their relevant section of the Austrian Federal Economic Chamber. Collective wage contracts are binding for all firms as well as for all employees. While there is no legal minimum wage in Austria,² the agreed-upon wages in collective agreements cannot be undercut. Within firms, payments above the collective bargaining wage can be negotiated either individually or between the works council and management.

The coverage of collective bargaining agreements is almost universal for private and public sector workers, and according to the OECD has been at 98% since the 1960s. Collective bargaining coverage is independent of union membership. As is shown in Figure 25, union membership among employees has dropped from levels above 50% up to the early 1990s to around 25% in 2020.

Figure 25. Union density over time



Source: OECD Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts (ICTWSS) database.

² Other countries have produced charts on the bite of the minimum wage, but that is not possible for Austria. There is no general legal minimum wage in Austria (see wage setting in Section 2).

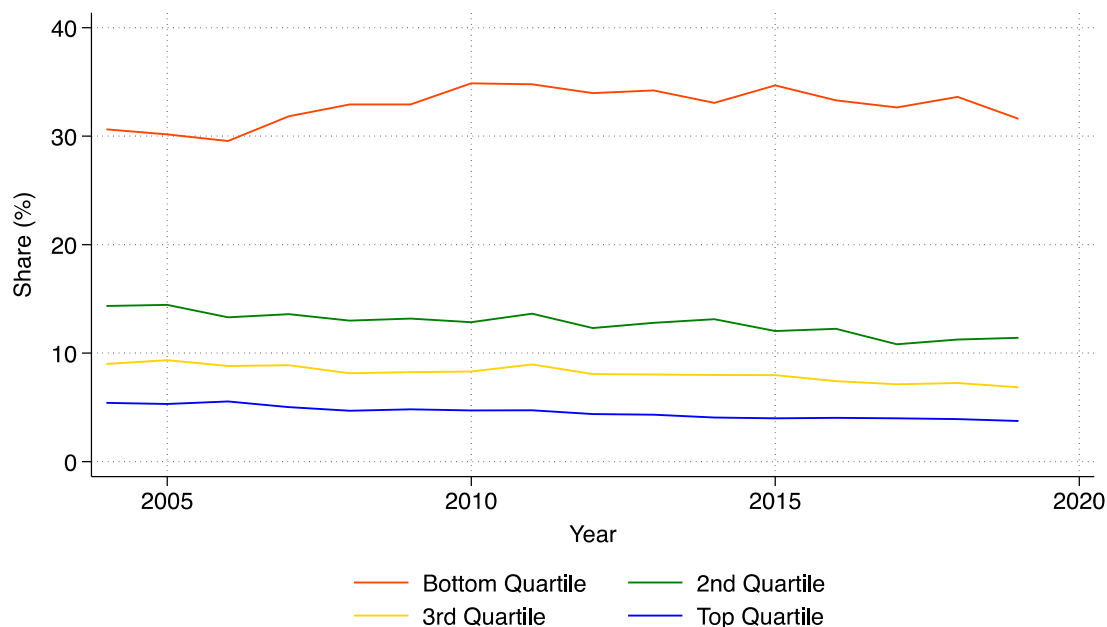
In Austria individual union membership has no direct impact on wages, because wages are centrally negotiated at the industry and regional level. Nevertheless, union membership was quite high at above 50% in the early 1970s (see Figure 25). Since then it has steadily declined and the membership rate is currently about 27%.

5.2 Social insurance

The next series of figures present evidence on the generosity of the tax, transfer and social insurance system in redistributing income towards lower-income households. Each figure sums up income and tax payments at the household level and splits the sample based on the quartile of the equivalised disposable (net) income distribution in each year.

Figure 26 presents the share of gross income received in the form of non-tax benefits. In the Austrian case benefits include social insurance such as public pensions, disability insurance, unemployment insurance, and family benefits. Gross income includes earnings and non-labour income, the latter of which is inclusive of benefits. The figure shows that the major share of safety-net benefits flows to low-income households, accounting for about a third of gross income in the first quartile. Over the 15-year period before the COVID pandemic, this share was remarkably stable. Benefits that flow to the second, third and fourth quartiles of the net income distribution are a smaller share of household net income. For these households such benefits mainly consist of family transfers, unemployment benefits, sick-leave benefits, and benefits from disability insurance.

Figure 26. Benefits' share of gross income by household disposable income quartiles

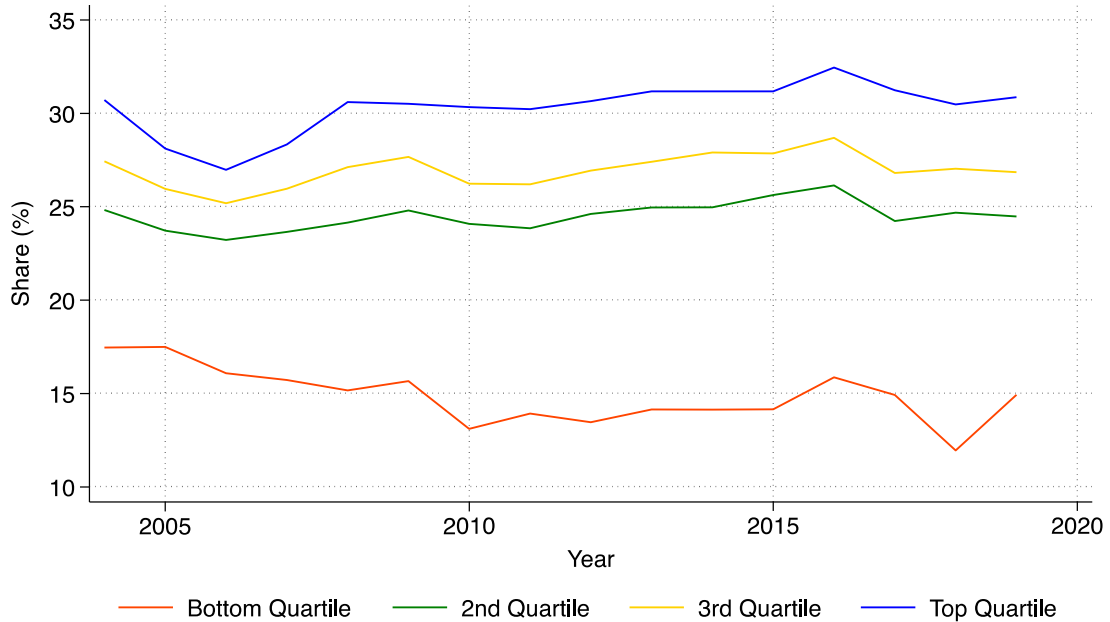


Note: Sample is individuals in all households.

Source: EU-SILC

Figure 27 shows share of gross household income that is paid in taxes by disposable household income quartile. The figure shows the effect of a progressive tax system where high-income households pay a higher average tax rate.

Figure 27. Taxes' share of gross income by household disposable income quartiles

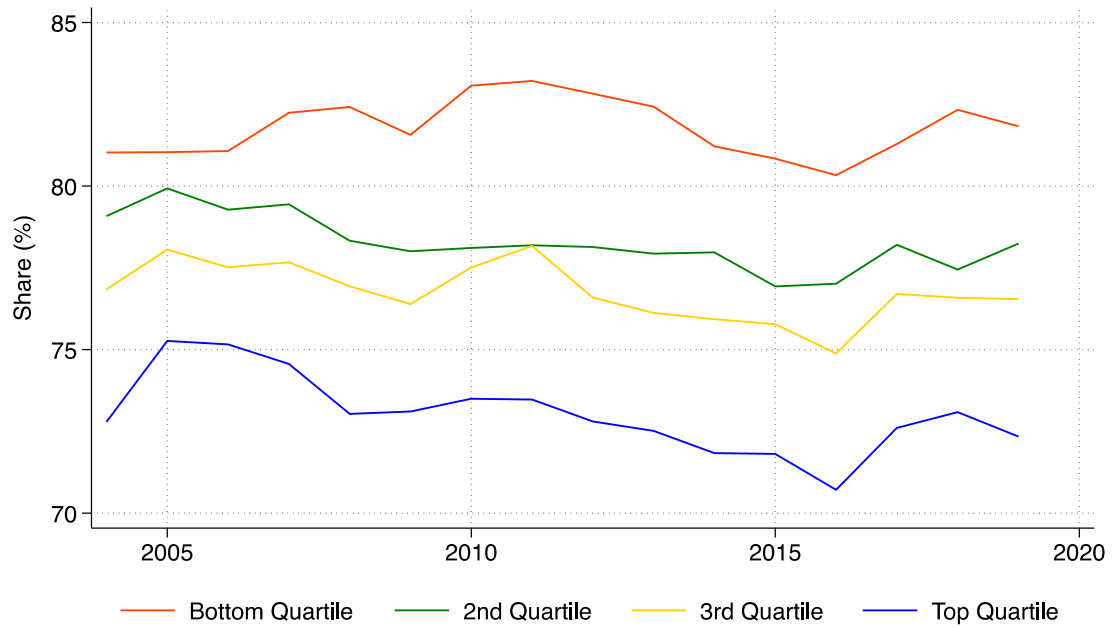


Note: Sample is individuals in all households.

Source: EU-SILC

Figure 28 shows disposable income as a fraction of gross income by disposable household income quartile. Austria had tax reforms in 2004–05, 2009–10 and 2015–16.

Figure 28. Disposable income as share of gross income by household disposable income quartiles



Note: Sample is individuals in all households.

