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Inequality in Italy: 1980- 2020

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Inequality in Italy: 1980–2020

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1. Executive summary

Employment, wages, hours, and individual earnings

Since the mid-1970s, Italy has witnessed a significant surge in female employment, particularly among individuals aged 25–60. In this age group, the employment rate has soared from 40% to 60%. For those in the 60–74 age bracket, employment rates have also increased but have remained notably lower than in other European countries. In contrast, male employment has remained relatively stable since the late 1970s, with over 90% employment in the 25–55 age category. However, Italy still maintains the lowest labour market participation rate and the lowest female employment rate among European countries.

Educational attainment has increased for both men and women in Italy, although not as much as in other developed nations. Notably, employed women tend to have higher educational levels than men, with a larger proportion of employed women holding university degrees (ISCED 6–8). Concerning employment in relation to education, individuals with ISCED 6–8 education levels enjoy an employment rate of approximately 80%, while those with lower education attainment (ISCED 0–2) experience lower employment opportunities, indicating that higher education is associated with increased employment opportunities. When examining the data by gender, it becomes apparent that men generally have higher employment rates than women, but this gap narrows for individuals with ISCED 6–8 education levels, while it remains significant for those with ISCED 0–2 education levels.

Wage growth in Italy has been sluggish in recent years, contributing to income stagnation for the majority of workers. The absence of a legally mandated minimum wage has sparked continued debate, as wage determination relies heavily on collective bargaining agreements, two-thirds (62.7%) of which have expired in the last two years and have not yet been renewed. Median hourly wages have remained relatively stagnant over the past four decades, reflecting a long-term slowdown in total factor productivity and labour productivity in Italy since the 1980s. In fact, when adjusted for 2015 prices, the median hourly wage was approximately €10 in both 1987 and 2020 in real terms. Despite this prolonged wage stagnation, notable gender and education disparities exist among various socioeconomic groups. Individuals with higher education levels, regardless of gender, tend to earn significantly higher wages. However, gender differences within each education category persist. Wage inequality, as measured by the Gini index, experienced a substantial increase in the 1990s, particularly for women. However, this increase was offset by a gradual decline in the first decade of the new millennium. The Gini index then trended upward again in the 2010s, reaching a level similar to that of the early 2000s by 2020. The 90:10 and 50:10 percentile ratios have remained relatively stable since 1987, hovering around 3 and 1.5, respectively.

Median hours worked have remained approximately consistent since 1987, with men typically working around 40 hours per week and women approximately 35 hours per week. These average weekly hours remain constant even when examining gender-specific hours worked by educational level. Real net individual earnings have shown little change over the past three decades, aligning with the previously mentioned wage stagnation. This applies to both men and women across all education levels. However, individuals with lower education levels earn considerably less than those with higher education. Additionally, men with higher educational attainments experience more significant wage growth than their female counterparts, underscoring the fact that education tends to reward men more than women, at least in terms of median incomes. Overall, this report sheds light on Italy's employment, wage and income dynamics, highlighting gender- and education-based disparities and the broader economic landscape of the past few decades.

Labour market institutions

The characteristics of the Italian labour market, marked by a relatively large share of self-employed and temporary workers, coupled with a social insurance system that predominantly favours employees with permanent contracts, have created conditions where the economic crisis stemming from COVID-19 could have led to a rapid increase in income disparities and poverty. The incidence of poverty in Italy had already risen considerably during the financial and sovereign debt crises, and it remained notably high compared to the European Union average even before the emergence of the COVID-19 emergency.

Italy lacks a legal minimum wage, and instead the minimum wage is defined through collective agreements. However, these agreements vary significantly across sectors and occupations, making them difficult to compare and unsuitable as an alternative to a law-mandated minimum wage. Union density, representing the proportion of workers who are union members, has seen a significant decline over the past five decades. After reaching a peak of 50% at the end of the 1970s, it fell to 30% by 2020.

Household incomes

Since individual earnings have stagnated in the last three decades, household earnings have increased only modestly over the same time period. However, median disposable income for non-working households (where no one works) at 2015 prices has almost doubled (from €8,000 to €15,000). One possible explanation is the pension system and the increased availability of social assistance: in the 1970s and 1980s, as well as during the pandemic period, social spending increased massively, and pensions started to become an important source of income for many households. More-educated households, where household education is defined by the education level of the head of the family, have higher earnings than less-educated families. Concerning inequality, the Gini index of household earnings has remained stable around 0.35 since 1977, while the share of households below the relative poverty threshold has increased to about 13%, especially after 2010.

Immigration changed the composition of the Italian population in recent decades: the fraction of the working-age (25–60) population born abroad increased considerably from 1989 to 2012, reaching about 14%, then it fell and plateaued at 12%. Immigrants are particularly clustered towards the bottom of the income distribution, and on average work more than natives (at both the extensive and intensive margin) but have much lower disposable income. Over time the biggest change has been among women, with the share of highly educated and personal earnings falling considerably relative to natives from 2008 to 2020.

2. Institutional background

Italy has a population of approximately 60 million people, and its economy is characterised by a strong emphasis on services and small firms. Italy's economic strengths encompass sectors such as manufacturing, fashion, design, automotive and tourism, in addition to a rich cultural heritage. The economic landscape in Italy displays regional disparities, with the Northern regions, such as Lombardy and Veneto, being economically more prosperous than the Southern regions, such as Calabria and Sicily. The North–South economic divide has been a long-standing challenge for the country. In terms of governance, Italy has a decentralised system, with regions enjoying significant autonomy. There are 20 regions in Italy, each with its own government and legislative powers. This decentralisation allows regions to have authority over areas such as healthcare, vocational training and transportation, while national matters (such as education and labour market regulations) are handled by the central government.

Over the past three decades, the Italian economy has undergone profound transformations. These changes have encompassed a demographic shift characterised by an ageing population and declining birth rates. Concurrently, a series of labour market reforms have been implemented to enhance labour market flexibility. Financial reforms have opened up credit markets, while pension reforms have raised the retirement age and reduced retirement benefits for future generations. One of the primary objectives of these reforms was to boost labour market participation, which had been among the lowest in Europe. In comparative perspective, Italy is an interesting case because, among the OECD countries, it ranks high in terms of income inequality. Ending a period of sustained growth in the 1980s, Italy suffered three sharp recessions during our sample period, spanning 1989–2020, in addition to milder economic fluctuations.

The most significant institutional change impacting earnings and income dynamics in Italy has been a series of labour market reforms aimed at enhancing labour market flexibility. In fact, during the 1990s, there was a shift away from policies of wage indexation leading to wage compression and reducing income inequalities that had characterised the previous two decades. Instead, policies adopted were associated with widening income disparities and greater wage instability. In the post-war period, particularly during the 1970s, Italian labour markets were tightly regulated, and wage indexation ensured that all employees received the same absolute wage increase in response to price changes. The process of labour market reforms began in 1992 with the abolition of the indexation system. Subsequently, a wave of reforms was implemented to increase the flexibility of the labour market. Starting in 1997 with the introduction of the 'Treu reform' and continuing in 2003 with the 'Biagi reform', employment protection has significantly reduced, in particular for temporary work. This included increasing the maximum number of times a temporary contract could be renewed with the same employer and expanding the variety of contracts available (Boeri and Garibaldi, 2007). These two-tier reforms were followed by the Jobs Act enacted in 2015, which aimed to reduce firing costs for open-ended contracts (Daruich, Di Addario and Saggio, 2022). The sequence of these reforms resulted in a significant increase in employment opportunities in Italy, although real wages remained stagnant. This was largely because new employment opportunities were created in sectors with low productivity growth (Checchi, 2012).

Italy has a pension system that provides financial support to its retired citizens. The pension system in Italy has undergone several reforms since the 1990s to address demographic challenges and ensure its long-term sustainability. By the early 1990s a series of reforms were introduced, including the 1992 'Amato reform' and the 1995 'Dini reform'. These reforms, targeting younger generations entering the workforce after 1995, shifted from a defined-benefit pension to a system that links contributions during the working life to benefits after retirement. They also imposed stricter criteria for minimum retirement age eligibility. While maintaining the prominence of the pay-as-you-go social security system for the older generations (who had contributed at least 15 years into the system by 1992), these reforms sought to establish a multi-pillar pension system. The first pillar remained the social security system, while the second pillar

incorporated contractual funds organised by workers and employers. The third pillar encompassed open pension funds (with individual or collective enrolment) and individual pension plans offered by banks, insurance companies, and management saving firms. Subsequent interventions further developed the multi-pillar system, including a 2000 law that introduced tax exemptions for contributions to collective and individual pension funds. Additionally, a 2005 reform created a consistent regulatory framework for various pension funds, blurring the distinction between collective and individual funds. These pension funds primarily operate on a defined contributions model, where benefits depend on contributions history, market returns, and costs. They offer multiple investment portfolios with varying degrees of exposure to equity market risk. Workers can switch among these portfolios after 2 years of enrolment at no additional cost.

Italy has a healthcare system, which provides healthcare services to all Italian residents and even to some non-residents. Italy's healthcare system is based on the principle of universal coverage, which means that all residents have access to essential healthcare services, regardless of their income or employment status. The majority of healthcare services in Italy are publicly funded through taxation. The Italian government allocates funds to the regions based on population and other factors. These funds are used to operate hospitals, clinics, and other healthcare facilities. While the public healthcare system is the primary provider of healthcare services in Italy, there is also a significant private healthcare sector. Private healthcare providers offer services to individuals who choose to pay for them, and private insurance plans are available as well. While the overall quality of healthcare in Italy is high, there can be significant regional disparities in the availability and quality of healthcare services. Some regions may have better healthcare infrastructure and resources than others.

The education system in Italy is also largely provided and funded by the state and it is structured into several levels. Early childhood education is provided by both public and private institutions. It is not compulsory but serves as a crucial foundation for children's development before they enter primary school. Primary education is mandatory and covers 5 years, usually from the ages of 6 to 11. After completing primary education, students enter lower-secondary education, which is also compulsory and typically spans 3 years, from ages 11 to 14. Upper-secondary education typically lasts for 5 years, from ages 14 to 19. Education is compulsory from 6 to 16 years of age and students can choose between different tracks: *liceo* which offers a more academically-oriented curriculum, and *istituto tecnico* or *istituto professionale* which provide technical or vocational education, preparing students for specific careers or employment, but also for university. The university system in Italy is known for its rich history and diverse range of institutions. Italy has several types of universities, including public universities funded by the government, private universities recognised by the state, technical universities (*politecnici*), and universities for foreigners (*università per stranieri*) that focus on teaching Italian language and culture to international students. Italian universities offer a variety of degree programmes, starting with the 3-year *laurea triennale* (bachelor's degree), followed by a 2-year *laurea magistrale* (master's degree), in accordance with the Bologna process. Research-based doctoral programmes, known as *dottorato di ricerca* (doctorate/PhD), are also available. Funding for public universities in Italy comes from the government, resulting in lower tuition fees for domestic and EU students; one-third of students obtain a tuition waiver following means testing. Private universities generally have higher tuition fees. Scholarships and financial aid opportunities are available for eligible students.

In Italy, the tax system encompasses various elements that impact individuals and businesses. The personal income tax is a tax applying to various types of income, including employment, self-employment, rental, and investment income. Currently, for employed workers tax rates are progressive, with deductions and tax credits available for specific expenses, such as healthcare and education costs. The self-employed enjoy preferential treatment, with a 15% proportional tax rate up to gross income of €85,000. The main tax on consumption is value-added tax (VAT) on most goods and services. Standard VAT rates generally fall between 20% and 22%. Both employees and employers contribute to Italy's social security system, funding benefits such as healthcare and pensions. Contributions are calculated as a percentage of an employee's salary, subject to a cap.

3. Notes on measurement and definitions

The figures in this study have been produced primarily using data sourced from the Bank of Italy's Survey on Households Income and Wealth (SHIW). The SHIW spans the period from 1977 to 2020, providing annual data up to 1984 and biannual data from 1986 onwards, with a few exceptions in 1987, 1998, and 2020. Due to the COVID-19 pandemic and the need to align the SHIW with the European Central Bank Household Finance and Consumption Survey, there is a four-year interval between the 2020 and the previous survey.

In total, these 24 SHIW cross-sections comprise approximately 450,000 observations, with an average of 18,500 individuals surveyed in each wave. It is worth noting that not all variables are available for every year. For example, some graphs only include earnings data from 1989 onwards, while data for certain years, particularly in the 1970s, may not be available.

For additional details on the SHIW, please visit https://www.bancaditalia.it/pubblicazioni/indagine-famiglie/index.html?com.dotmarketing.htmlpage.language=1&dotcache=refresh

Unit of analysis and sample:

- The sample is individuals aged between 25 and 60 inclusive, except where otherwise indicated. For figures on wages and earnings, the sample is further restricted to individuals (or households where applicable) with strictly positive wages or earnings, respectively. There are no further restrictions for the household income figures. While some households in the SHIW are interviewed more than once, the figures below use the SHIW as a series of repeated cross-sections.

- Individuals are the unit of analysis throughout. For example, for equivalised household income, each individual is allocated their respective equivalised household income, so that income is counted as many times as there are individuals aged 25–60 in the household.

- In the figure where we winsorise, we allocate all observations above the 99th percentile the amount equal to the 99th percentile. Otherwise, distributions are not trimmed. Sample weights are used throughout the analysis.

Outcome definitions:

- **Employment rate**: the fraction of the population that is employed according to self-reported employment status (rather than say having non-zero earnings).

- **Earnings**: net annual real individual earnings at 2015 prices (includes self-employed).
    - If an employee has multiple jobs, earnings from all jobs are summed together.
    - Household net earnings are defined as the sum of household members' individual earnings.
    - Nominal earnings are converted into real terms in calendar year 2015, using SHIW deflator.

- **Hours of work**: usual/typical paid hours worked per week, including paid overtime. Excludes self-employed workers.

- **Wages**: individual real net hourly wages (weekly net employee earnings divided by weekly hours worked as defined above). Excludes self-employed workers. We convert nominal wages into real terms in 2015 prices, using SHIW deflator.

- **Disposable household income (household equivalised income after deducting taxes and adding benefits and tax credits**)

    - The SHIW dataset provides disposable income as the summation of three main components: working income (i.e., net earnings), net public transfers (pensions or other forms of government benefits) and capital income, coming from stocks and/or bonds.

    - In some cases, public transfers are negative: in this case the individuals in the family pay the government more than they receive. It is important to notice than these transfers do *not* take into account taxes on income: neither working nor capital, as income data are always net.

    - Household incomes – both earnings and disposable income – are normalised according to the modified OECD equivalence scale, to make numerously different families comparable.

Splits:

- **Gender:** female, male.

- **Education**: Education is divided into three groups, based on International Standard Classification of Education (ISCED) classifications: ISCED 0–2, ISCED 3–5 and ISCED 6–8. These three categories refer to completed education cycles: whether the individual attained the education level or not, regardless of how many years were spent in schooling.

Completed education	ISCED	Group
Middle school (*scuola media*)	ISCED 0–2	Low
High school (*scuola superiore*)	ISCED 3–5	Medium
University or more (master's or PhD)	ISCED 6–8	High

- **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. In Figures 28 and 33 they are also divided into working and non-working. A working family is a family where at least one member works and earns employment income.

4. Individual employment and earnings

In this section, we delve into the trends in individual employment and earnings. Starting with earnings, our initial analysis dissects hourly wages and hours worked as separate components. Subsequently, we present a series of charts that specifically address earnings inequality. It is important to highlight that our examination of wages and hours focuses primarily on employed individuals in Italy, as reliable data on hours worked for self-employed individuals do not exist. However, when we shift our focus to total earnings, our analysis encompasses both employees and the self-employed.

4.1 Trends in employment

Figure 1 displays employment rates by gender and age from 1977 to 2020. This graph underscores a consistent and pronounced disparity in participation rates between prime working-age males and females throughout the entire time-frame. Nevertheless, it is worth noting that this gender gap began to narrow during the 2000s. The employment rate for women of prime working age (25–60) has doubled, while the rate for men has remained constant. In 2020, the employment rate for men aged 25–60 exceeded 80%, whereas for women within the same age group it was around 60%. The reduction in the gap between males and females was most rapid between 1970 and 2010, while it remained stable after 2010. A different pattern emerges among older men and women (aged 61–74). The employment rates for both males and females within this specific group of workers exhibit a similar trajectory across the entire period. The figure prominently highlights the surge in participation rates for this group during the 2000s. This pattern serves as a clear indicator of the impact of pension reforms and the subsequent rise in the retirement age. The employment rates for young individuals (aged 16–24), both male and female, exhibit a continuous decline since the late 1980s, mirroring the rise in school participation. Additionally, the pandemic contributed to a decline in the employment rates for young women, while the rates have increased for young men. This divergence in the employment patterns between genders, which initially began between 2010 and 2015, has further widened.

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

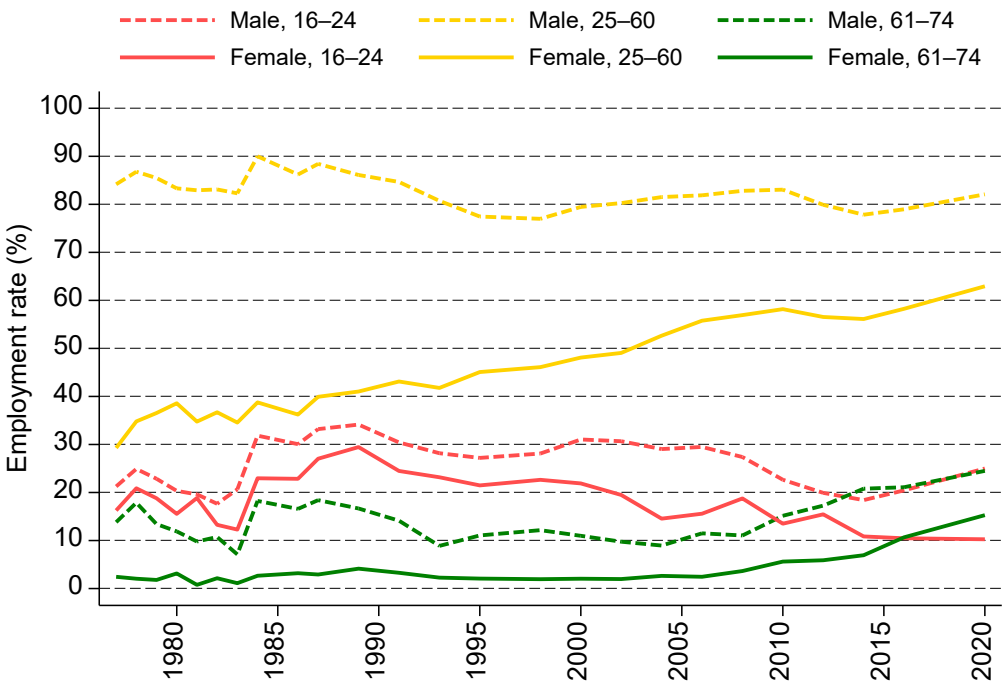


Figure 2 depicts the employment rates across the life span for both women and men in selected years: 1987, 1995, 2006, 2016 and 2020. In this graph, as expected, both genders exhibit a characteristic inverted U-shaped pattern, showing that employment rates tend to be highest during the age range of 25–60.

However, there are notable distinctions between women and men. In 1987, the peak employment rate for men approached 100%, while for women it ranged between 40% and 50%. This indicates a substantial gender disparity, with a larger proportion of men being employed.

Over the years, there has been an upward trend in female employment, particularly in the middle age bracket. This suggests that an increasing number of women in this age group have been participating in the workforce.

Despite these improvements, a significant gender gap in employment rates persists. Female employment rates remain around 20 percentage points lower than those for men. This discrepancy underscores that, although female labour force participation increased in the latter part of the 20th century, it still lags behind the levels observed in other OECD countries.

In fact, the overall female employment rate is below 50%, and in certain regions, predominantly in the South, it even falls below 40%. These regional variations indicate that there are specific areas where female workforce participation rates are notably lower compared to the national average.

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

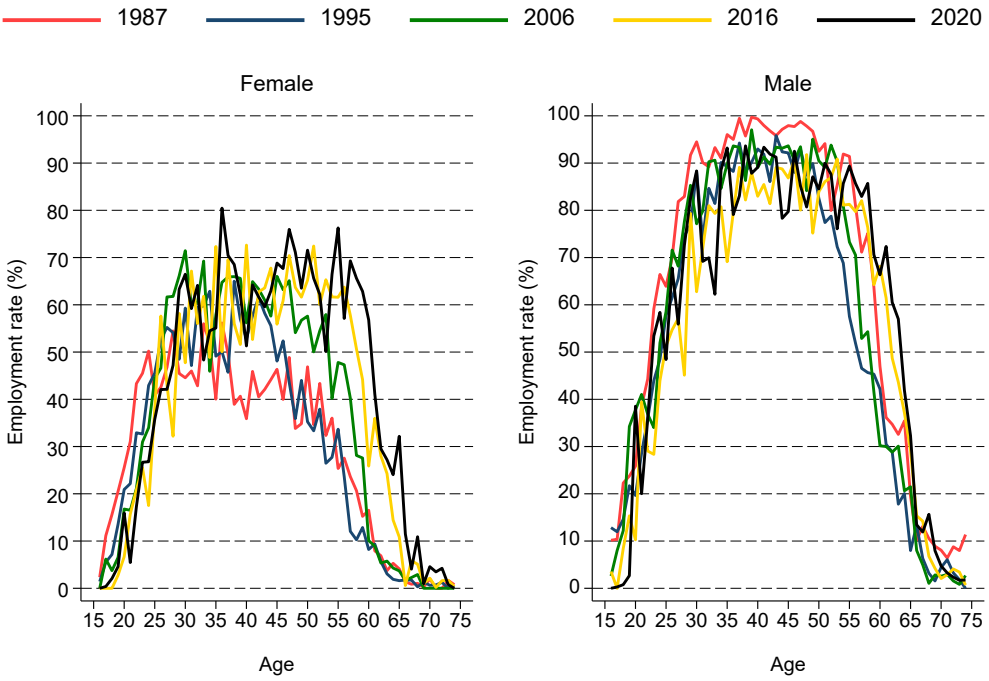
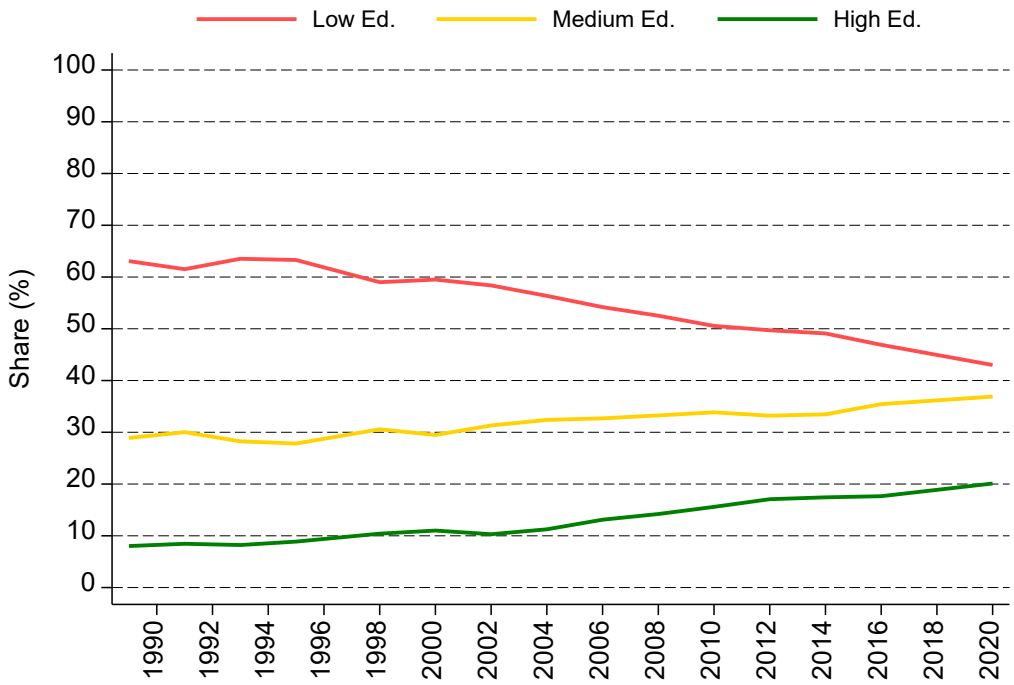


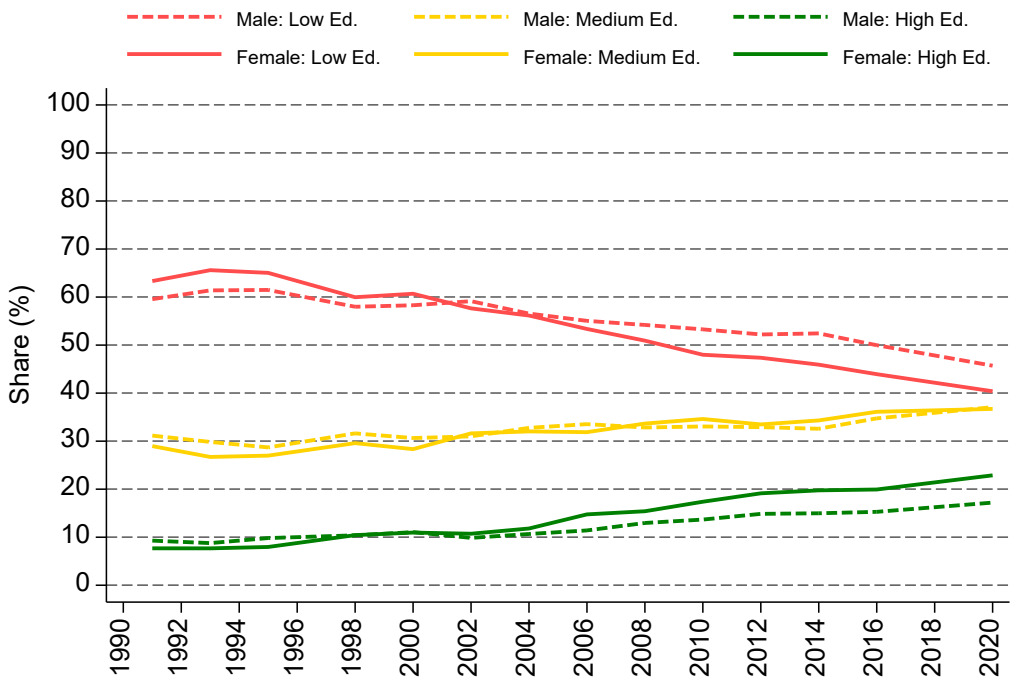
Figure 3 illustrates educational attainment trends of young adults (aged 25–60). The graph begins in 1989 because education data before that year are only available for income receivers, rather than for the entire sample. In the late 1980s, more than 60% of the Italian population had only attained a middle school education level (ISCED 0–2). However, over the past three decades, this percentage has decreased by approximately 20 points, while the proportions of individuals with high school diplomas and those with bachelor's degrees or higher (ISCED 3–5 and ISCED 6–8, respectively) have seen substantial increases. Nevertheless, the percentage of individuals with bachelor's degrees or higher remains below 20%, with both high school and middle school diploma holders comprising approximately 40% each. Figure 4 shows that while these trends have generally been similar for both men and women, there are some discernible differences in the educational attainment of women. Women exhibit a more pronounced decrease in the percentage of those with a lower level of education, and concurrently, they show a stronger increase in the proportion of highly educated individuals.

Figure 3. Educational attainment over time



Note: Sample is individuals aged 25–60.

Figure 4. Educational attainment by sex, over time

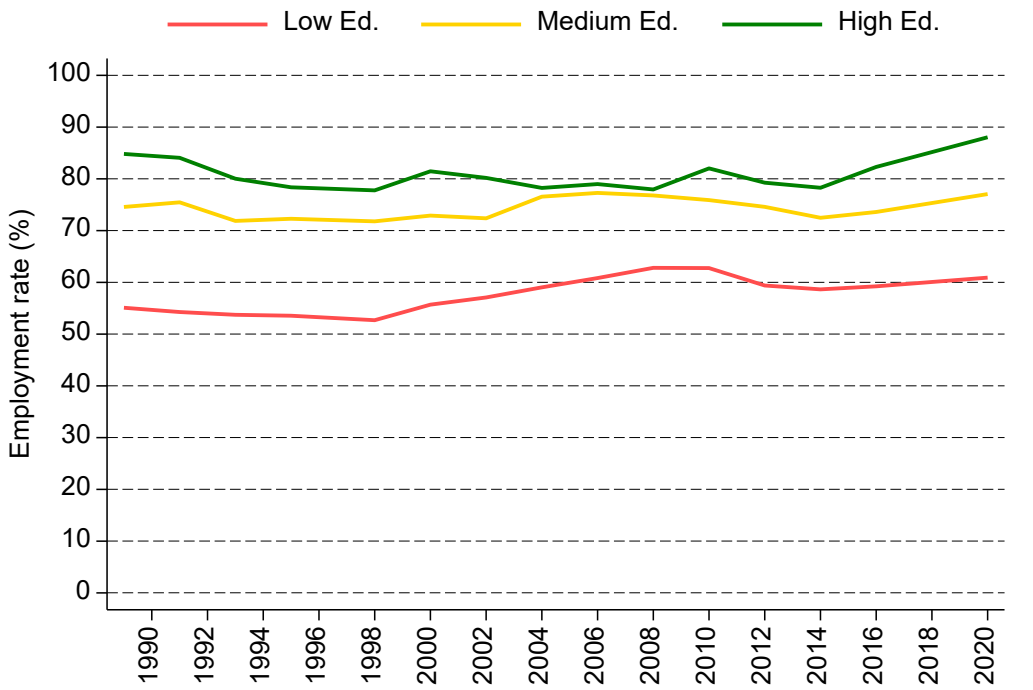


Note: Sample is individuals aged 25–60.

Figure 5 presents data on employment rates based on different levels of education. The figure shows that individuals with higher levels of education have higher employment rates, which is a

common trend in many countries. In this case, the employment rate for individuals with the highest level of education hovers around 80%, exhibiting a range between approximately 75% and 90% over the years, with the most recent data indicating a peak at 90%. Despite the increasing employment rate for the most educated group in the last decade, there is no significant change in the employment premium associated with education over the time interval under analysis. This means that the difference in employment rates between the most educated group and the least educated group remains relatively constant at around 20 percentage points. This trend is different from most OECD countries where the education premium has been steadily increasing over the same time-frame.