Source: EU-SILC

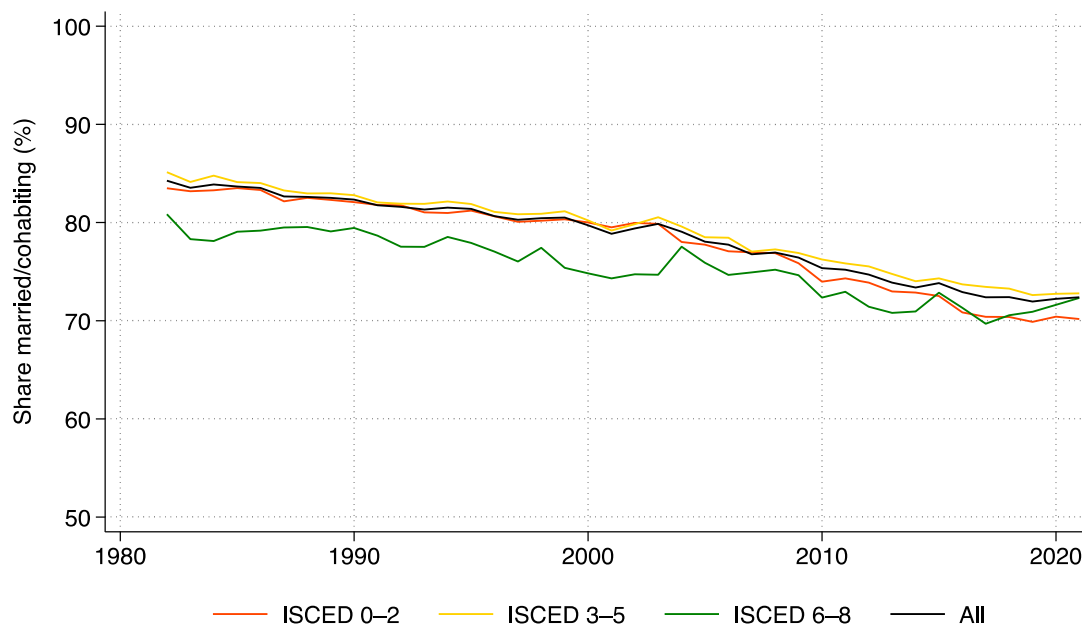
6. Household incomes

This section looks at trends in household incomes. We start by looking at trends in household composition and the degree of assortative matching, which partly determine household earnings. We then compare trends in household earnings and household disposable income for working households, drawing out the role of the tax and transfer system over time. Finally, we show a set of charts on trends in household income inequality across all households (including those where no one is in work).

6.1 Trends in household composition

Figure 29 shows that rates of marriage and registered partnerships were higher in groups with low (ISCED 0–2) and middle (ISCED 3–5) levels of education than among the highest educated in 1980. Since then they have fallen across all educational groups, and converged to about 72% by 2020. In recent years about three-quarters of individuals living in partnerships are married.

Figure 29. Share married or cohabiting, overall and by education, over time

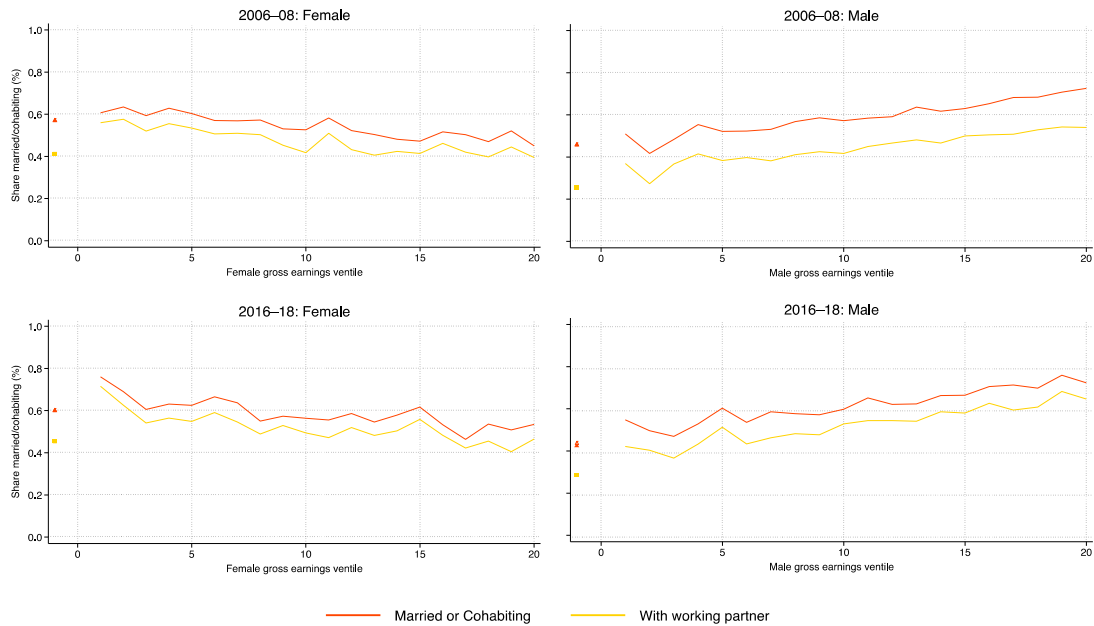


Note: Sample is individuals aged 25–60. Share of individuals married or cohabiting.

Source: Austrian Mikrozensus

Figure 30 investigates gradients in marriage rates across the individual gross earnings distribution. This gradient is negative for women and positive for men, indicating some assortative matching of low-income women with high-income men. Women and men who are not working are less likely to be married or cohabiting than those in employment and they are also less likely to live in a household with a working partner. There are no big changes in these patterns between the period 2006–08 and a decade later.

Figure 30. Share married/cohabiting and share with working partner, by sex and individual gross earnings percentile, selected years

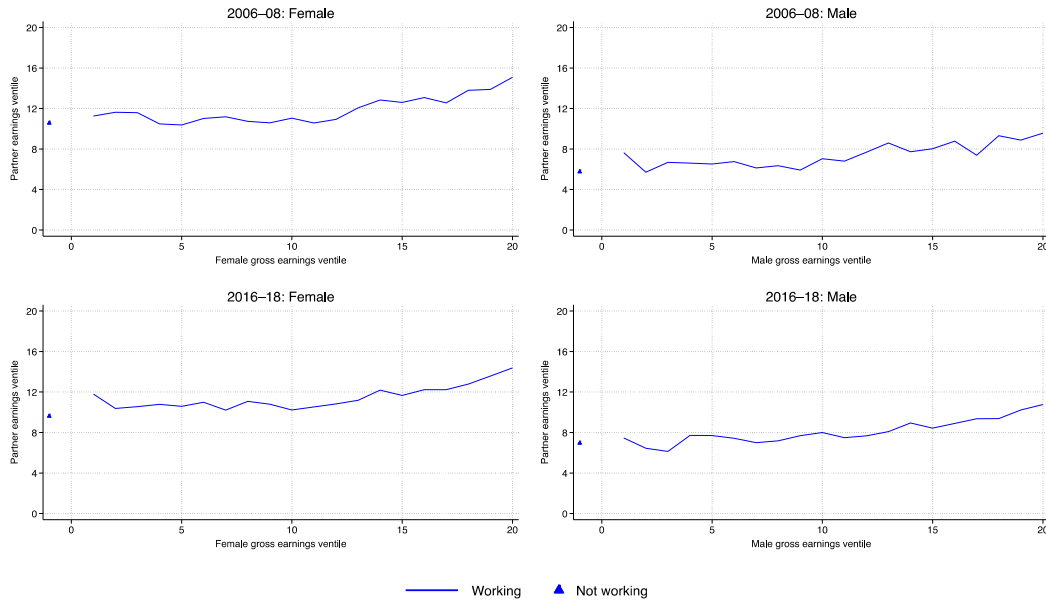


Note: Sample is individuals aged 25–60.

Source: EU-SILC. Dots show the same for people with zero earnings.

Figure 31 confirms this conclusion by plotting the partner's position in the earnings distribution. Women and men with earnings above the median are increasingly likely to cohabit with a partner higher up in the distribution. But there is no such pattern for women and men below the median of their respective earnings distributions.

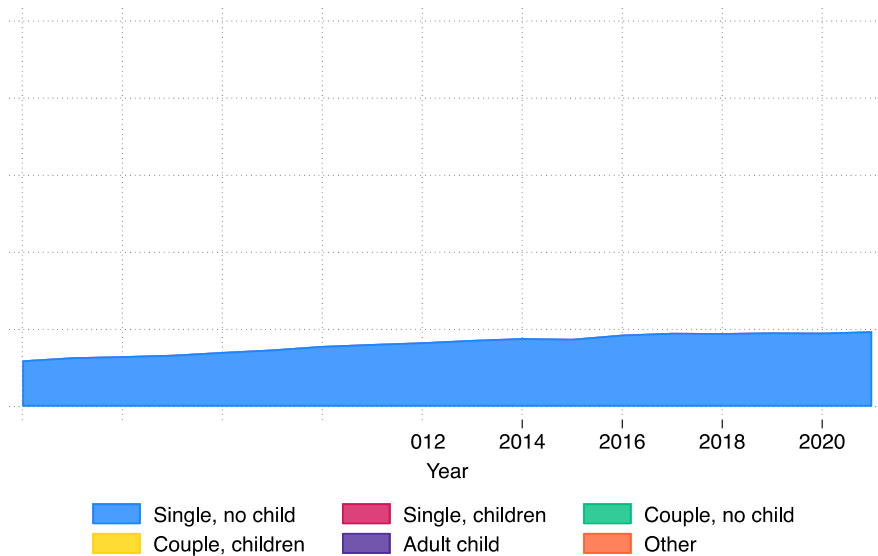
Figure 31. Mean gross earnings ventile of partner/spouse by individual's gross earnings ventile, selected years



Note: Sample is individuals aged 25–60.
Source: EU-SILC.

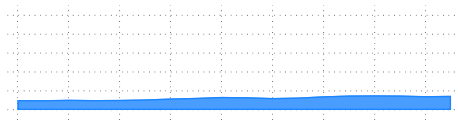
Next, we look at shifts in the family structure more broadly (Figure 32). The most important changes are the increase in the share of prime working-aged adults who are single without children to 20% in 2020, and the decline in couple households with children. The share of single parents was about 4% in 2020 (it has been broadly stable since 2004).