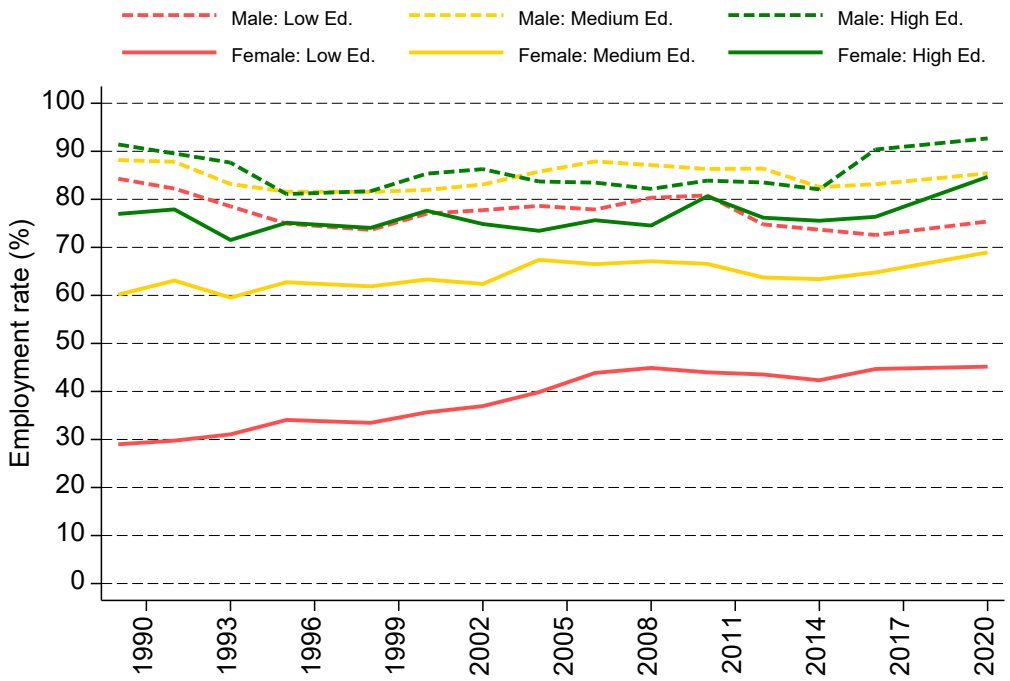
Figure 5. Employment rates by education, over time



Note: Sample is individuals aged 25–60.

When examining employment data by both gender and education, as depicted in Figure 6, a notable trend emerges: the gender gap in employment outweighs the education gap. Particularly striking is the remarkably low employment rate of women in the lowest education categories (ISCED 0–2). This indicates that, among those who are employed, women tend to have higher levels of education than men, while women with lower education levels are more likely to be non-working. Furthermore, when comparing employment rates between men and women within ISCED 6–8, we find that they exhibit similar rates. However, employment rates for more-educated women, although notably higher than those for less-educated women, still fall behind the rates for men with lower education levels.

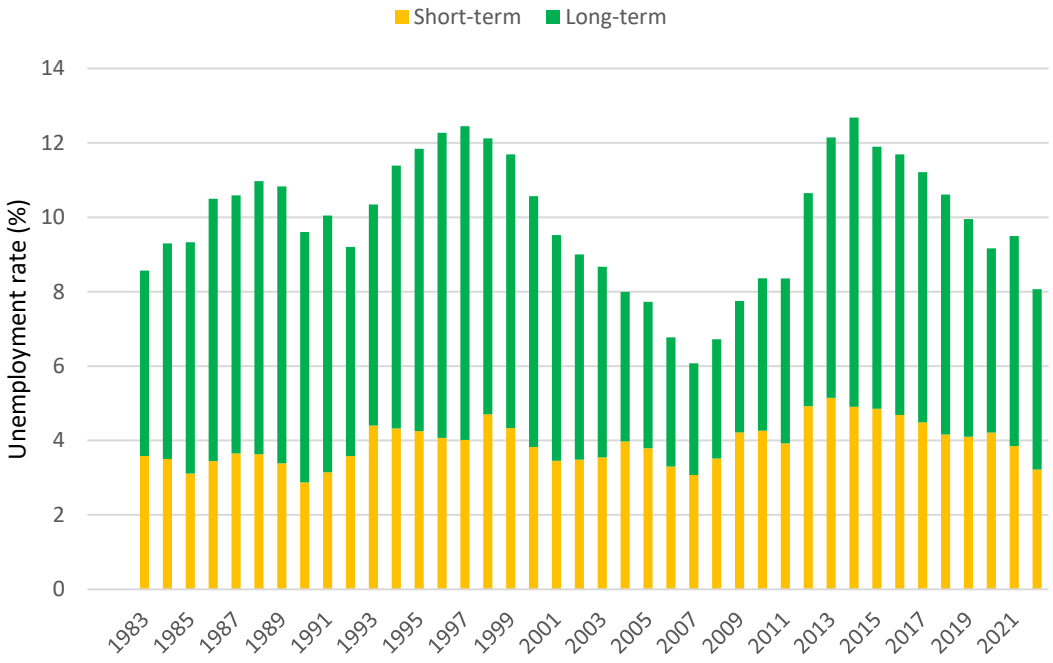
Figure 6. Employment rates by sex and education, over time



Note: Sample is individuals aged 25–60.

Figure 7 illustrates a notable variation in the unemployment rate over time, differentiating between long-term (1 year or more) and short-term (less than 1 year) unemployment. The unemployment rate exhibited sharp spikes during the severe recession of the 1980s and the labour market reforms of the 1990s, followed by a substantial decrease in the early 2000s. However, it surged significantly during the Great Recession and reached its peak during the years of the sovereign debt crisis. By the end of 2013, unemployment declined gradually, but it did not return to pre-crisis levels. Since the beginning of the period, approximately two-thirds of unemployed workers have been long-term unemployed, reflecting an Italian peculiarity and indicating the limited flexibility of the job market. The COVID-19 pandemic led to an increase in unemployment, with a sign of recovery in 2022.

Figure 7. Unemployment rate by duration over time.



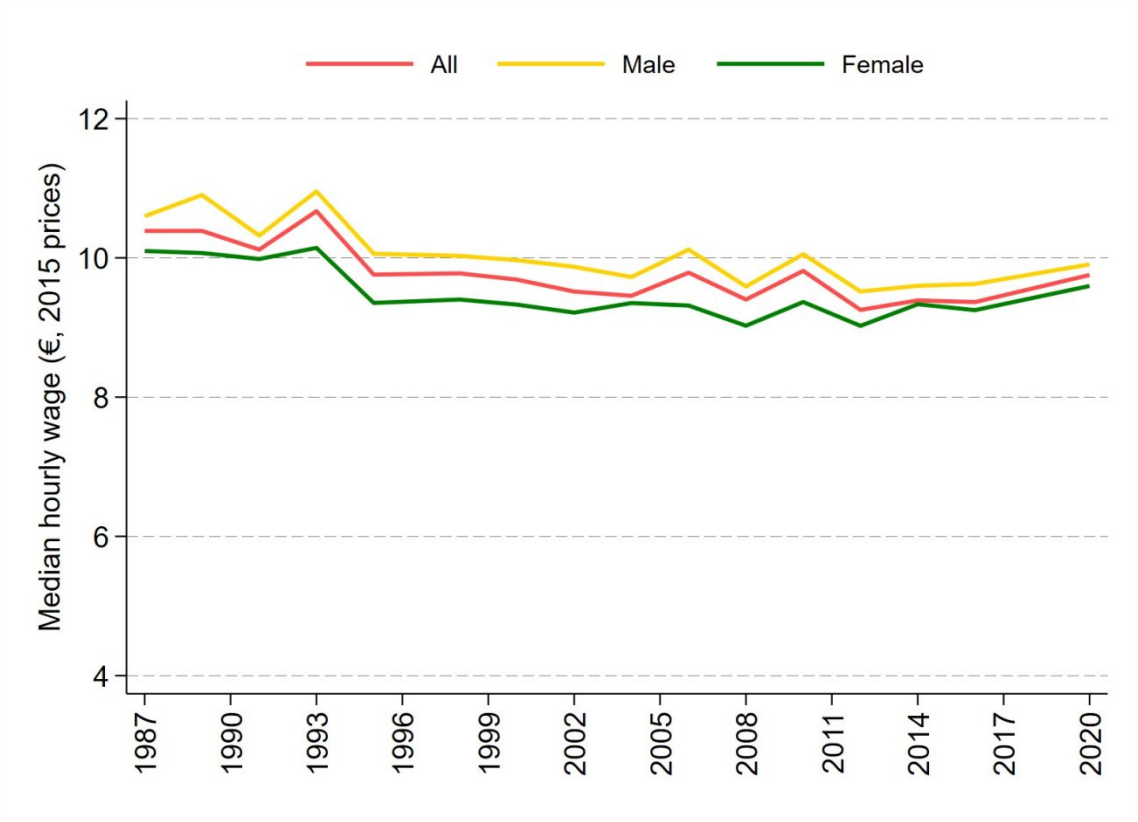
Note: Sample is individuals aged 25–60. The unemployment rate is calculated as the fraction of the labour force aged 25–60, split between short-term (less than 1 year) and long-term (1 year or more) duration of unemployment.

Source: The calculation of the unemployment rate by duration of unemployment is derived from Labour Force Survey (LFS) data for Italy, sourced from OECD.Stat, for 1983–2022. This computation involves considering the percentage of individuals who have 'declared' their unemployment status and applying this percentage to the actual count of total unemployed individuals.

4.2 Trends in hourly wages (employees only)

Real median hourly wages remained relatively stagnant between 1987 and 2020, hovering around €10. Figure 8 illustrates that this wage trend held true for both males and females, indicating a lack of significant gender disparity in this regard.

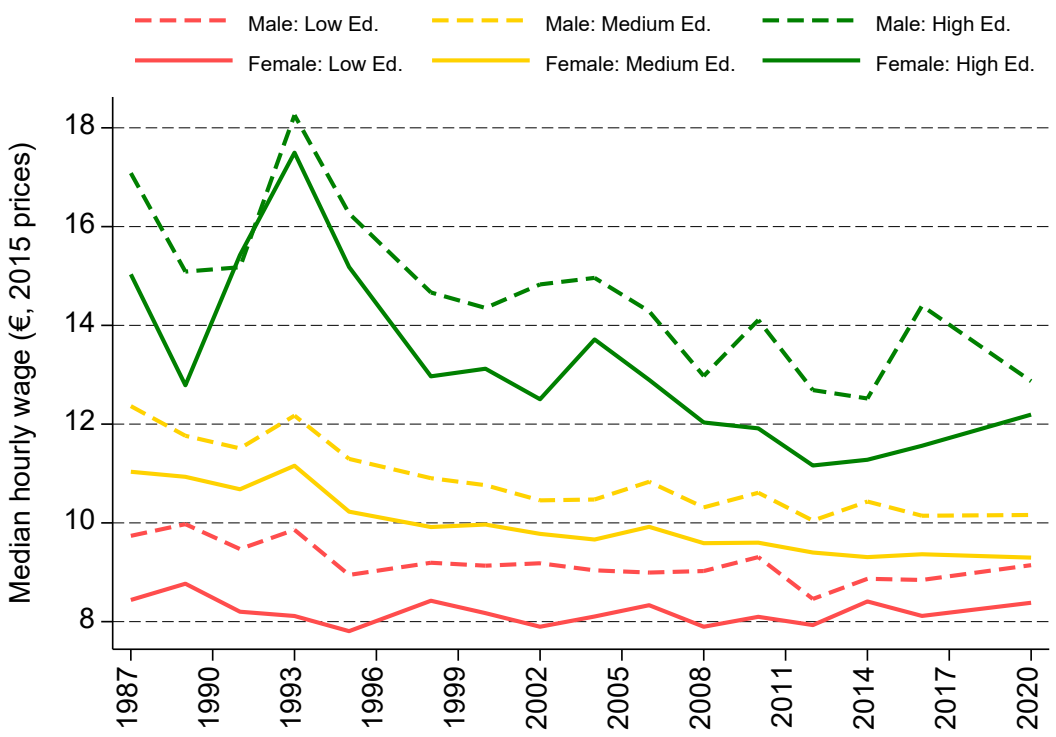
Figure 8. Median net real hourly wage among employees, overall and by sex, over time



Note: Sample is employees aged 25–60 with strictly positive wages. Wages are in 2015 prices.

Figure 9, on the other hand, highlights notable differences among various educational groups. The most striking observation is the sharp decline in wages for individuals with university qualifications since the early 1990s. Additionally, the educational gap in wages has considerably narrowed over the years, affecting both men and women. This suggests a convergence in earnings across different educational backgrounds, potentially reflecting changes in the labour market and educational attainment.

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



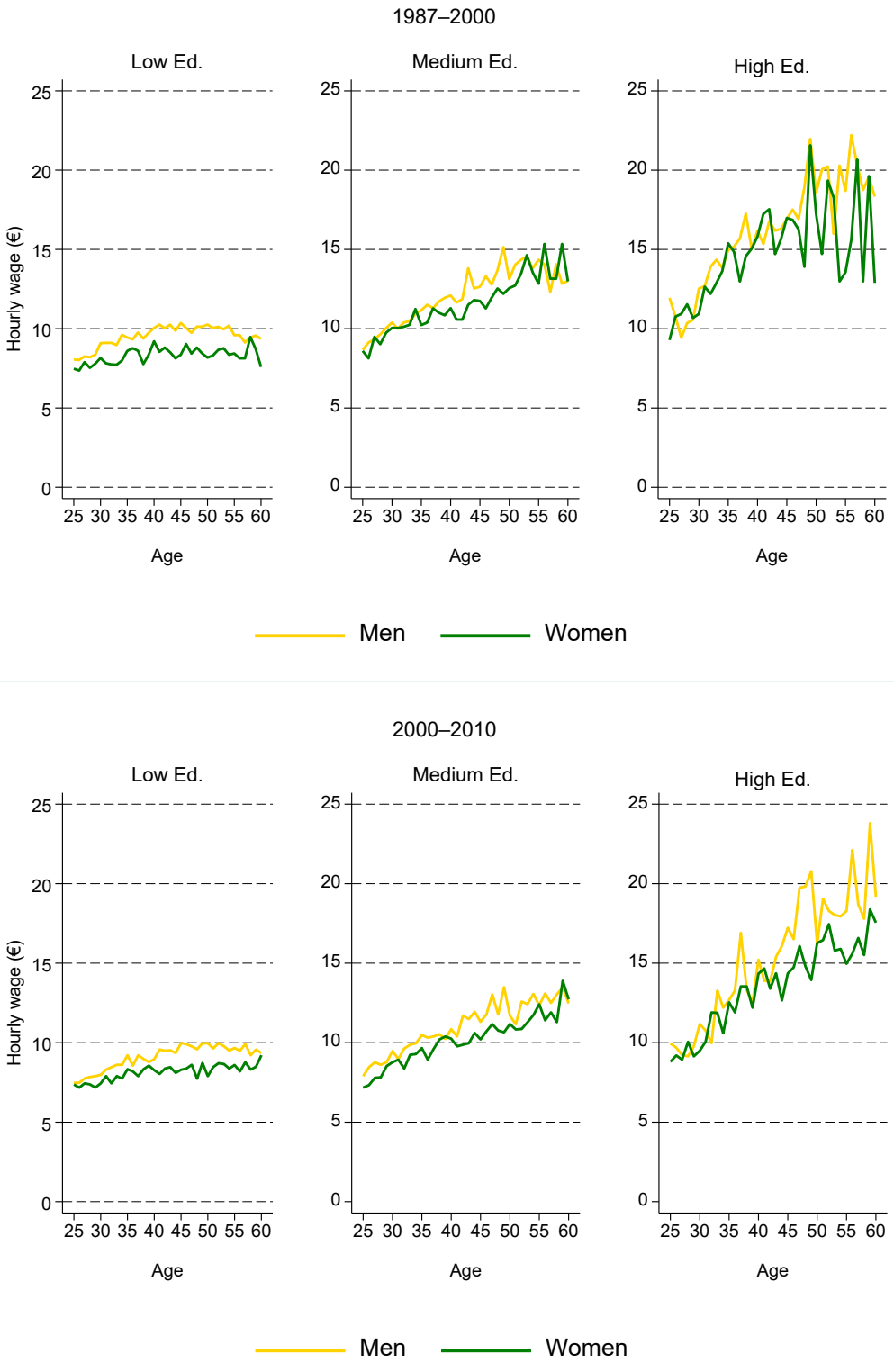
Note: Sample is employees aged 25–60 with strictly positive wages. Wages are in 2015 prices.