Figure 32. Share of individuals by position in the household, over time



Note: Sample is individuals aged 25–60. 'Single, children' and 'Couple, children' refer to dependent children only.
Source: Austrian Mikrozensus.

Figure 33. Share of individuals by position in the household, by sex and education, over time



Couple, children Adult child

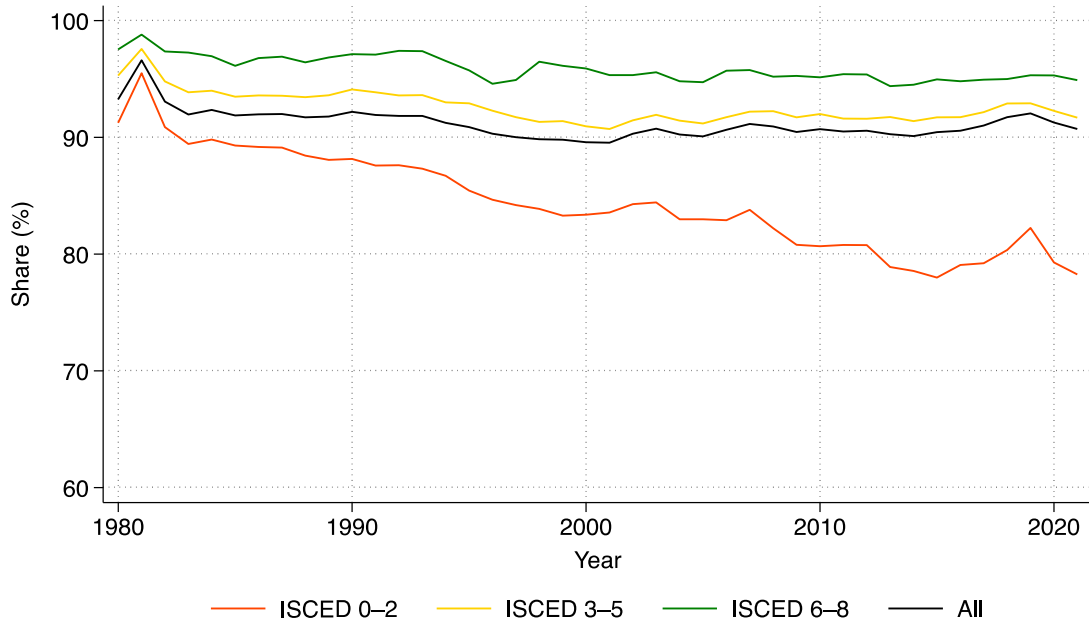
Note: Sample is individuals aged 25–60. ‘Single, children’ and ‘Couple, children’ refer to dependent children only.

Source: Austrian Mikrozensus.

6.2 Earnings and incomes among working households

In Austria, the share of individuals living in a working household has been roughly constant at slightly above 90% over the last two decades, as shown in Figure 33. But this is not the case for the lowest educational levels, where this share has dropped by about 10 percentage points since 1980. This pattern may be due to negative selection, though, as the share of individuals with only compulsory education has also declined considerably.

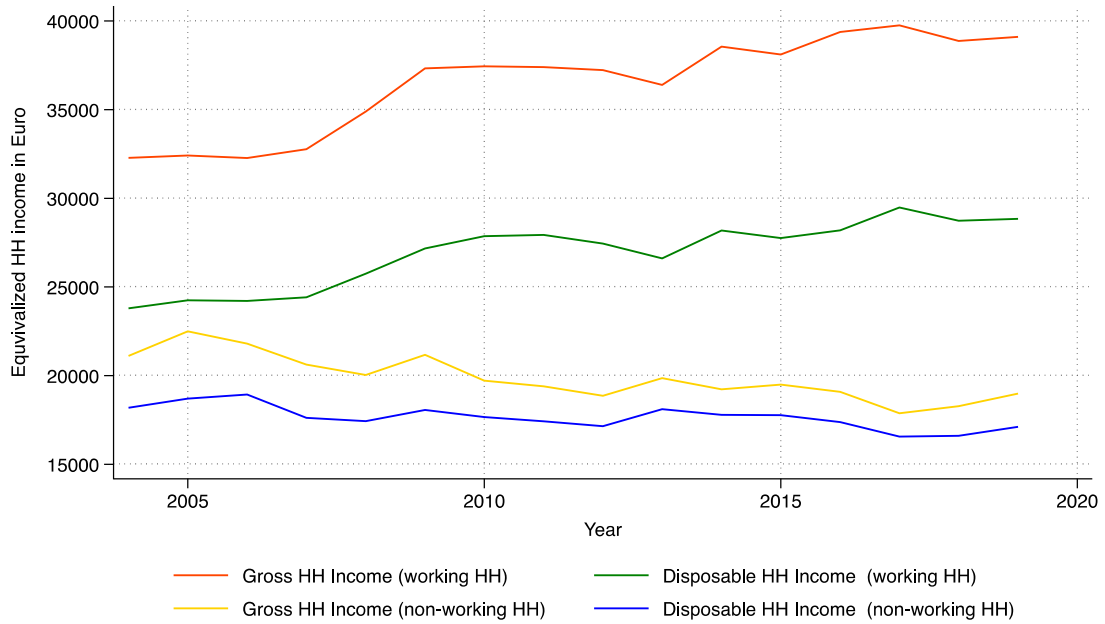
Figure 34. Share of individuals in a working household, overall and by education, over time



Note: Sample is individuals aged 25–60. A working household is defined as a household in which at least one adult is in work. Source: Austrian Mikrozensus.

We now consider how all the trends above combined to explain trends in household earnings. Figure 35 shows median real gross household earnings and disposable household income for working and non-working households. There is a large income gap between the two types of households. Not surprisingly, gross household earnings are much closer to disposable household income for non-working households. The gap is probably due to taxes on pensions. Over time the disposable household income of working households has increased, but it has declined among non-working households, who seem to be worse off relative to working households in 2019 than they were 15 years earlier.

Figure 35. Median real gross household earnings and disposable household income among working households, over time

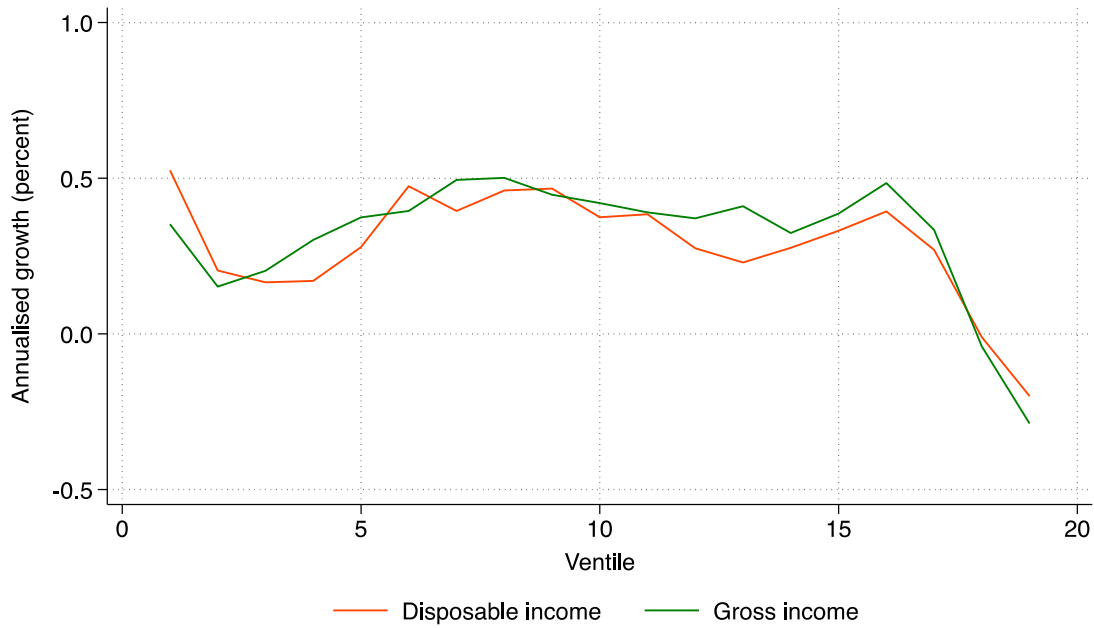


Note: Sample is individuals in working households. A working household is defined as a household in which at least one adult is in work. We exclude households in the bottom and top 1% of the gross household earnings distribution. All incomes have been equivalised using the modified OECD equivalence scale.

Source: EU-SILC.

Next, we consider growth in gross household earnings and disposable income over the income distribution. For both types of income annual growth over the period 2010–18 has been rather uniform over the distribution.

Figure 36. Annualised growth in real gross household earnings and household disposable income for working households, by percentile, 2010–18



Note: Sample is individuals in working households. A working household is defined as a household in which at least one adult is in work. All incomes have been equivalised using the modified OECD equivalence scale.

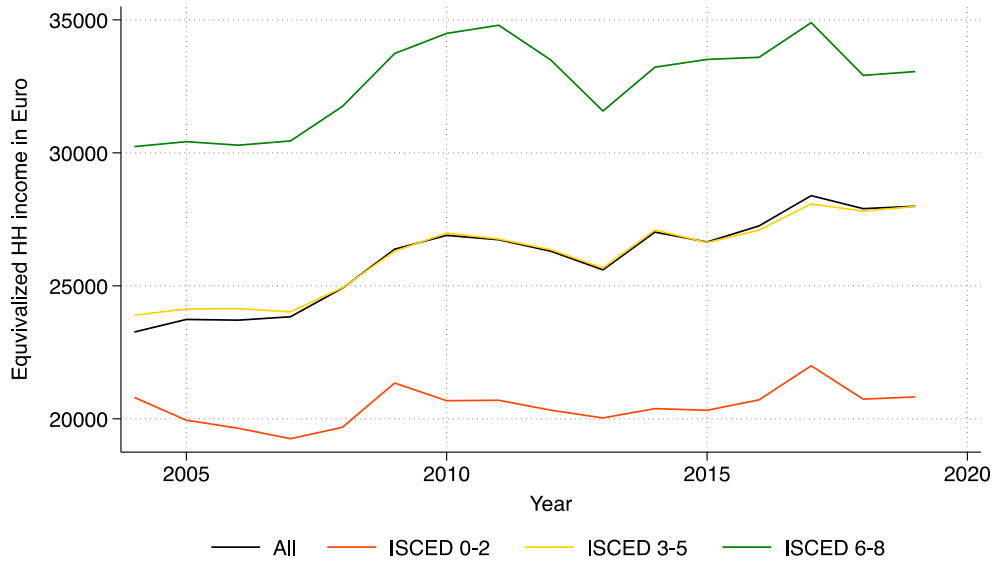
Source: EU-SILC.

6.3 Inequality in incomes among all households

This section brings together the trends shown above to look at inequality in disposable household incomes across all households.

Median real disposable household income rose from 2004 to 2019 across all education groups except the lowest educated, for whom the income profile is almost flat.

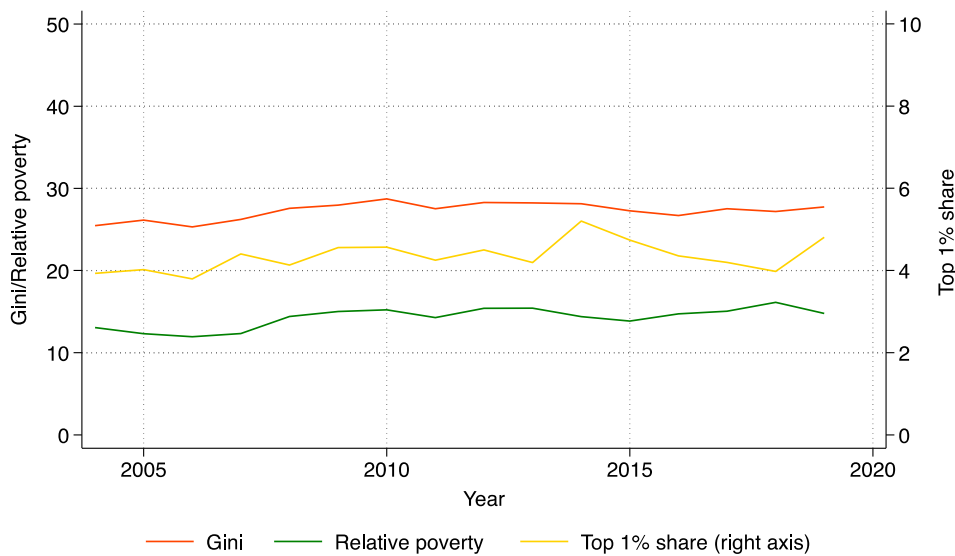
Figure 37. Median real disposable household income for all households, overall and by education, over time



Note: Sample is individuals in all households. Source: EU-SILC.

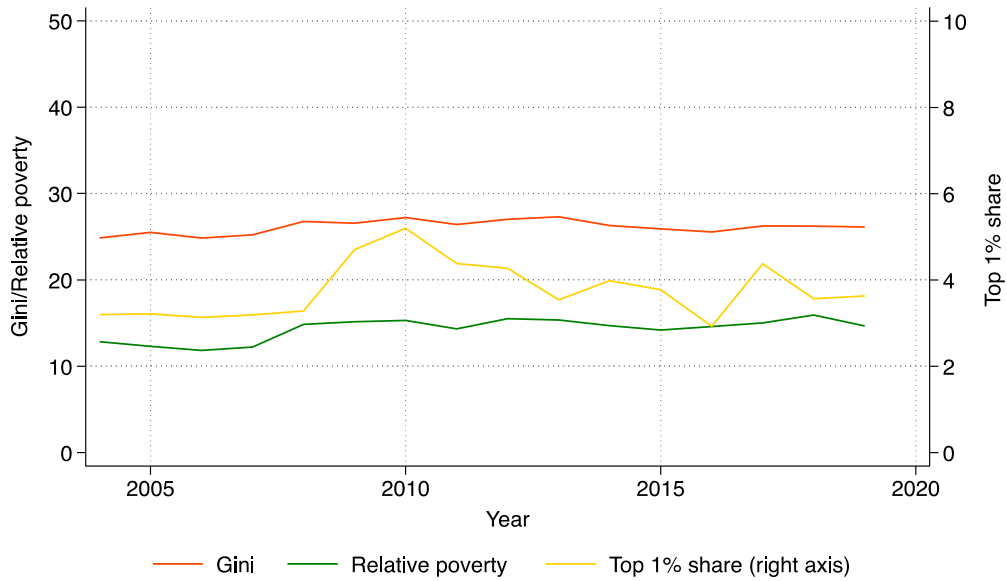
Measures of inequality show little change in inequality over the period 2005–19 (Figure 38a). Relative poverty, defined as the share of the population with income below 60% of the median, rose from 12% to 15% and the Gini coefficient varied between 27% and 29%. The patterns hardly change if we winsorise household income at the top 99th and bottom 1st percentiles (Figure 38b).

Figure 38a. Gini, relative poverty and top 1% share of net household income for all households, over time



Note: Sample is individuals 25–60 years of age in all households. Income is defined as equivalised household income. Source: EU-SILC.

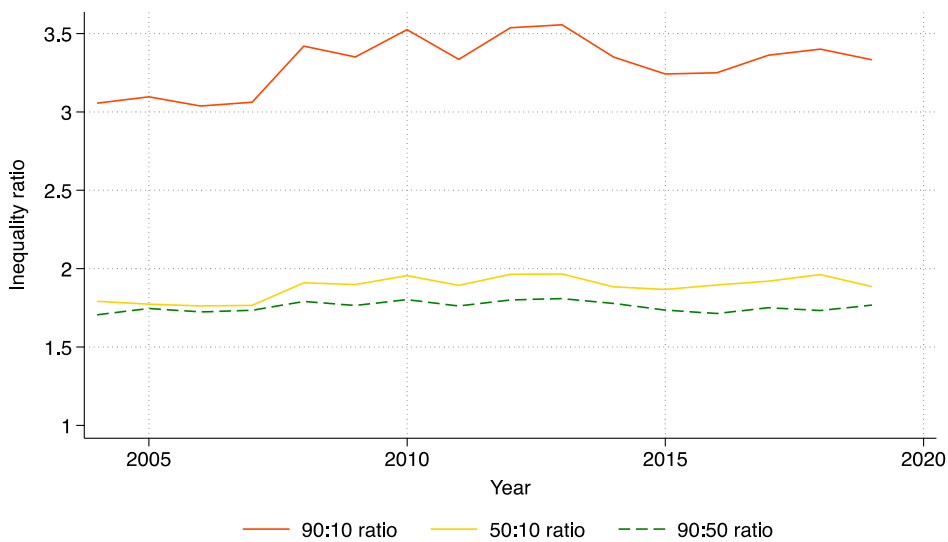
Figure 38b. Gini, relative poverty and top 1% share of net household income for all households, over time – winsorised at the 99th percentile and 0.



Note: Sample is individuals in all households. EU-SILC

Figure 39 shows percentile ratios, which in line with the figures above also show a relatively flat profile over time. There was a slight increase in the 90:10 ratio from 3 to 3.4 and also a small change in the 50:10 ratio.

Figure 39. Percentile ratios of disposable household incomes for all households, over time

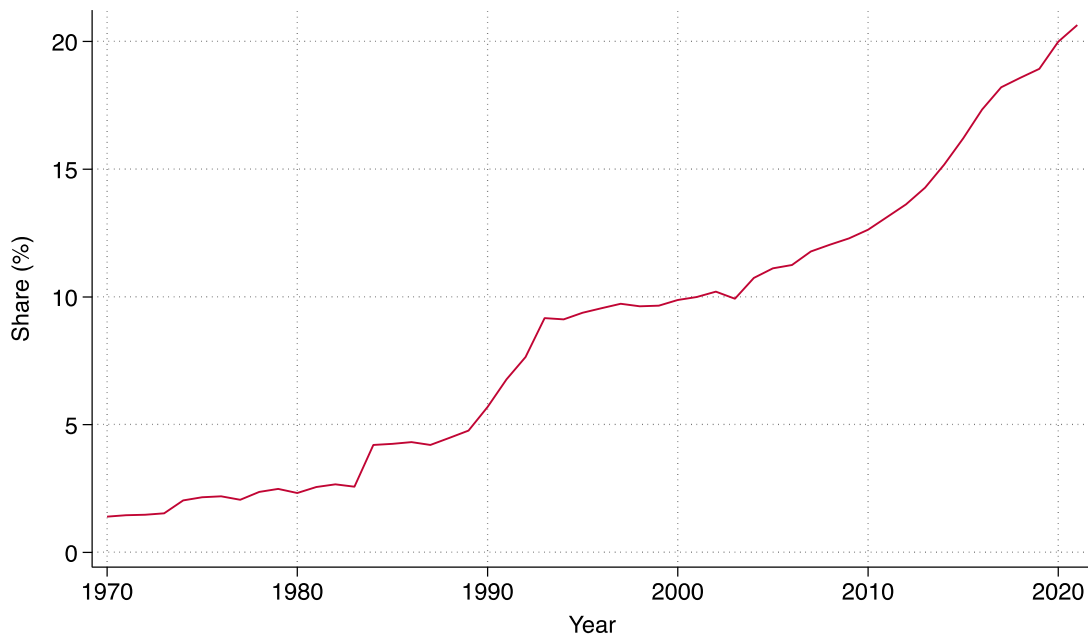


Note: Sample is individuals in all households. SILC

6.4 Immigration

The immigrant population has been steadily rising in Austria. As shown in Figure 40, in the 1970s the share of individuals with non-Austrian citizenship was only around 3% and it is currently above 20%. Flows of immigrants were triggered by the war in former Yugoslavia in the early 1990s and the entry of central and eastern European countries into the EU in 2004 and 2008. Austria restricted full access to the labour market of new citizens for 7 years. This is the reason for the pronounced increase in immigration from eastern neighbour countries starting in 2011.