Figure 10 provides insights into median wages across the life cycle, taking into account gender and education levels, across different time periods. Here are some key observations:

1. **Low education levels (ISCED 0–2)**. Individuals with lower levels of education exhibit a relatively flat wage profile over their working lives, regardless of the specific time period considered. This suggests that their wages remain relatively stable over time.
2. **Middle education levels (ISCED 3–5)**. Both men and women with middle levels of education experience slight positive wage growth as they progress through their working lives. However, younger generations entering the labour market tend to have lower initial hourly wages than those at the same career stages in previous periods. This indicates that wage growth for this group has slowed over time.
3. **Higher education levels (ISCED 6–8)**. At age 25, men and women with higher levels of education have nearly identical median wages. However, as they progress into their 40s, a gender wage gap gradually emerges and persists into their 60s. Although even for this group one observes slowing wage growth over time, men with higher education levels tend to see more significant growth than their female counterparts.

In summary, Figure 10 reveals that individuals with different education levels experience distinct wage trajectories over their working lives. It also underscores the presence of a gender wage gap for those with higher education, which becomes more pronounced as individuals advance in their careers. These trends offer valuable insights into how education, gender and age interact in shaping wage outcomes.

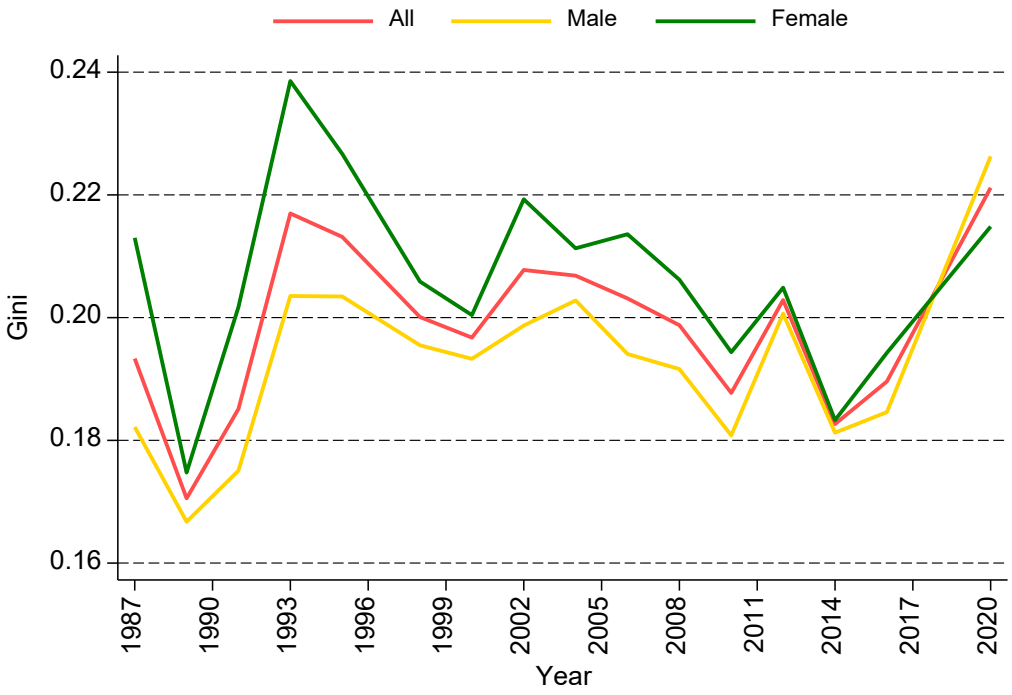
Figure 10. Median net real hourly wage among employees over life cycle, by sex and education



Figures 11 and 12 depict the evolution of wage inequality, as measured by the Gini coefficient, the 90:10 ratio, and the 50:10 ratio. Wage inequality experienced a decline in the late 1980s to early 1990s, followed by a sharp increase in the early 1990s. Subsequently, over the next two decades, there was a notable reduction in wage inequality. However, a more recent upturn in wage inequality emerged in the years following the Great Recession, persisting even during the COVID-19 period, thereby elevating the Gini coefficient to levels reminiscent of the early 2000s.

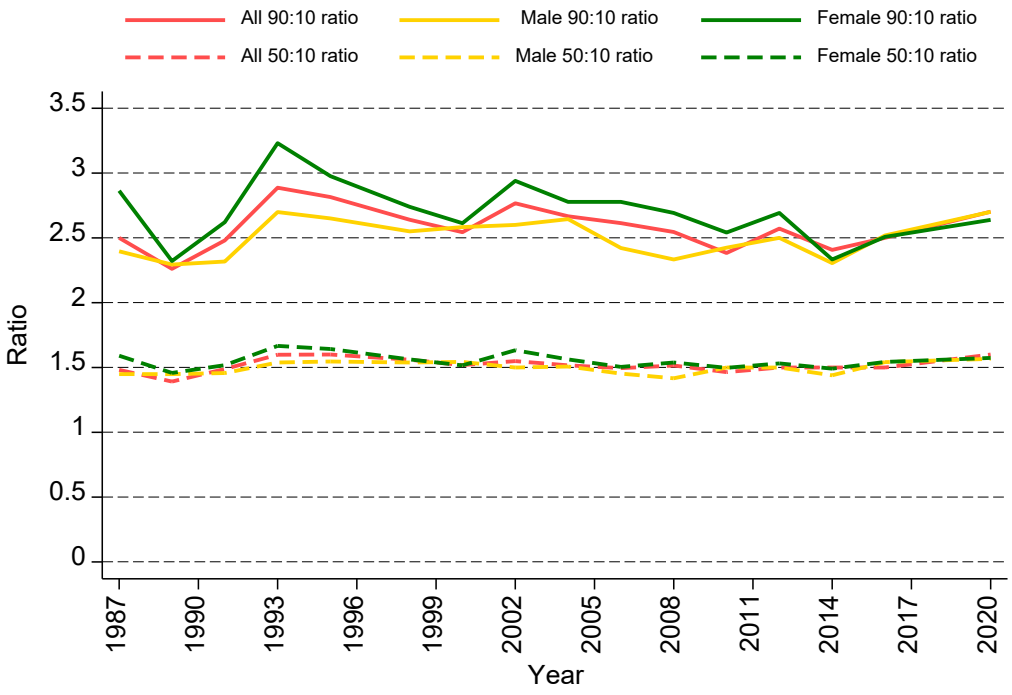
Overall, there are no significant disparities between males and females in the observed wage inequality trends. Nevertheless, Figure 12 highlights remarkable and structural disparities in inequality levels between the upper and lower ends of the hourly wage distribution.

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



Note: Sample is employees aged 25–60 with strictly positive hourly wages. Trimmed at the top and bottom 1% of the gender-specific hourly wage distribution.

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



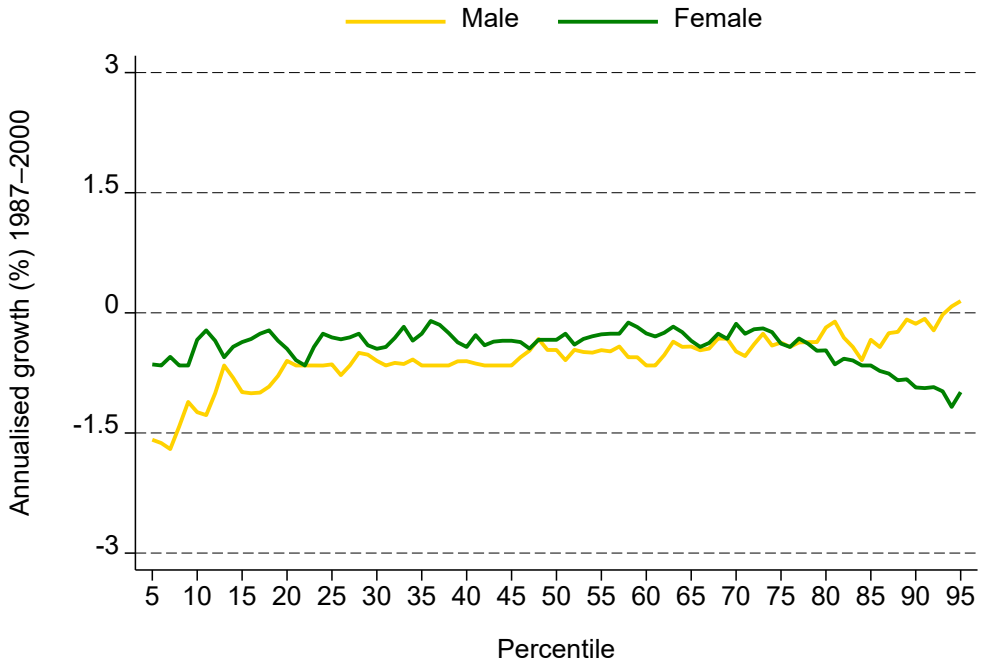
Note: Sample is employees aged 25–60 with strictly positive hourly wages.

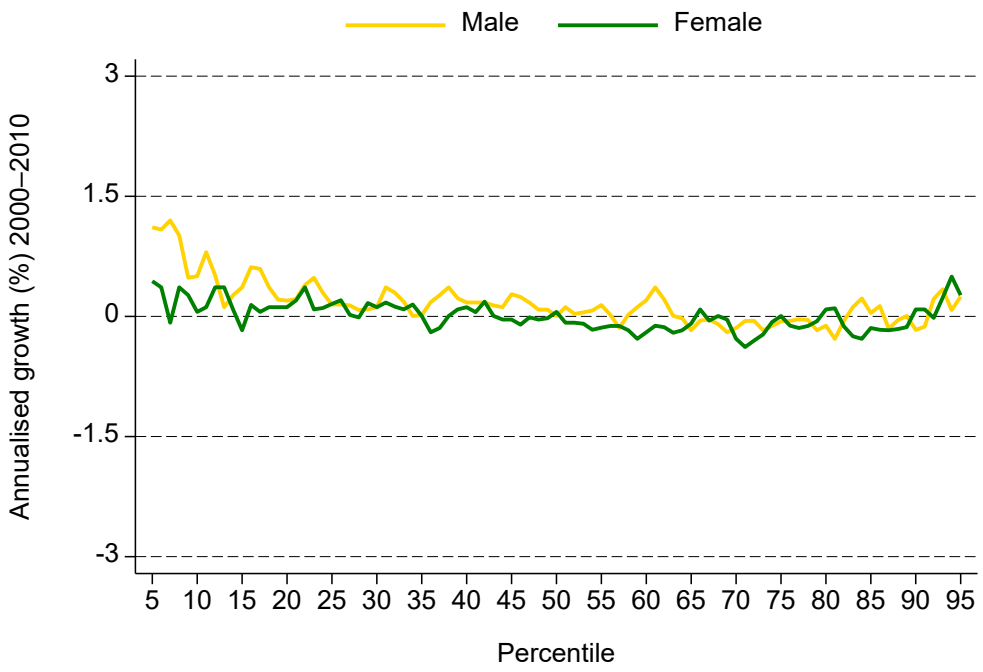
Figure 13 provides a closer look at changes in hourly wages across the wage distribution. The entire 1987–2000 period featured low and relatively uniform negative wage growth. Wage changes for both men and women fell within the range of –1.5% to 0%.

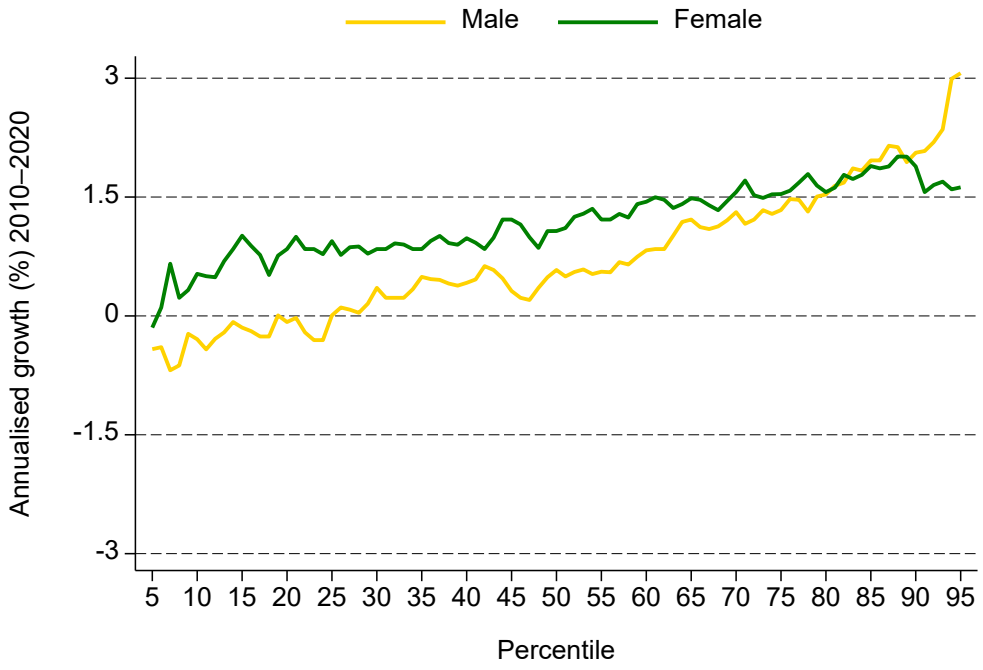
Wage inequality exhibited a sharp increase between 1980 and 1994, accompanied by stagnant wages across the entire distribution. Moving forward, from 2000 to 2010, wages largely remained stagnant across most of the distribution, with slightly better outcomes for those in the lower tail.

Between 2010 and 2020, the growth in hourly wages varied significantly across different percentiles of the distribution. This divergence reflects distinct responses to subsequent financial and sovereign debt crises. The increase in wage inequality during this period can be attributed, in part, to the absence of a minimum wage and lack of indexation of earnings, especially during the relatively high inflation years between 1987 and 2000.

Figure 13. Annualised growth in net hourly wages among employees by wage percentile, overall and by sex, selected periods





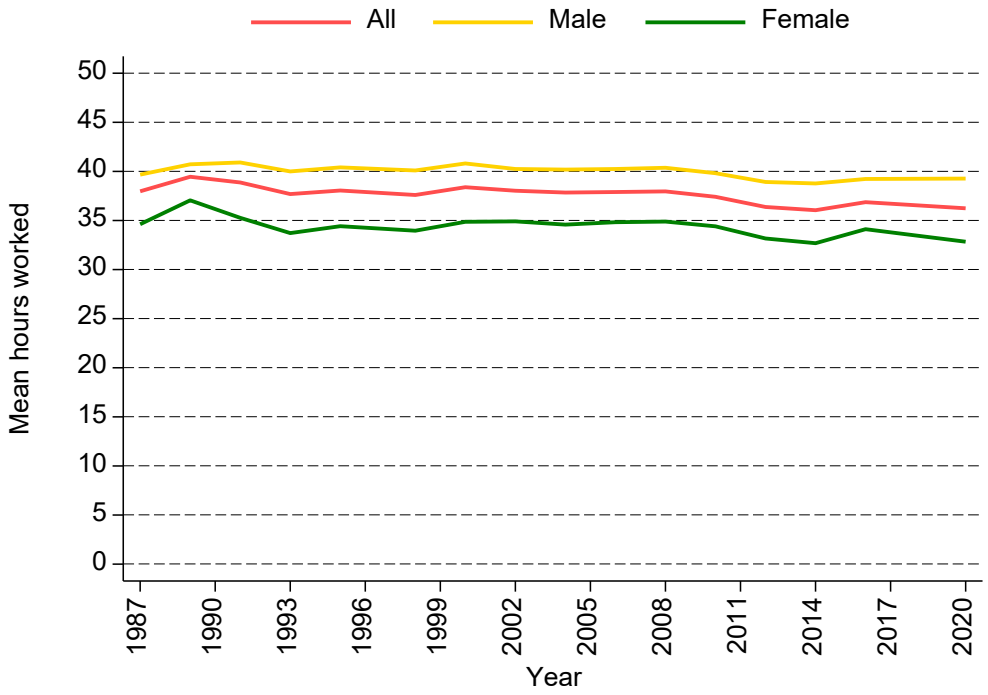


4.3 Trends in hours worked (employees only)

Figure 14 illustrates that average weekly working hours for male employees have remained largely unchanged over time. In contrast, for female employees, there has been a slight decline, with hours dropping below 35 per week since the late 1990s. The decrease in weekly hours worked has been most pronounced among individuals with low levels of education, as depicted in Figure 15. However, since the Great Recession, there has been no significant disparity in hours worked across different educational backgrounds, especially among women.

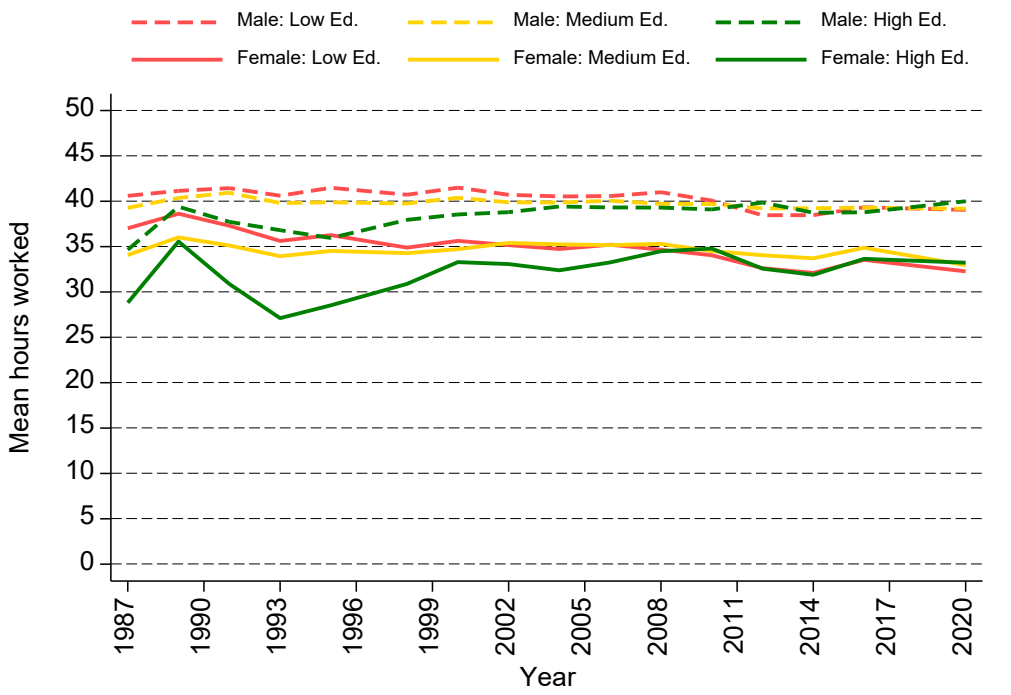
It is noteworthy that a gender gap in working hours persists across all levels of education. Interestingly, highly educated individuals exhibit a more volatile pattern in their working hours than those with lower levels of education. This variability may reflect differences in job roles and the flexibility associated with various professions.

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



Note: Sample is employees aged 25–60. Hours include paid (but not unpaid) overtime and have been top-coded to 97 hours per week.

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



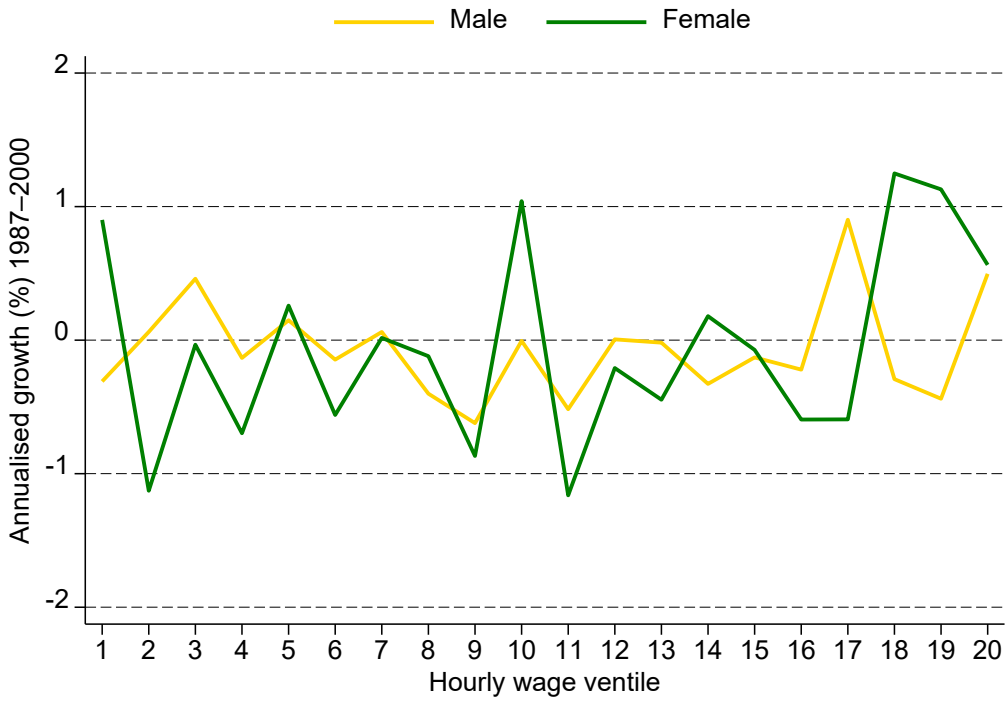
Note: Sample is employees aged 25–60 who have completed full-time education. Hours include paid (but not unpaid) over time and have been top-coded to 97 hours per week.

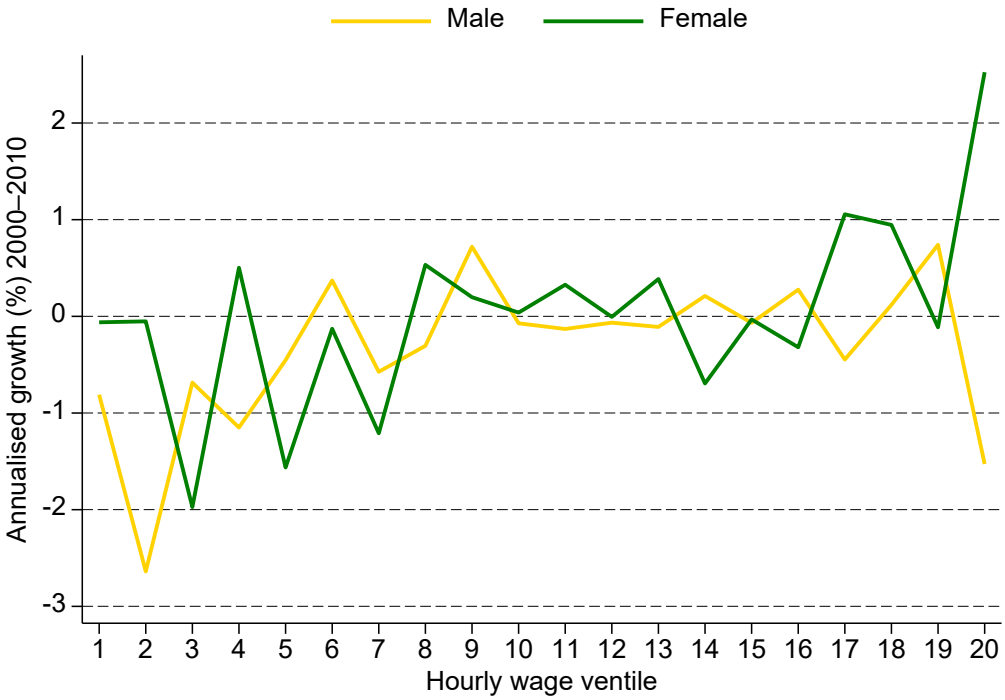
Figure 16 plots average working hours for both men and women, segmented across the wage distribution, over different time periods:

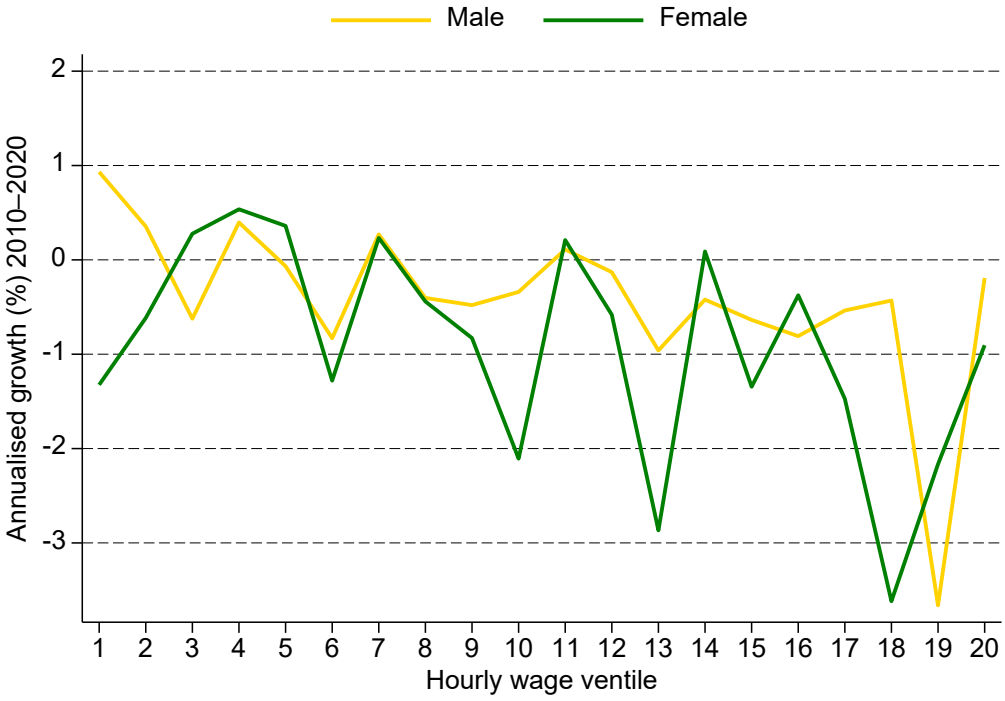
- Between 1987 and 2000, there was an increase in average hours worked for both men and women, with women experiencing a more substantial increase, particularly among those at the higher end of the wage distribution.
- From 2000 to 2010, a noteworthy pattern emerged. At the lower end of the wage distribution, there was a persistently negative growth in hours worked. Conversely, at the upper end, especially for women, a remarkable positive growth in hours worked was recorded. For men, the growth was close to zero and even negative within the top ventile.
- Following the Great Recession, there was a decline in both male and female working hours observed across most of the wage distribution. However, the decrease in working hours was more pronounced toward the upper wage levels.

These trends highlight how working hours have evolved over time, revealing distinctions between genders and income groups. The data showcase the impact of economic conditions and labour market dynamics on working hours for men and women across various income brackets.

Figure 16. Annualised growth in mean hours worked among employees by hourly wage ventile, overall and by sex, selected years







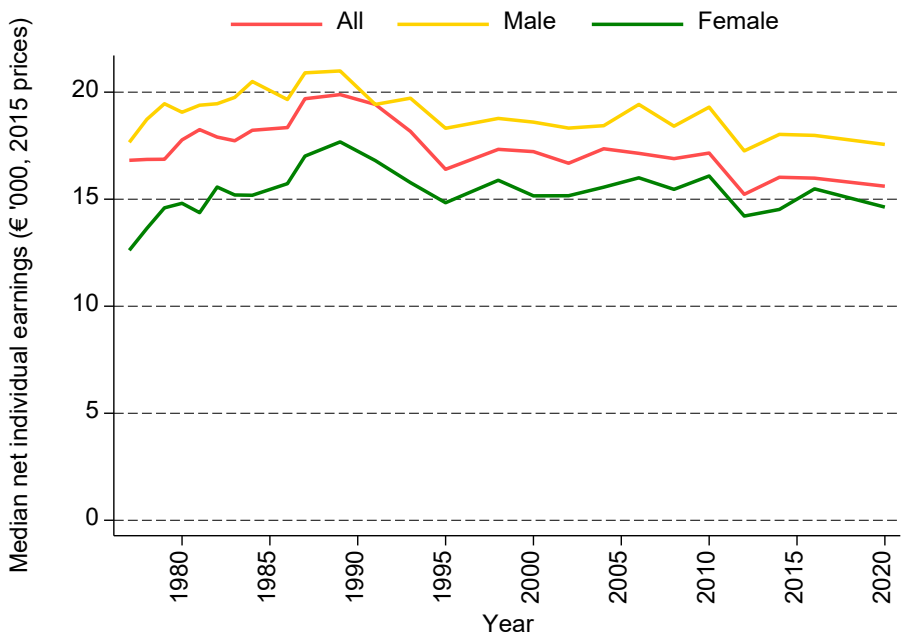
Note: Sample is employees aged 25–60 who have completed full-time education. Hours include paid (but not unpaid) over time and have been top-coded to 97 hours per week.

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

Let us now delve into the trends in individual earnings, which reflect the combination of changes in hours worked and hourly wages. Before we present statistics on income inequality, Figure 17 illustrates trends in median earnings, primarily influenced by shifts in median wages, as median hours have remained relatively stable over time. The graph reveals that median earnings experienced an upward trajectory for both men and women from the late 1970s until the early 1990s. Subsequently, there was a sustained decline, from which men have yet to fully recover, and women have only recently regained ground. Notably, for men, a clear negative trend in real individual earnings emerged from the mid-1990s, possibly linked to extensive labour market reforms introducing various short-term contract types. Women also encountered this negative shock but did not see a continuous deterioration.

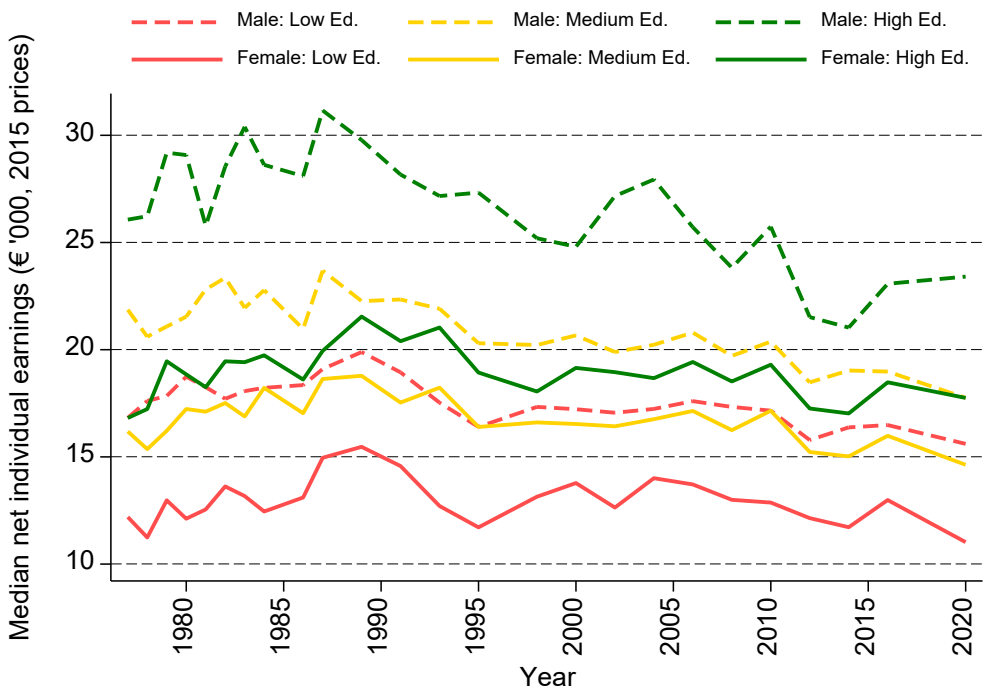
Furthermore, both men and women faced an additional negative shock following the Great Recession, leading them into a new downward trajectory, a trend that persisted after the COVID-19 crisis. Figure 18 illustrates a significant decline in earnings for men, especially those with high-level qualifications (ISCED 6–8), and a relatively less pronounced decline for those with intermediate qualifications (ISCED 3–5). It is important to acknowledge that when examining trends by education, we should consider the possibility of selection bias, given the overall increase in educational attainment during this period. What is particularly striking is that the gender pay gap appears to narrow more substantially for women than for men as educational qualifications rise. The key insight to take away from this figure is that the structural factors contributing to gender-based earnings disparities seem to outweigh the influence of disparities in educational achievement.