Figure 40. Share of immigrants in the population 25–60 years of age, 1970–2020

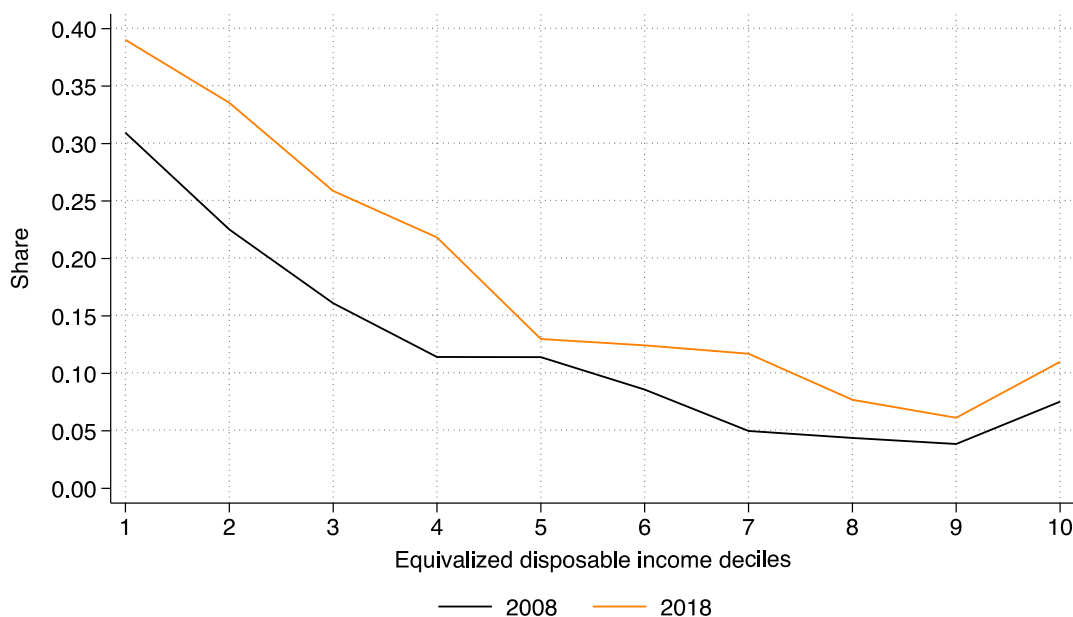


Note: Sample is individuals age 25–60.

Source: Austrian Mikrozensus

Immigrants tend to have lower incomes than the native population. Figure 41 shows the share of immigrants in 2008 and 2018 across the respective distributions of equivalised disposable household income. The highest share of immigrants is persistently found in the lower part of the income distribution.

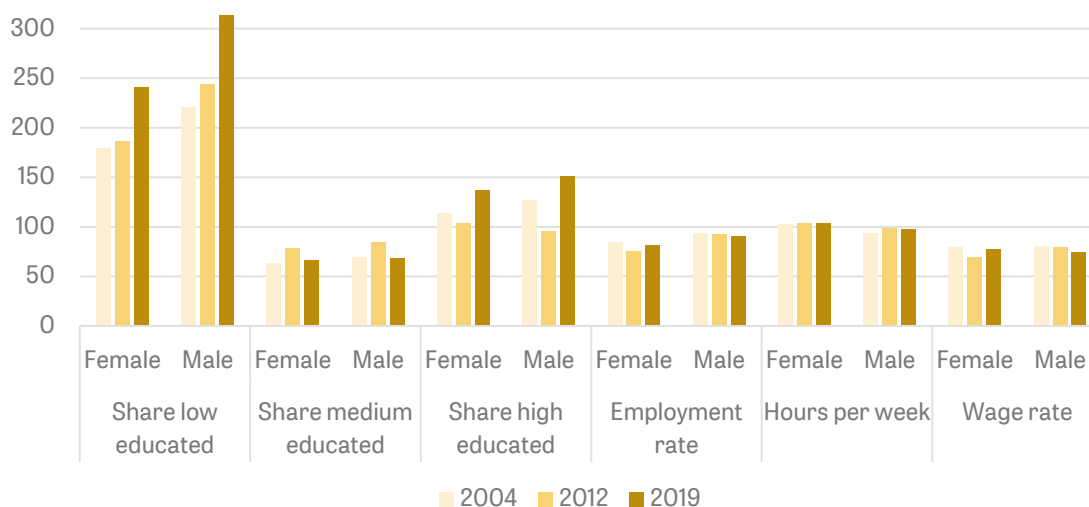
Figure 41. Share of immigrants by percentile of household disposable income



Source: EU-SILC

Lastly, in Figure 42 we present various outcomes of immigrants relative to the native-born population by sex and selected years. These are measured by normalising each outcome by the respective outcome among native-born persons. Immigrants are more likely to be poorly educated (ISCED 0–2), but also more likely to be highly educated (ISCED 6–8). Both of these gradients have been on the rise over time. Natives are overrepresented in the quantitatively largest group of medium education (ISCED 3–5). This applies to both women and men. Immigrants are less likely to be in employment. This difference is more pronounced for women than for men, but has not changed much over time. In terms of hours worked, migrant women work more hours than native women and migrant men work slightly fewer hours than native men. Migrants earn consistently lower wages than natives.

Figure 42. Outcomes of immigrants relative to native-born population, by sex and over time



Note: Sample is individuals aged 25–60.

7. Appendix

Figure 43. Employment rates by age and sex, over time, from EU-SILC data



Figure 44. Educational attainment over time, from EU-SILC data

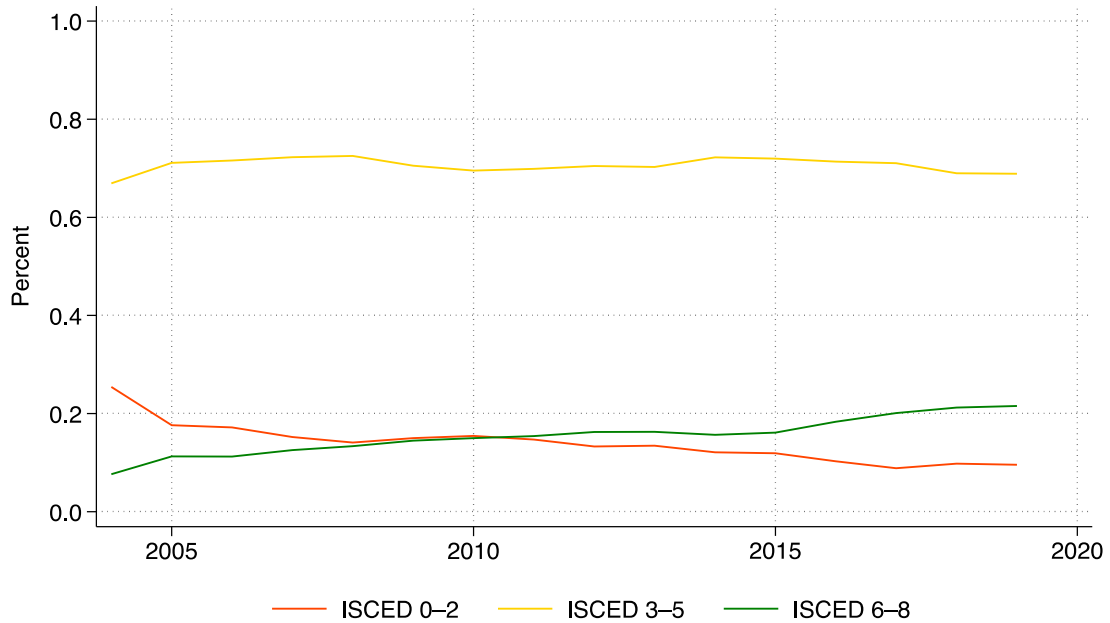


Figure 45. Unemployment rate by education, from Mikrozensus data

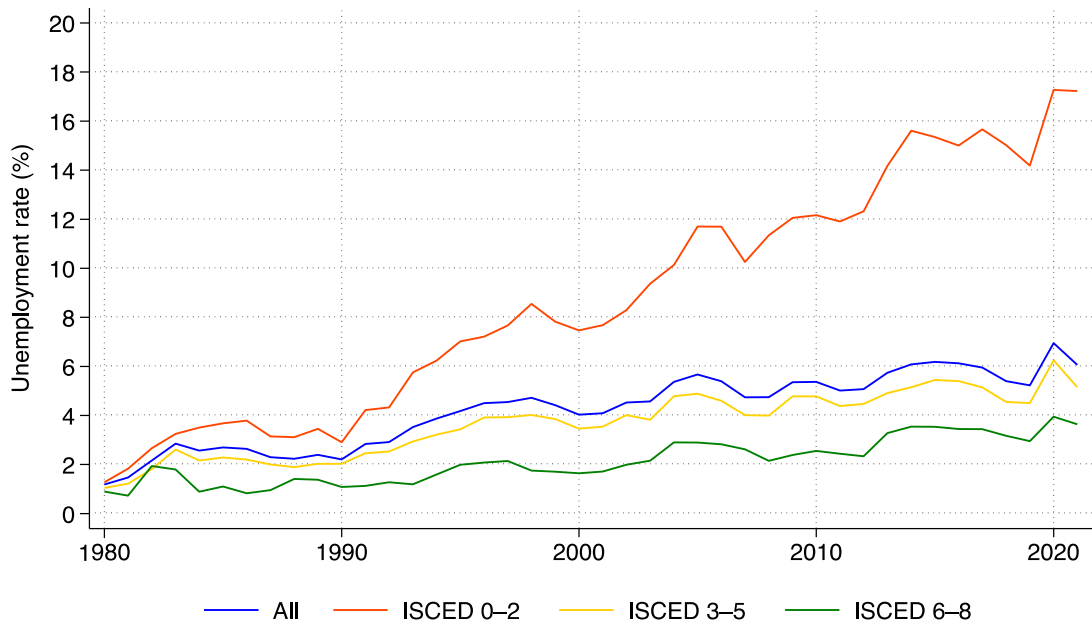


Figure 46. Median net hourly wage by gender for all employees aged 25-60, from Mikrozensus data