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



Note: Sample is employees aged 25–60 with strictly positive earnings. Net earnings are adjusted to 2015 prices and do not account for any transfers, taxes or benefits.

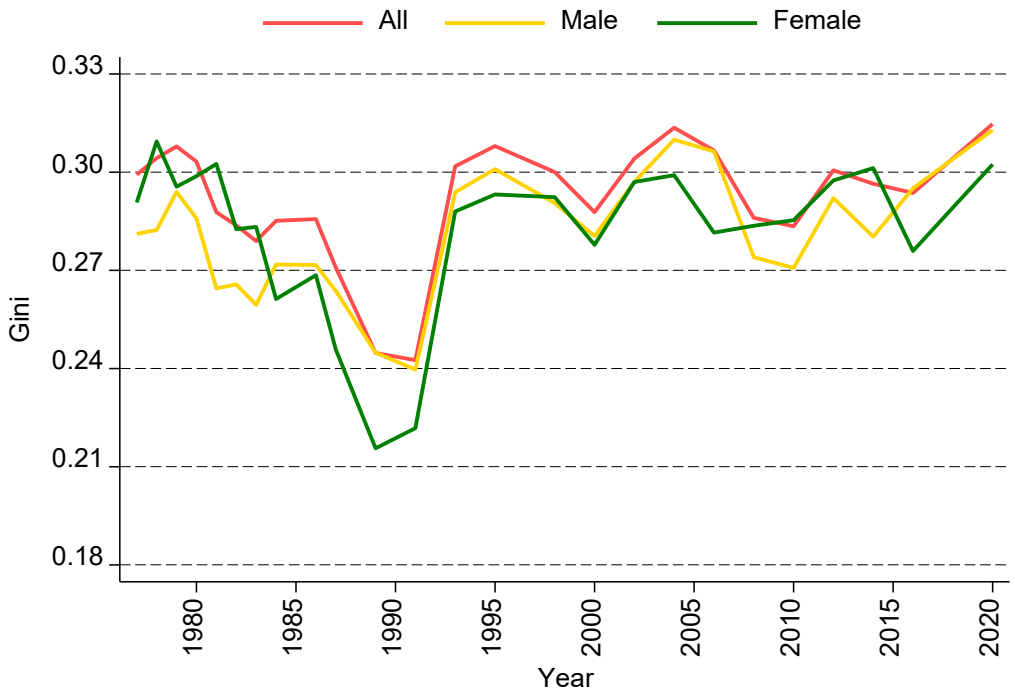
Figure 18. Median real net individual earnings, by sex and education, over time



Note: Sample is employees aged 25–60 with strictly positive earnings. Net earnings are adjusted to 2015 prices and do not account for any transfers, taxes or benefits.

In Figure 19, we observe a steady increase in overall earnings inequality, as measured by the Gini coefficient, since the 1990s, reaching a level of 0.32 by 2020. This trend is reflected in the net earnings inequality of the working-age population, which grew from a Gini index of 0.25 in 1989 to 0.32 in 2020. Notably, over the last three decades, earnings inequality and earnings volatility have risen for both men and women. The primary driver behind these trends appears to be the wave of labour market reforms implemented since the late 1990s. This dramatic increase in part-time and fixed-term employment has contributed to greater earnings inequality through a substantial shift in the distribution of annual hours worked across various jobs. It is essential to note that earnings inequality does not directly translate into disparities in disposable income. This is because many households have multiple income recipients, and disposable income calculations include other income components, such as income from real and financial assets and government transfers, including pensions. Furthermore, the pandemic year has signalled an increase in inequality, as observed in the dynamics of earnings inequality.

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

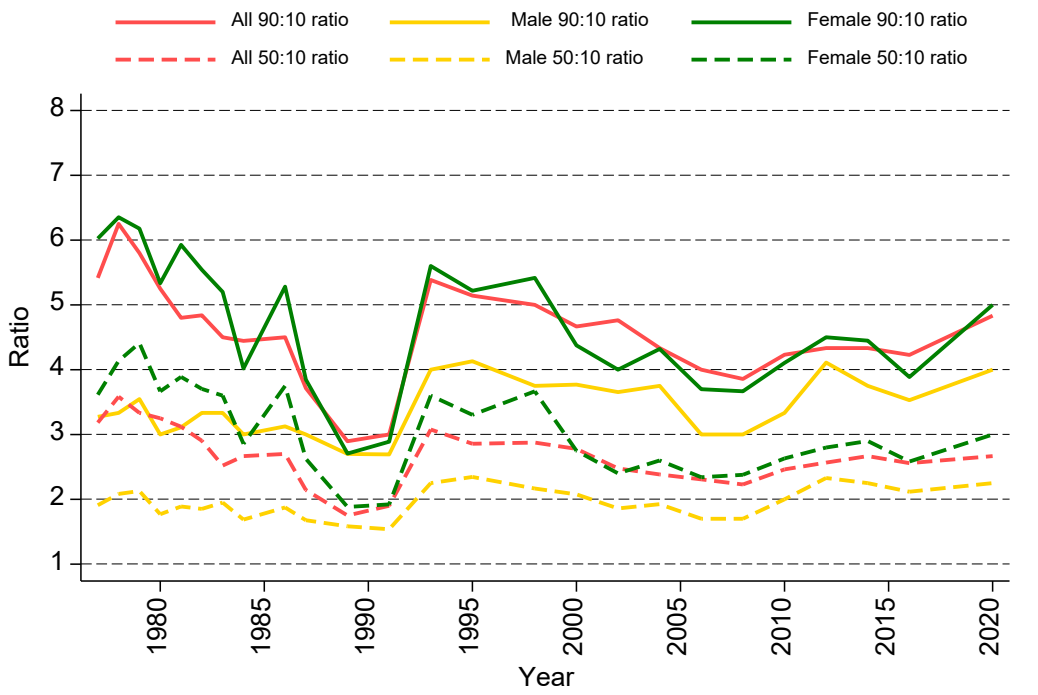


Note: Note: Sample is individuals in work aged 25–60 with strictly positive earnings.

We are unable to include graphs of gross individual earnings and total employer cost over the time-frame under analysis or by earnings percentile because the SHIW does not include measures of gross earnings. Administrative data from INPS (the Italian social security agency) offer complete and reliable information on earnings for the most recent period, but do not include household composition and education, and do not link to earnings of other members of the household. Furthermore, INPS data exclude the self-employed and public employees, which represent over one-third of Italian employment. Available INPS data for the working population also show a considerable increase in inequality. Considering the entire population of employees (including wage earners in agriculture and caregivers), the Gini index of gross earnings computed with INPS data increases from 0.40 in 2005 to 0.46 in 2020. Microdata for public employees are available for the most recent periods, and if one adds them to the sample the Gini index goes from 0.42 in 2014 to 0.44 in 2020.

Figure 20 presents a clear trend of rising earnings inequality across a broad range of the income distribution since the early 1990s, as indicated by both the 90:10 and 50:10 ratio measures of earnings inequality. Importantly, this trend appears consistent for both male and female earners, with no significant divergence in earnings inequality patterns between the two genders. What is particularly noteworthy in the figure is the difference between the 50:10 ratio and the 90:10 ratio. This difference highlights the increasing disparity in top earnings, especially among women. In other words, the gap between individuals at the 90th percentile and those at the 10th percentile of the income distribution has been widening over time, particularly during the pandemic. This phenomenon indicates a growing concentration of earnings at the top of the income scale, which can have significant implications for income inequality and socioeconomic dynamics within the population.

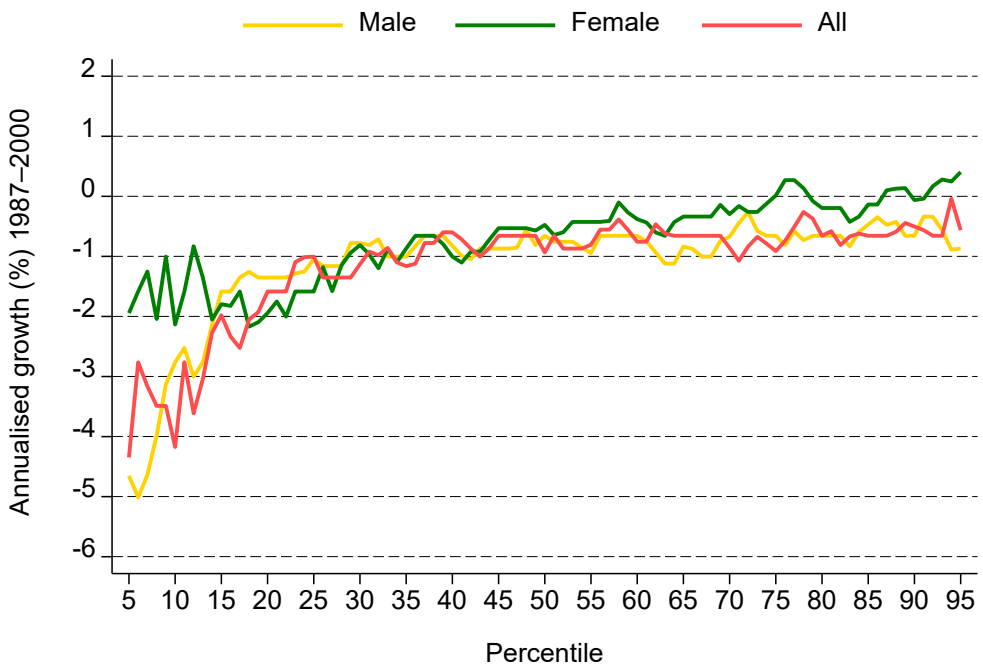
Figure 20. 90:10 and 50:10 ratios of net individual earnings, overall and by sex, over time

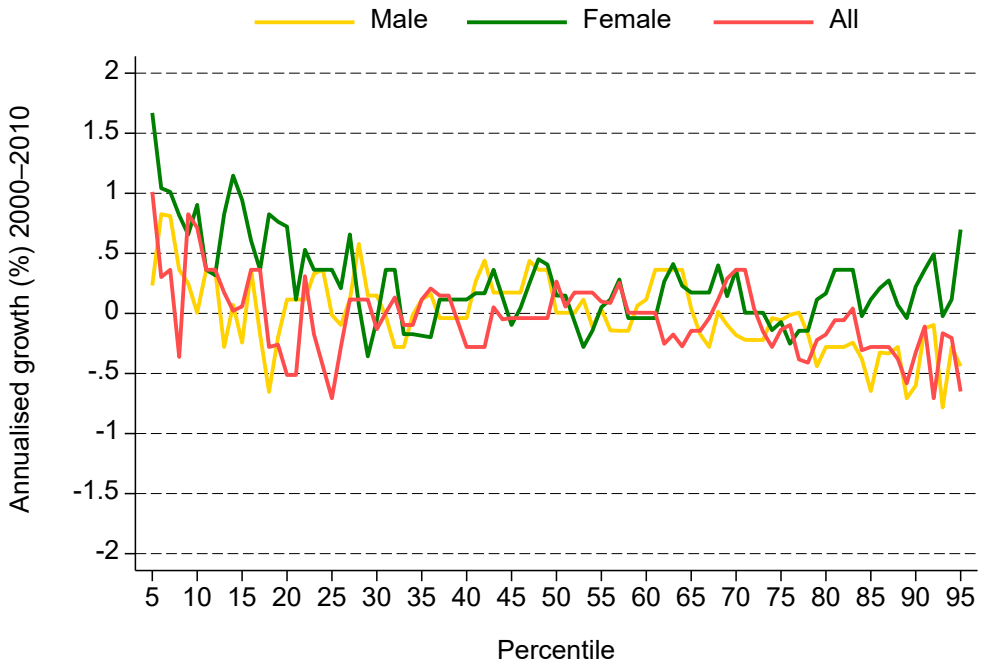


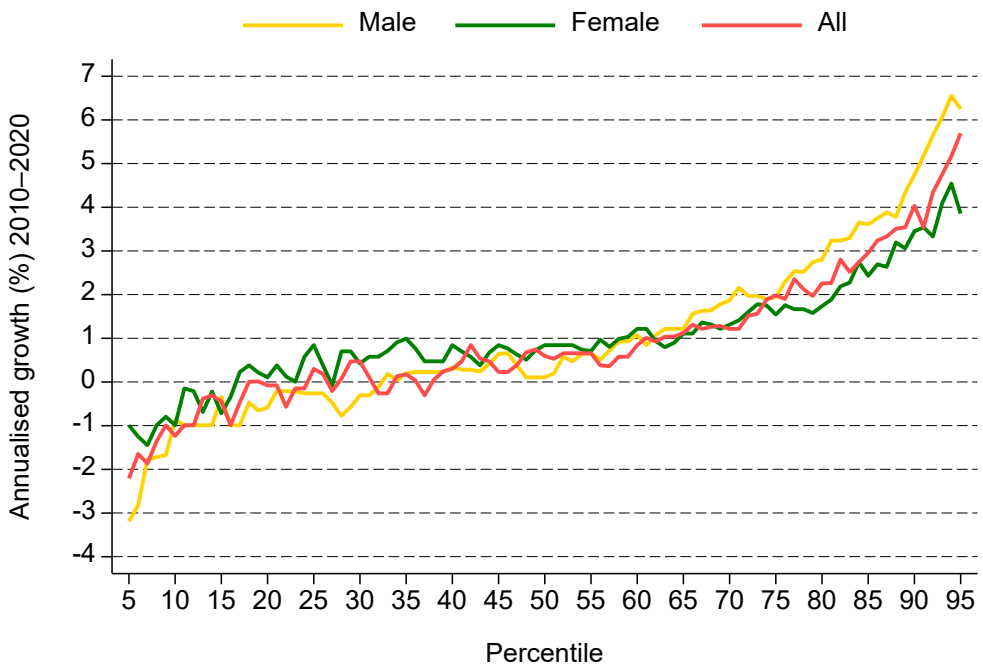
Note: Sample is individuals in work aged 25–60 with strictly positive earnings.

Figure 21 provides a comprehensive view of earnings growth across the income distribution, and it exhibits similar trends to Figure 13, which charts changes in wages over the same time periods. However, there are distinct patterns that emerge over the different decades examined. During the period from 1987 to 2000, the annualised growth of earnings, especially for men, was notably low for workers at the lower end of the income distribution. Within this time-frame, a clear positive correlation becomes apparent between an individual's position in the earnings distribution and their earnings growth rate. Conversely, at the upper end of the distribution, there was only limited growth in earnings. In contrast, in the decade from 2000 to 2010, a negative correlation is observed between an individual's position in the income distribution and their earnings growth rate. Workers at the lower end of the distribution experienced positive earnings growth, while those at the top of the distribution saw their earnings remain relatively stagnant. Over the recent decade (2010–20), a clear positive relationship emerges between an individual's position in the earnings distribution and their earnings growth. This underscores the impact of major events like the Great Recession and the sovereign debt crisis, which have contributed to an increase in earnings inequality, favouring those at the upper end of the income distribution.

Figure 21. Annualised growth in net earnings by earnings percentile, overall and sex, selected periods





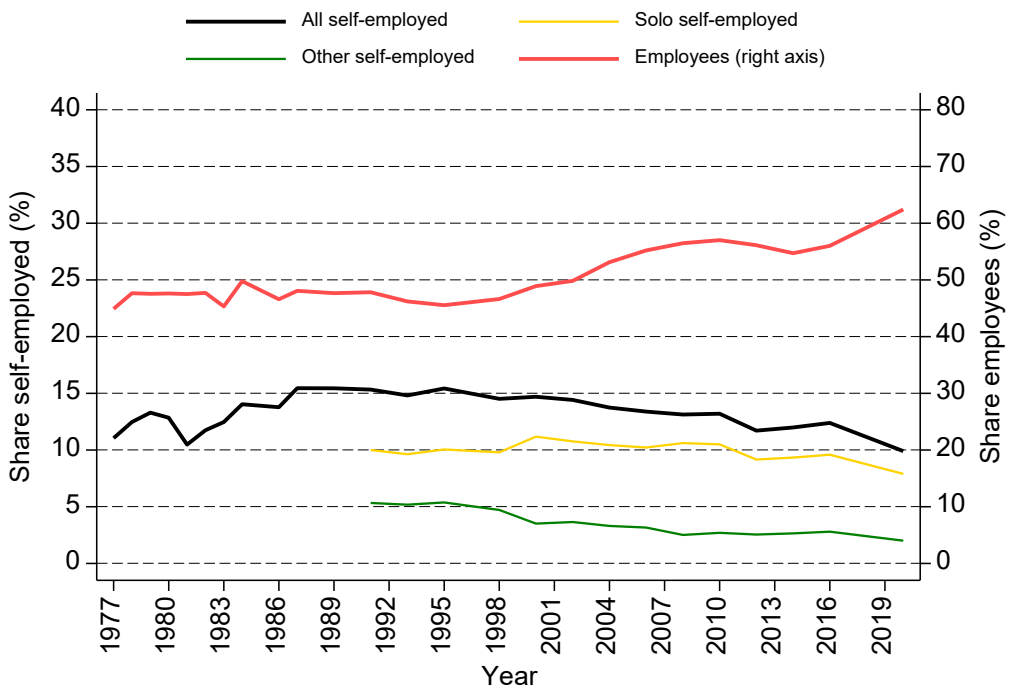


4.5 Self-employment

Figure 22 reports the share of employees and self-employed among individuals aged 25–60, from 1977 to 2020. Starting from 1991 the figure also shows the fraction of solo self-employed, defined as self-employed workers without employees, and other self-employed. Self-employment rose until the mid-1980s, then stagnated for a while, and has been decreasing from the late 1990s to today. The drop in self-employment is mostly driven by a decrease in the fraction of individuals aged 25–60 who are either self-employed with employees or family workers. Indeed, the fraction of solo self-employed was steady until 2010, when it started to slightly decrease. In contrast to self-employment, the fraction of employees in the population aged 25–60 has been increasing since the mid-1990s.

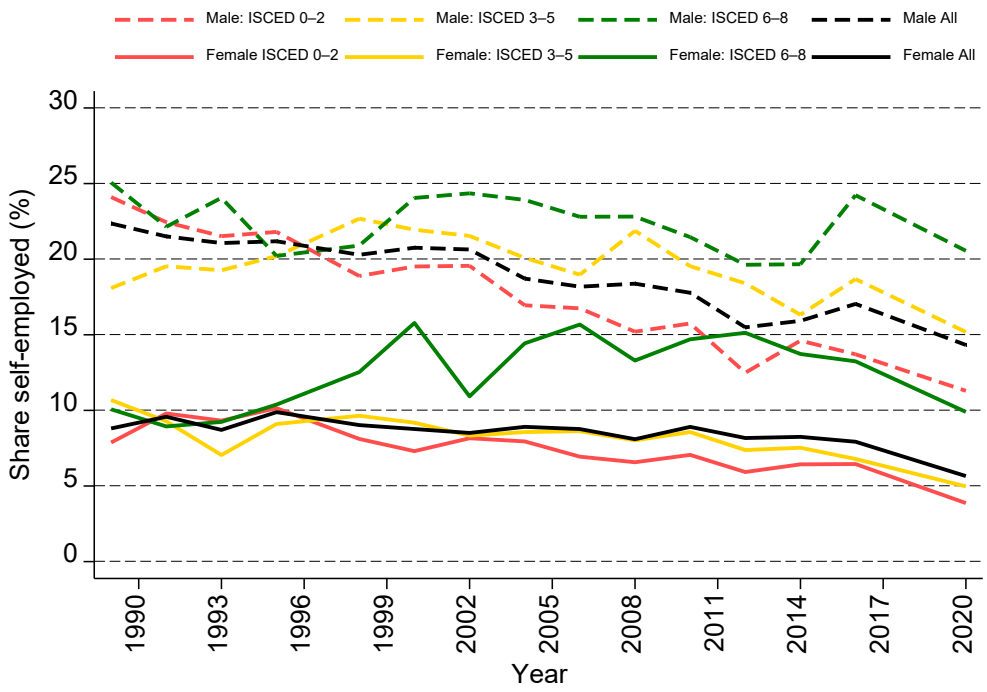
Figure 23 further shows the share of self-employed by gender and education, starting from 1989, when education data become available also for non-employed individuals. The figure shows that the drop in self-employment is mostly driven by low-educated men, while the share of self-employed workers has increased among high-education individuals, especially women.

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



Note: Individuals aged 25–60 years of age. 'Solo self-employed' are self-employed without employees, 'other self-employed' include self-employed with employees and family workers. Workers are defined as self-employed if they receive more income from self-employment than they do from employment.

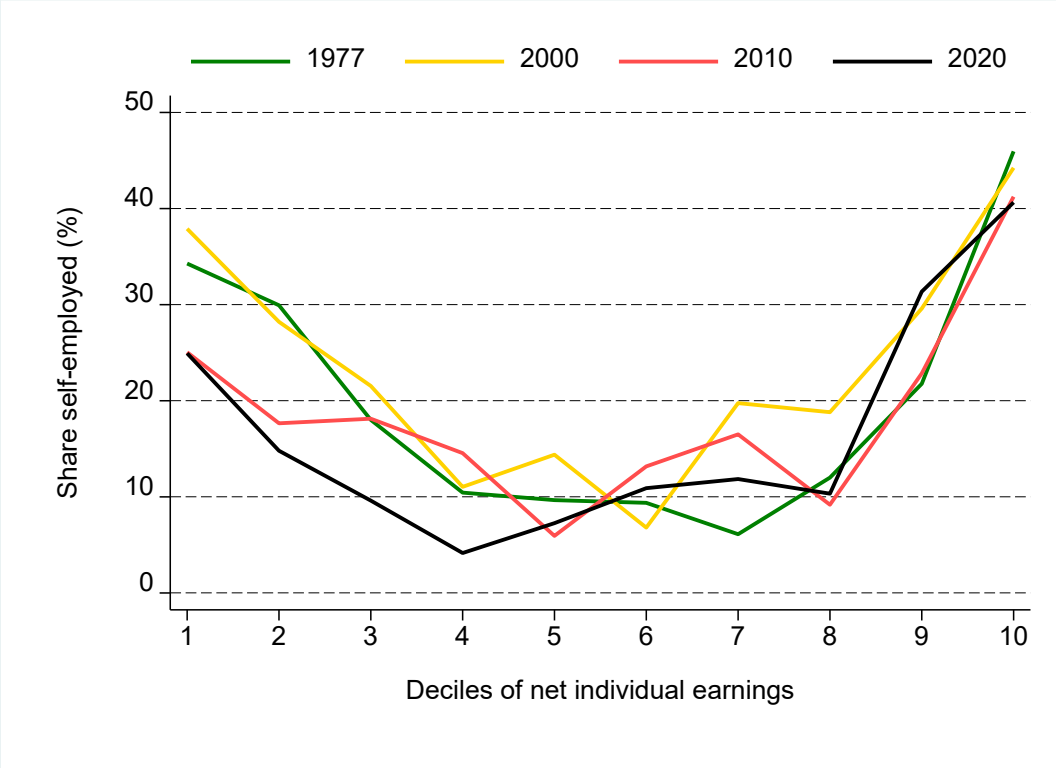
Figure 23. Share self-employed by sex and education, over time



Note: Individuals aged 25–60 years of age. 'Solo self-employed' are self-employed without employees, 'other self-employed' include self-employed with employees and family workers.

Finally, Figure 24 shows the share of self-employed workers in the population aged 25–60 by decile of total net earnings, for selected years. There are virtually no changes over time from the fifth to the tenth decile, while there is a decrease in the share of self-employed in the first deciles of the income distribution. Interestingly, the relationship between the share of self-employed workers and net earnings deciles is U-shaped, suggesting that self-employed workers are concentrated at the two ends of the net earnings distribution.

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



Note: Individuals 25–60 years of age, in work.

5. Labour market institutions

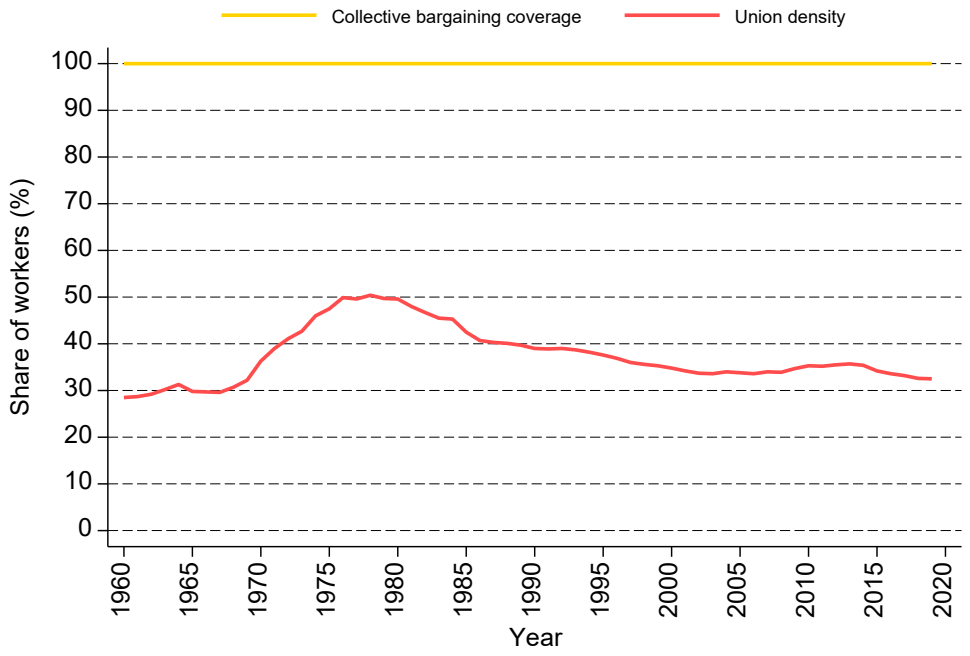
5.1 Minimum wages and unions

There is no legal minimum wage in Italy, as wages are the result of collective bargaining between trade unions and employers' unions at national, local, and firm levels. For this reason, it is not possible to compute how many workers earn the legal minimum or to compute the ratio between the median wage and the minimum wage.

Figure 25 shows union density in Italy since 1960, and the fraction of workers covered by collective bargaining agreements in the whole population. As shown in the figure, formally collective bargaining coverage is universal, staying at 100% over the entire sample period. However, it is estimated that at least 16% of the workforce in Italy are informal workers and at least 10–15% (predominantly women and immigrants) receive a wage lower than the minimum provided for by the national collective agreements.

Union density peaked at 50% in the 1970s, during a season of fervent mobilisation for worker claims, then steadily decreased in the following years until the early 2000s, when the popularity of unions rose again as a result of the labour market reforms that eased the legal discipline of temporary work. It further decreased in recent years, and it is now around 30%, as young workers have a lower propensity to join unions than older ones.

Figure 25. Union density and fraction of workers covered by collective bargaining agreements, over time



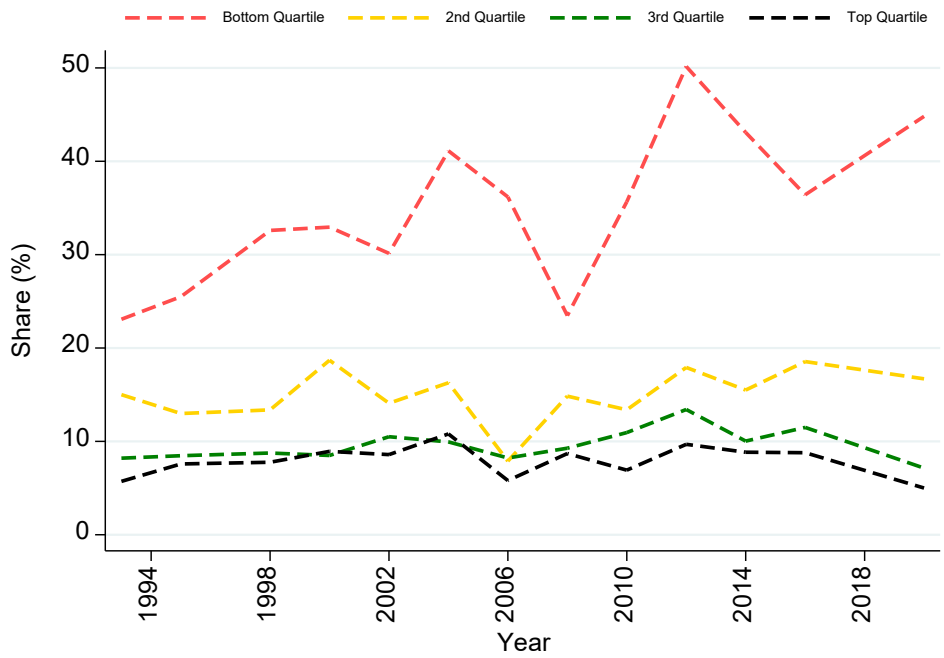
Note: The sample is all employees. *Source*: OECD.

5.2 The effects of taxes and state benefits across the income distribution

Figure 26 provides an illustration of the role of state benefits in income redistribution, particularly from wealthier to less affluent households, and how this dynamic has evolved over time. Benefits

do not include tax credit. They do include economic transfers. The data presented cover the period between 1994 and 2020, which includes the years just before and after the onset of the Great Recession and the pandemic crisis. During this time window, state benefits played a significant role in redistributing income. Specifically, the poorest 25% of households relied on state benefits for approximately 30% of their net income in 2006, while the second quartile of households derived about 12% of their income from state benefits. The top quartile, representing wealthier households, received around 5% of their income from state benefits. The reliance on state benefits by low-income households increased notably after the Great Recession and the sovereign debt crisis. These crises led to a rise in unemployment rates, making state benefits more crucial for supporting financially vulnerable households. Following an economic recovery and reductions in the generosity of benefit programs, the importance of state benefits decreased. In other words, as the economy improved and some austerity measures were implemented, state benefits became less central to household income. However, during the COVID-19 pandemic, state benefits regained significance. This resurgence in importance was due to increased support within the welfare system, likely in response to the economic challenges brought on by the pandemic. In summary, Figure 26 demonstrates how state benefits have played a pivotal role in income redistribution, with their importance varying over time, particularly in response to economic events such as the Great Recession and the pandemic. The figure underscores the dynamic nature of income support systems and their impact on different income groups.

Figure 26. Benefits as a proportion of overall income, by net household income quartile



It is not possible to provide charts on direct taxes and disposable income as a proportion of gross income because the SHIW does not include data on gross income.