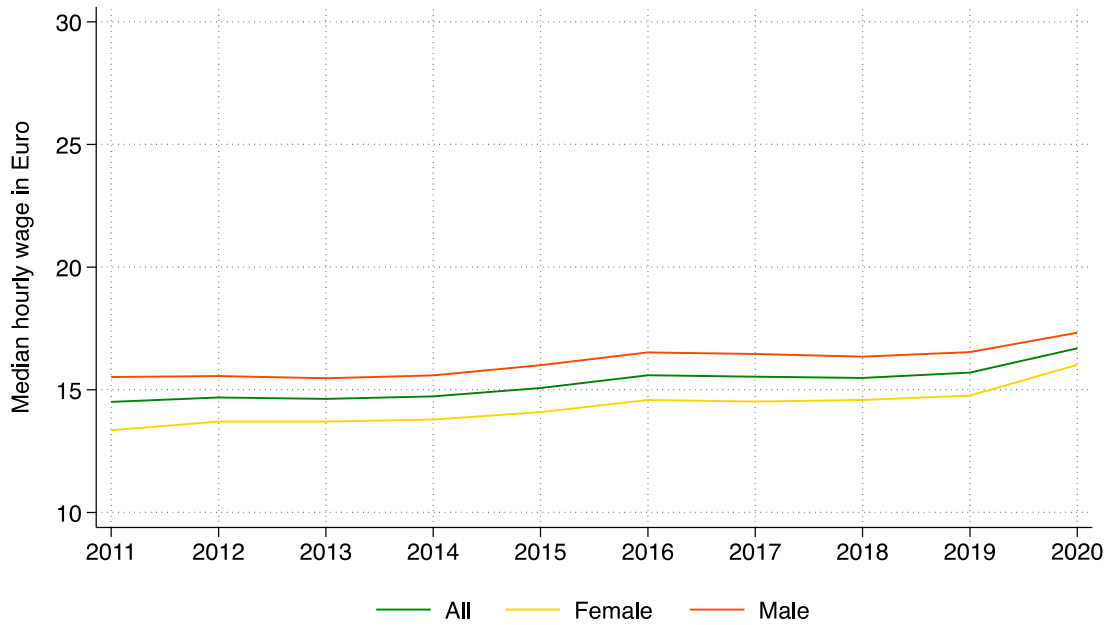


Figure 47. Median hourly wage by gender and education, from Mikrozensus data

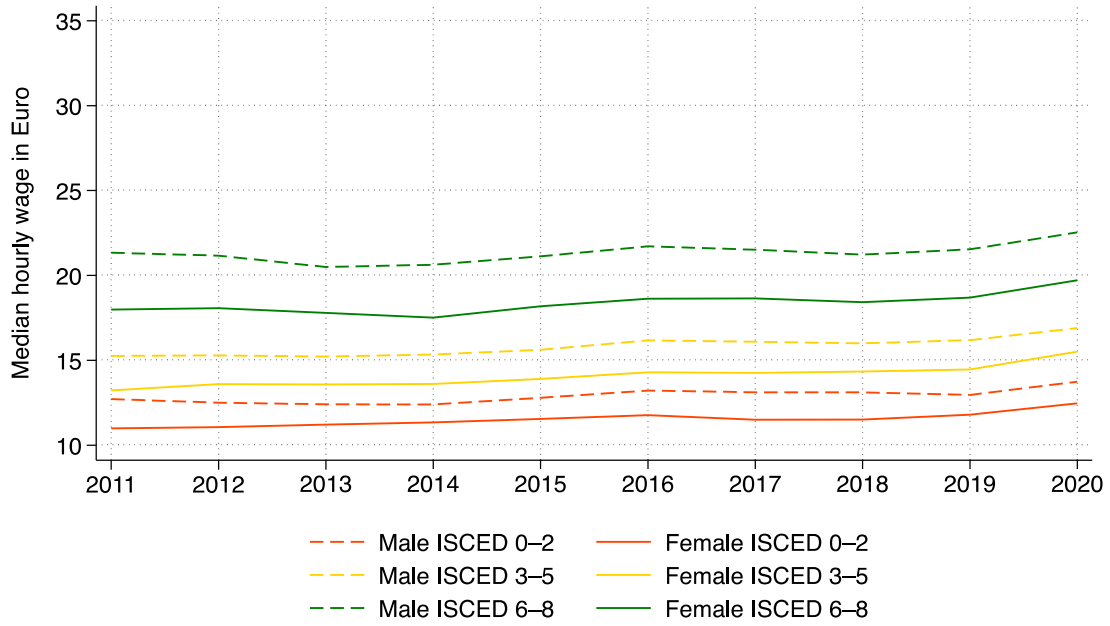


Figure 48. Median real hourly wage among employees over life cycle, by sex and education, from Mikrozensus data

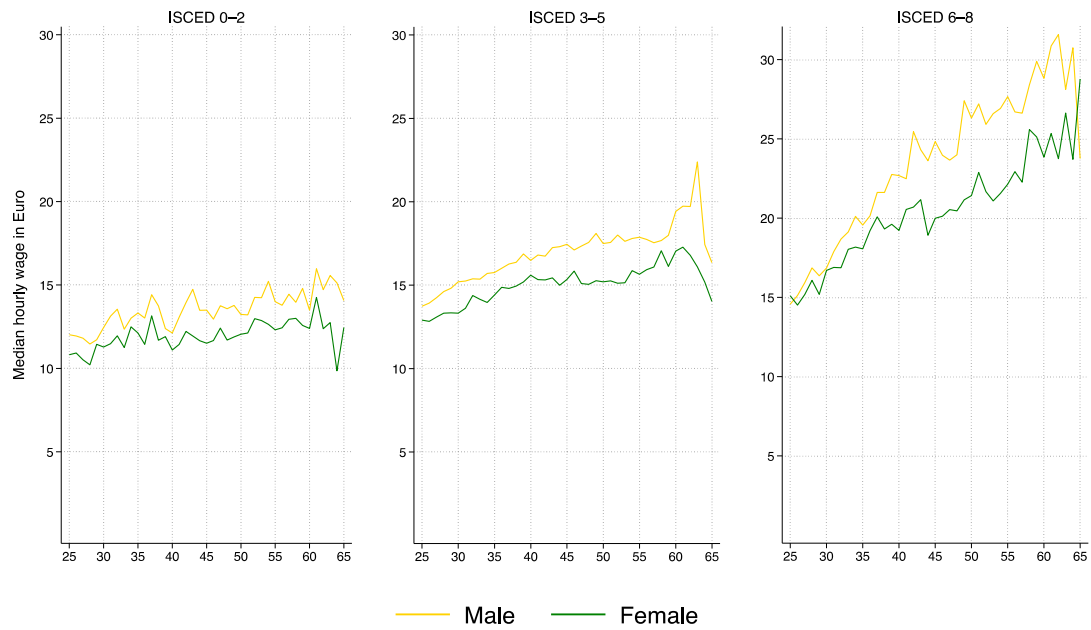


Figure 49. Gini coefficient of hourly wages among employees, overall and by sex, over time, from Mikrozensus data

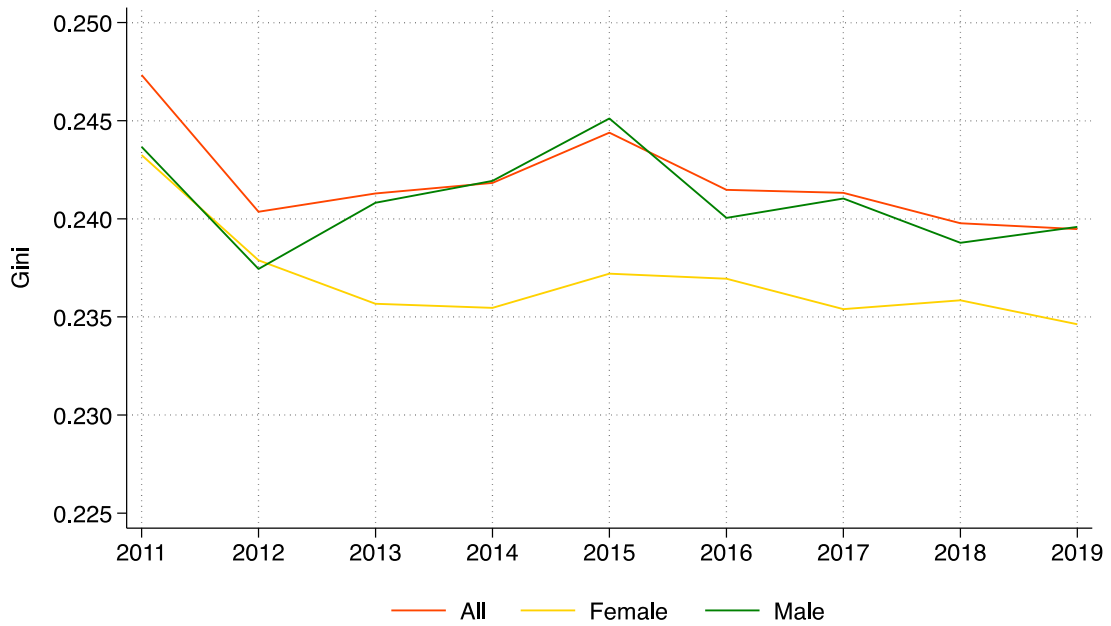


Figure 50. 90:10 and 50:10 ratios of hourly wages among employees, overall and by sex, over time, from Mikrozensus data

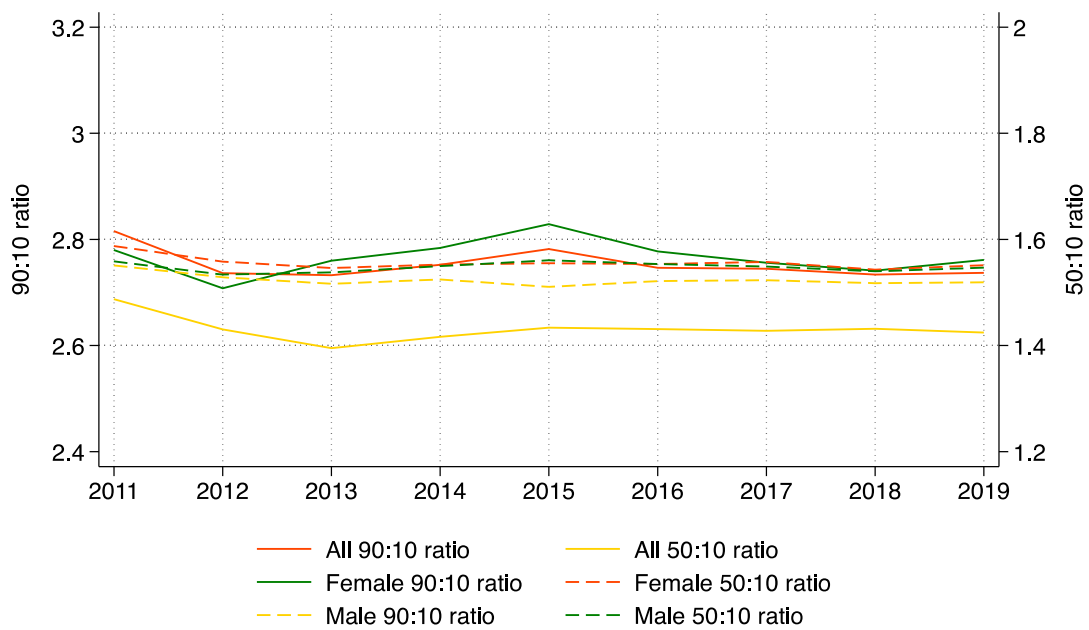


Figure 51. Annualised growth in hourly wages among employees by wage percentile, 2010-18, from Mikrozensus data

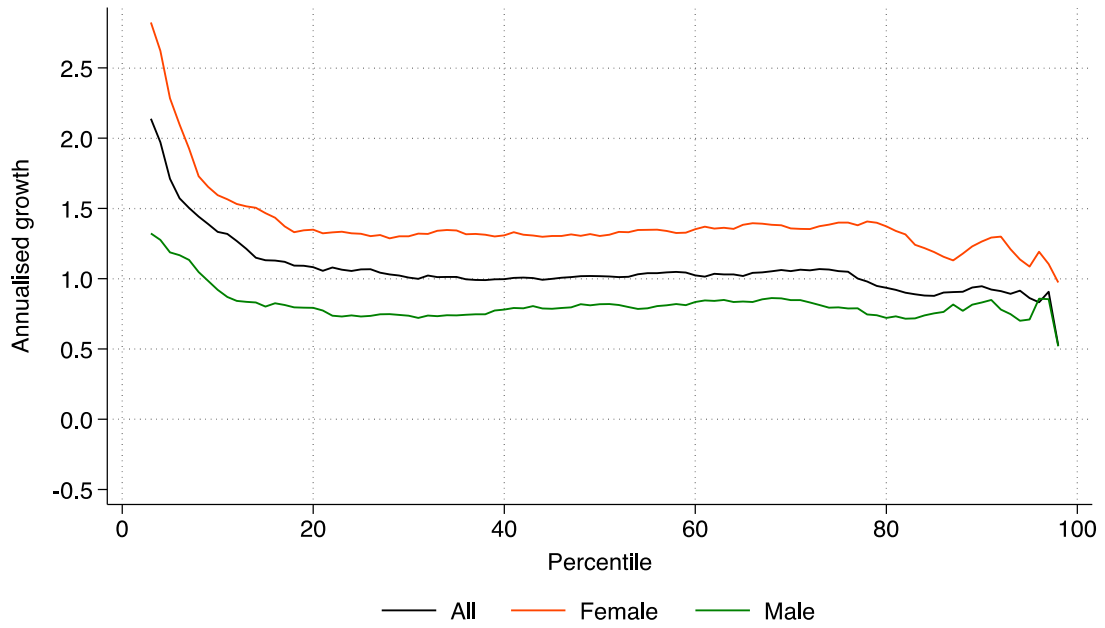


Figure 52. Share of employees working part-time (32 hours or less), for all employees aged 25-60, from Mikrozensus data

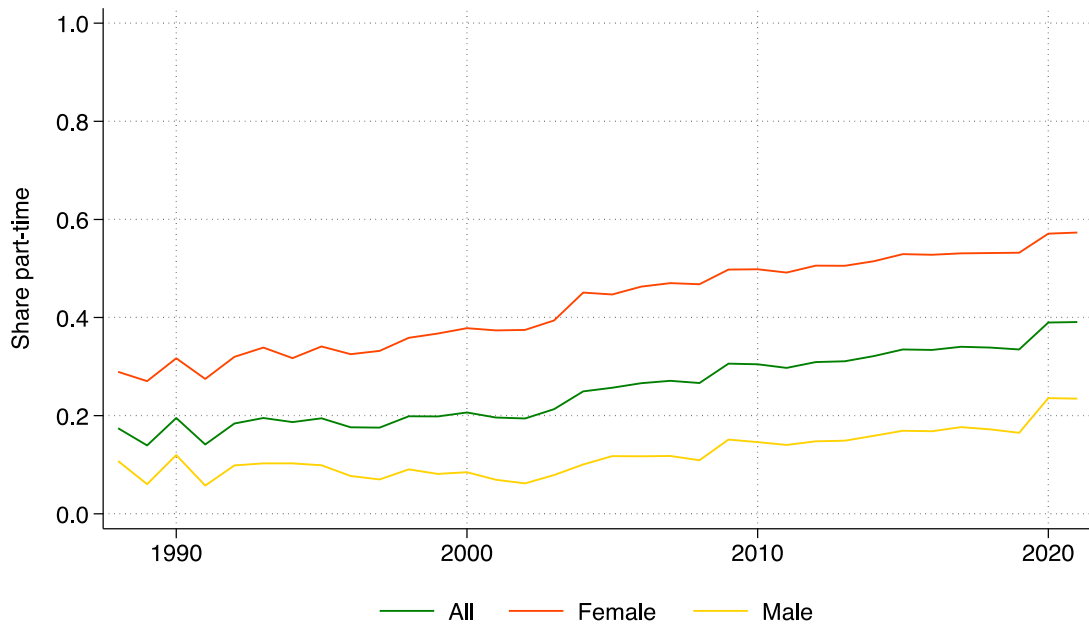


Figure 53. Share of employees working part-time (32 hours or less), by gender and education, from Mikrozensus data

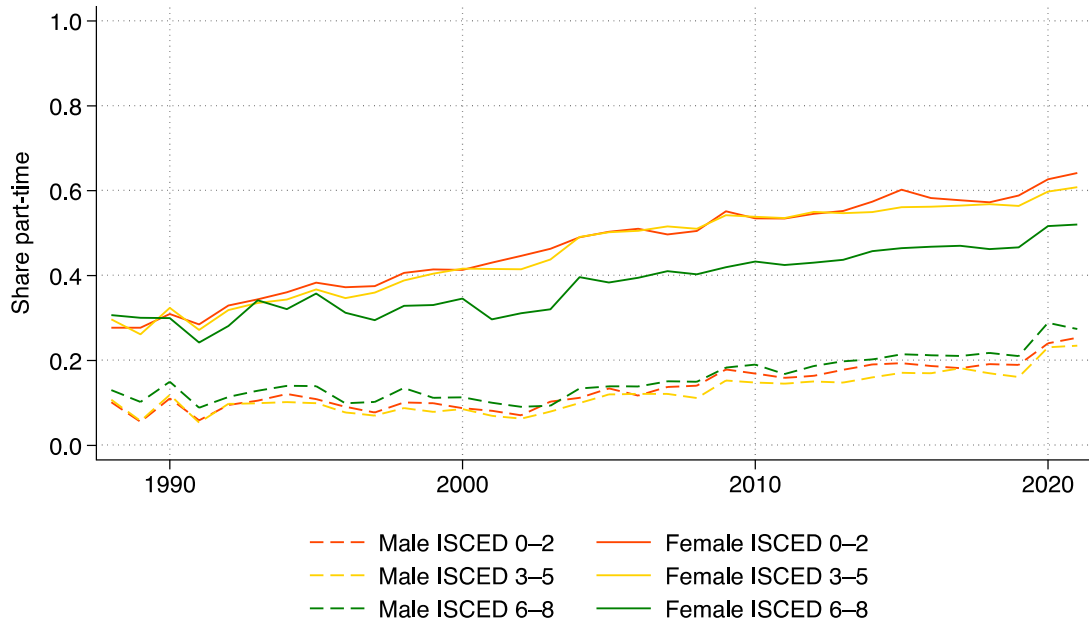
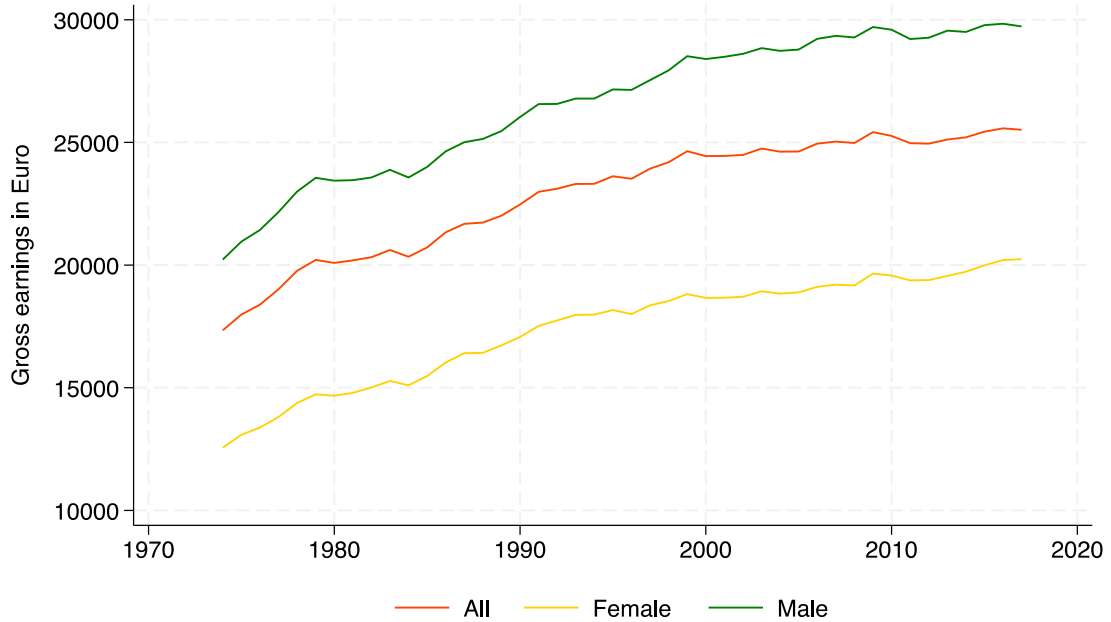
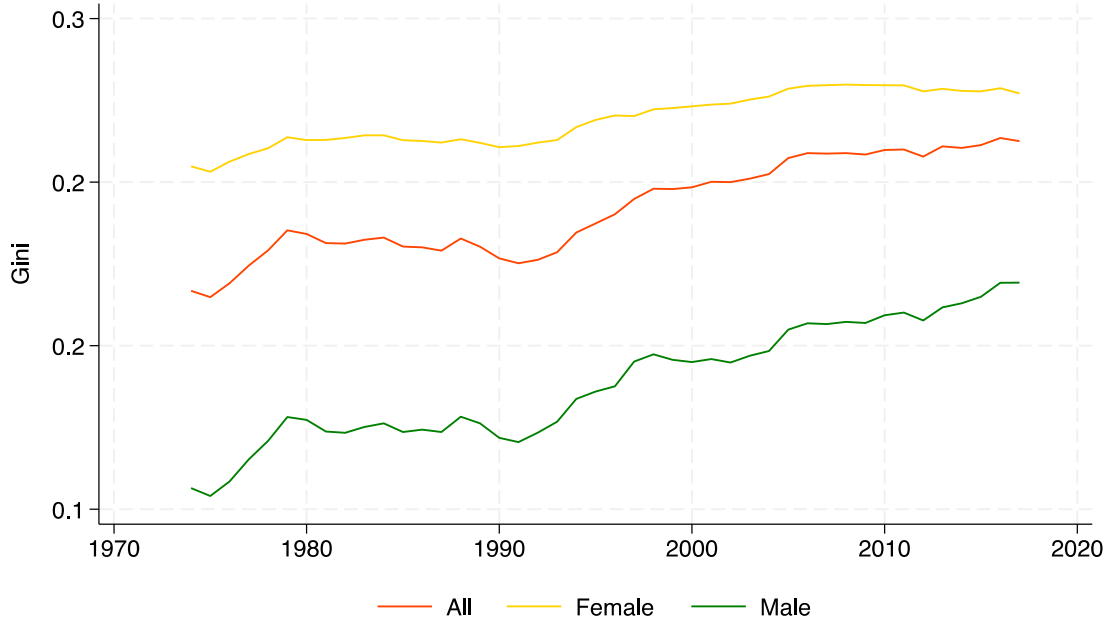


Figure 54. Median gross individual earnings, overall and by sex, from ASSD data



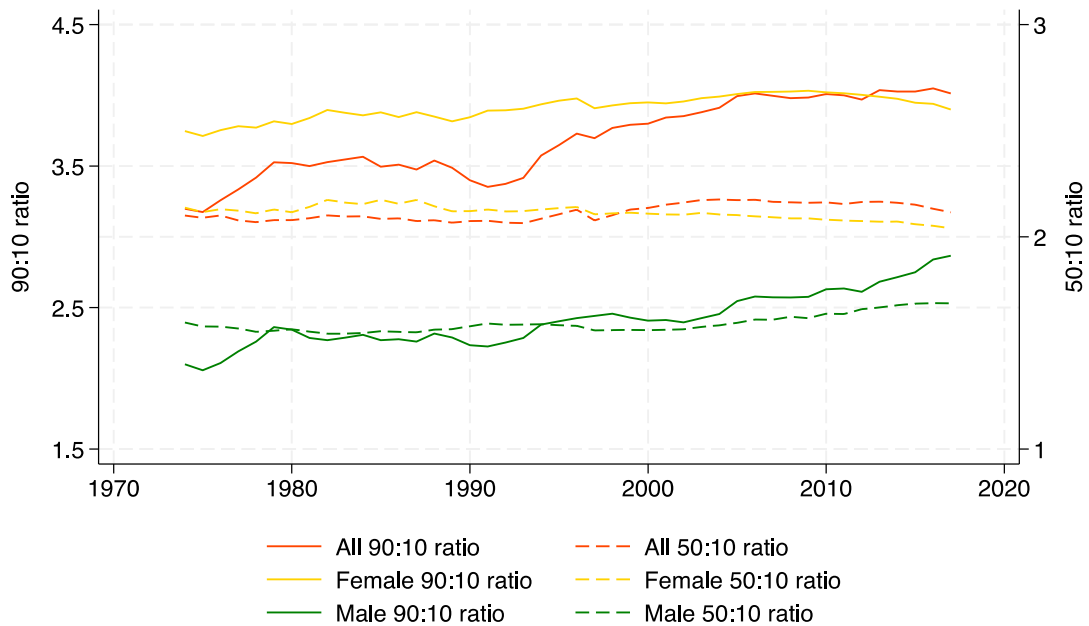
Note: Sample is employees aged 25-74. We do not include the bottom and top 1% of the gender specific wage distribution. We pool data from across the three years to obtain hourly wage for each 3-year period.

Figure 55. Gini coefficient of gross individual earnings, overall and by sex, over time, from ASSD data



Note: Sample is individuals in work aged 25–55. Note, earnings are censored at the contribution cap which means that the top of the earnings distribution is not represented.

Figure 56. 90:10 and 50:10 ratios of gross individual earnings, overall and by sex, from ASSD data



Note: Sample is individuals in work aged 25–55.

Figure 57. Annualised growth in gross earnings by earnings percentile, overall and by sex, selected periods, from ASSD data

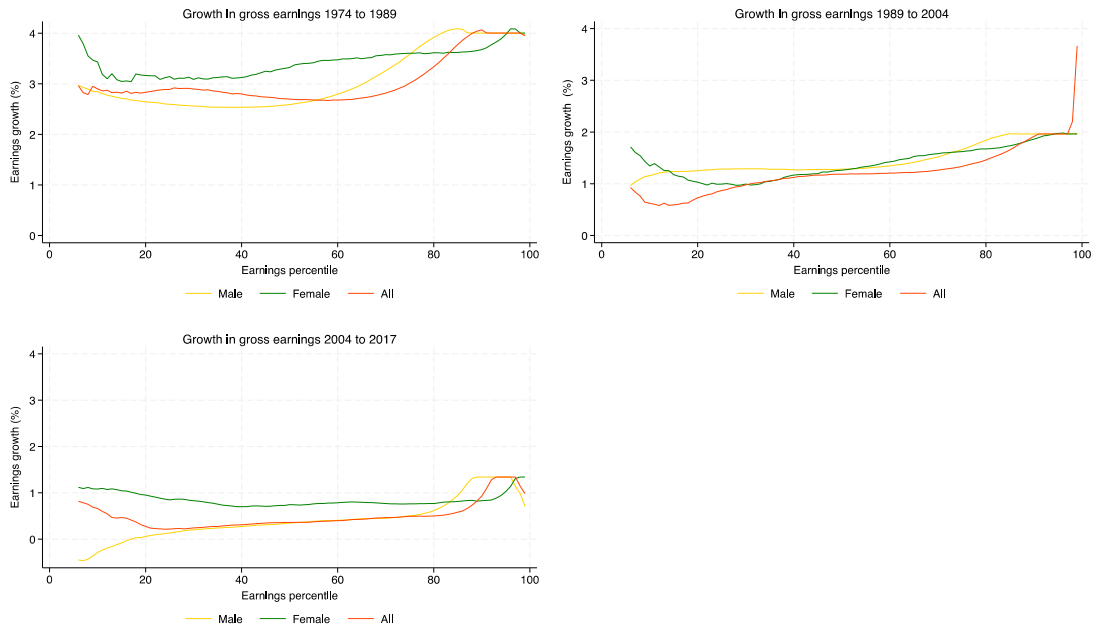


Figure 58. Share of employees and self-employed workers, over time, from EU-SILC data



Figure 59. Share of immigrants in the population 25–60 years of age, 2004–2019, from EU-SILC data