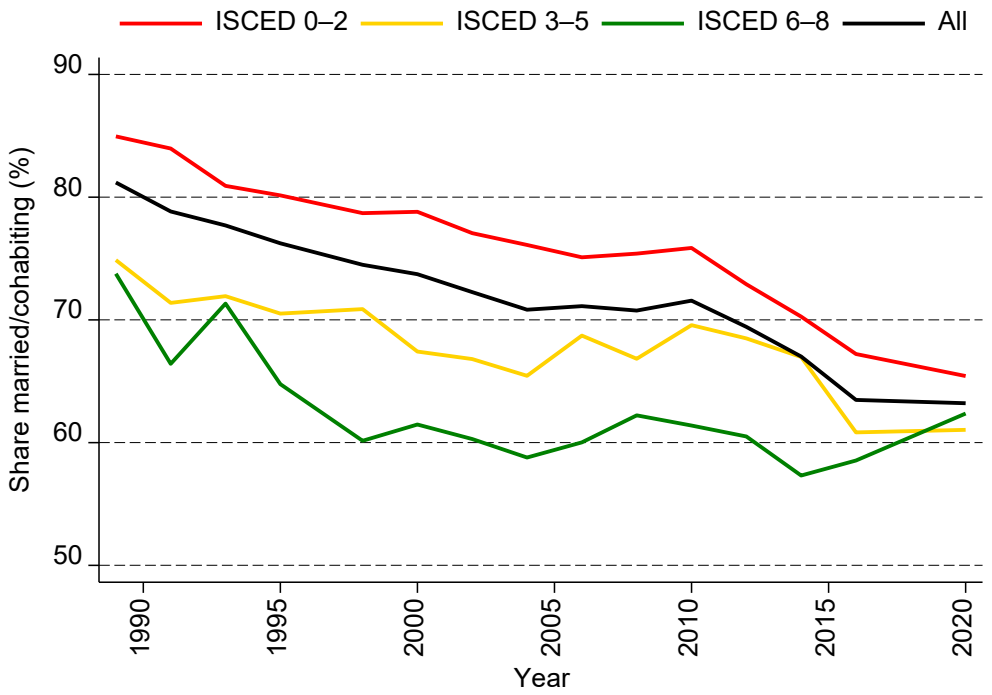
6. Household incomes

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. Finally, we show a set of charts on trends in household income inequality across all households, including those families where no household member is working.

6.1 Trends in household composition

Rates of marriage and cohabitation in Italy have fallen over time, especially among low-educated individuals (Figure 27). The share married or cohabiting also fell among graduates, from about 70% in 1990 to values between 50% and 60% from 2000 onward. The drop is less pronounced for middle-educated individuals, while it reaches about 30 percentage points among the low-educated. Nonetheless, in 2020 the rate of marriage/cohabitation was the highest in the latter group relative to the rest of the population. The residual category, not reported in the figure, includes all non-married/cohabiting individuals, such as single-person households and non-married adults living with their parents.

Figure 27. Share married/cohabiting, overall and by education, over time

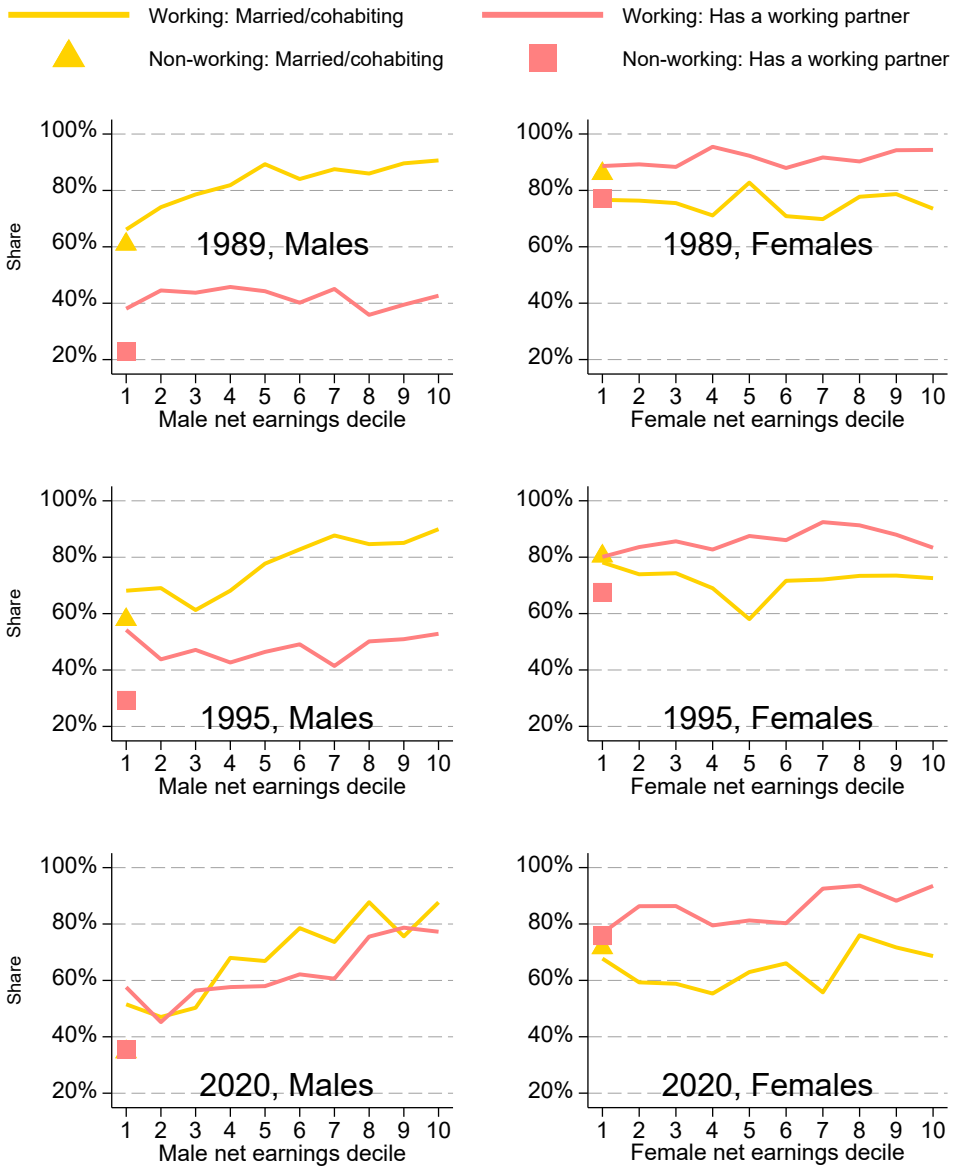


Note: Sample is individuals aged 25–60 who have completed full-time education.

Figure 28 shows the evolution of the share of married or cohabiting individuals over time and the share of married or cohabiting individuals with a working partner, as a function of net individual earnings. The likelihood of being married/cohabiting is positively correlated with net earnings deciles for men, while no such correlation occurs for women. In 1989 and 1995 the likelihood that a married or cohabiting man had a working partner did not change significantly across earnings deciles while it was increasing in 2020, suggesting that high earners are more likely to have a working partner than low earners. Furthermore, the likelihood for a man of having a working partner has considerably increased over time (it starts very low in 1989, with a value of about 40%), but it is still low among low earners (about 50%). For women, the likelihood of being married or cohabiting has decreased over time, from a level of about 80% in 1989 to about 60%

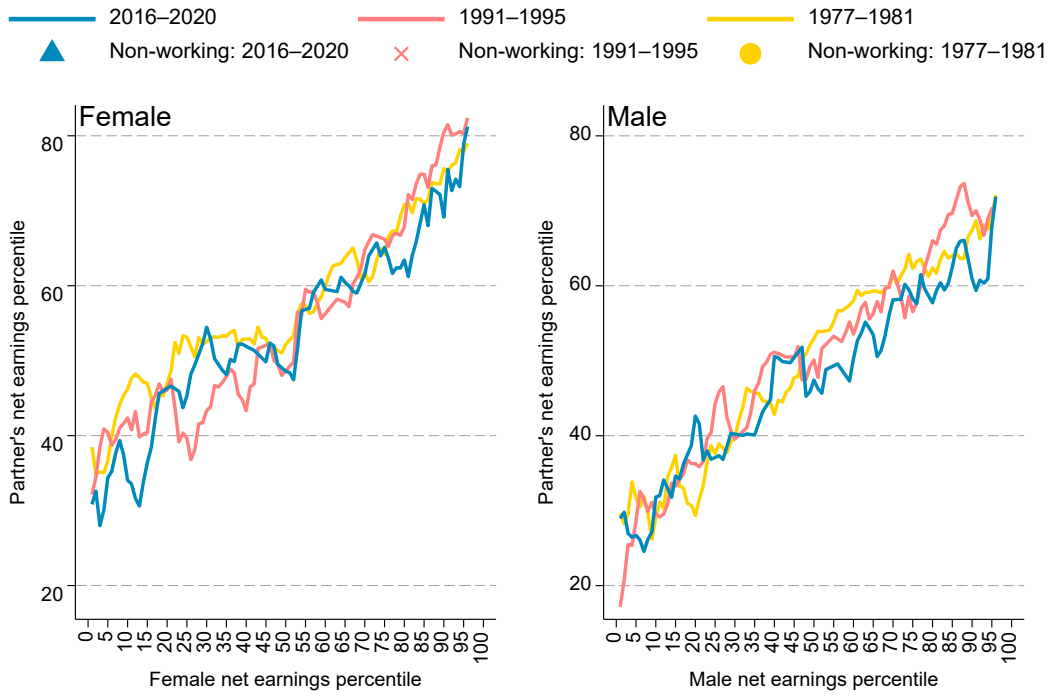
in 2020, while the likelihood of having a working partner has not changed much. Finally, for couples in which both partners work, the positive correlation between partners' earnings has not changed significantly over time (Figure 29), but one must keep in mind the fact that the fraction of such couples has increased considerably over time.

Figure 28. Share married/cohabiting and share with working partner, by sex and individual gross earnings percentile, selected years



Note: Sample is individuals aged 25–60. Married/cohabitating also includes civil partnerships. The proportion with a working partner is conditional on being married/cohabiting.

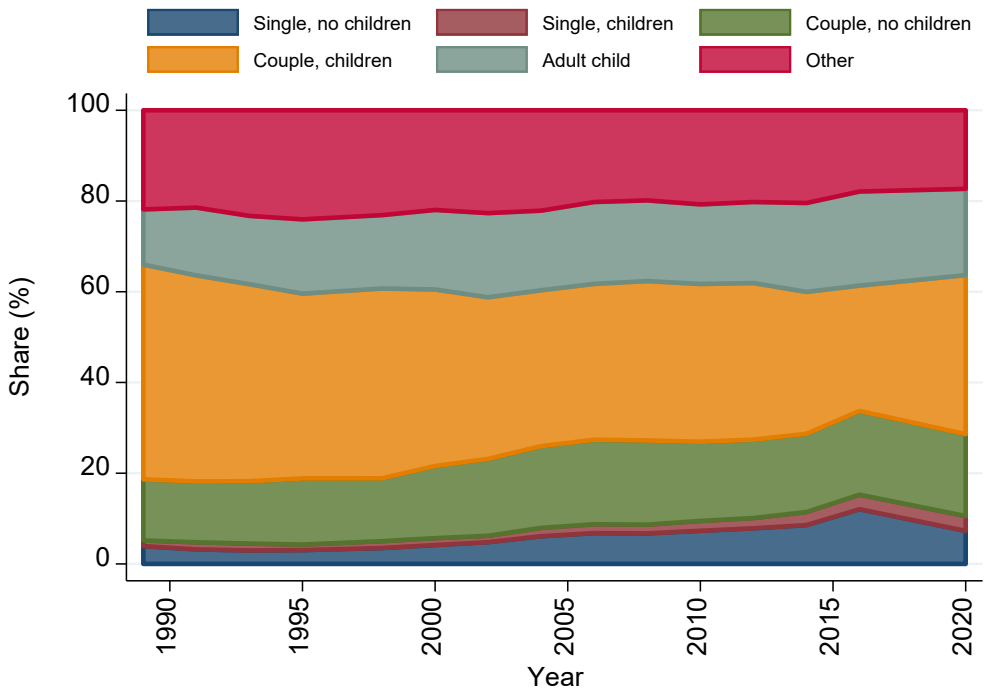
Figure 29. Mean net earnings percentile of partner/spouse by individual's gross earnings percentile, selected years



Note:
Sample is individuals aged 25–60 (with strictly positive earnings for defining earnings percentiles). Married/cohabitating also includes civil partnerships. Mean earnings of partners are plotted as five-point moving averages across the net earnings distribution.

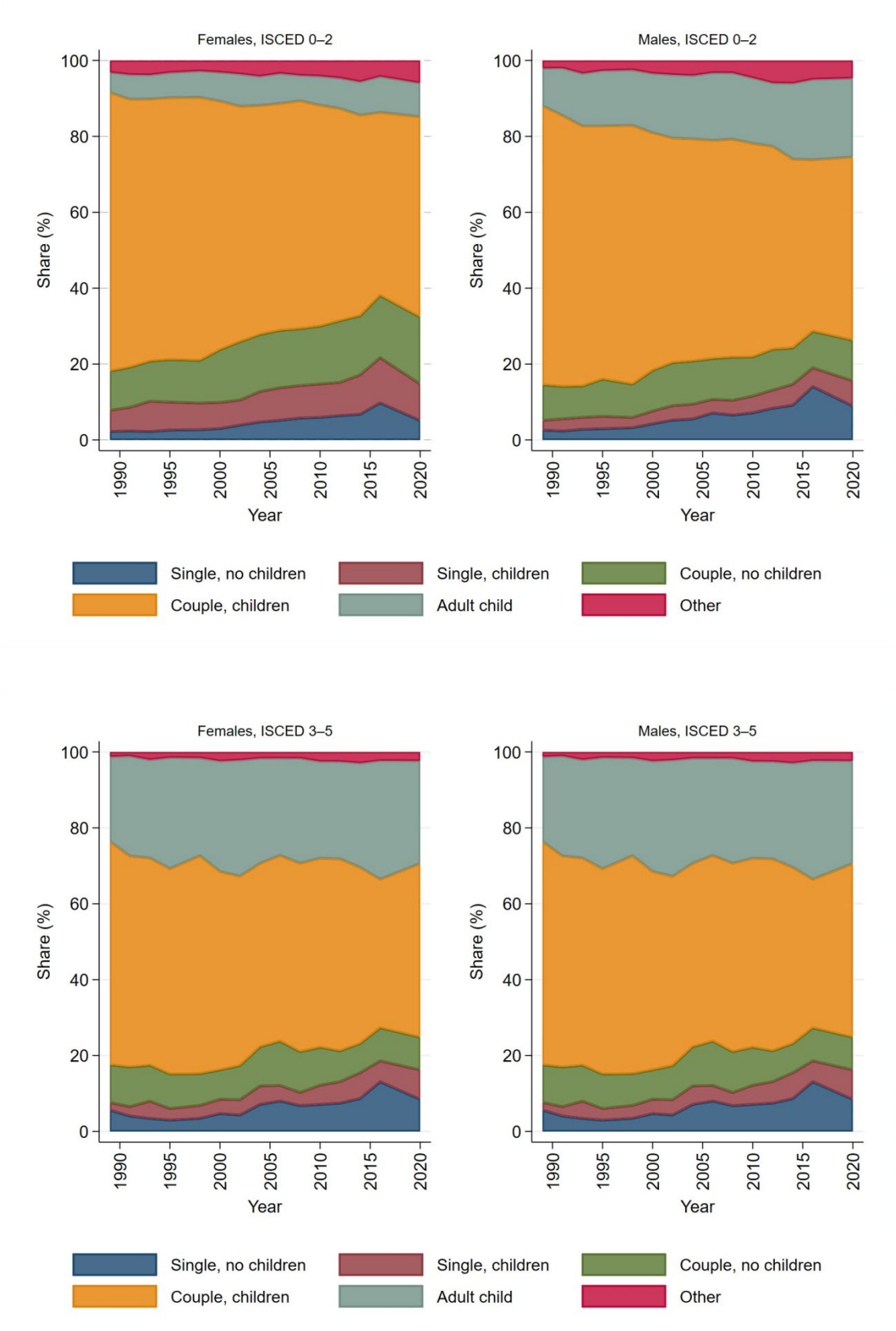
Figure 30 shows the evolution of family structure over time: the share of prime working-aged adults who are single without children, the share of single parents and the share of couples without children increased from 1989 to 2020. Figure 31 shows that these trends are common across genders and education groups. The share of so-called 'adult children' is quite significant. This category includes adults who live in a household but are neither head of the household nor married to or cohabiting with the household head.

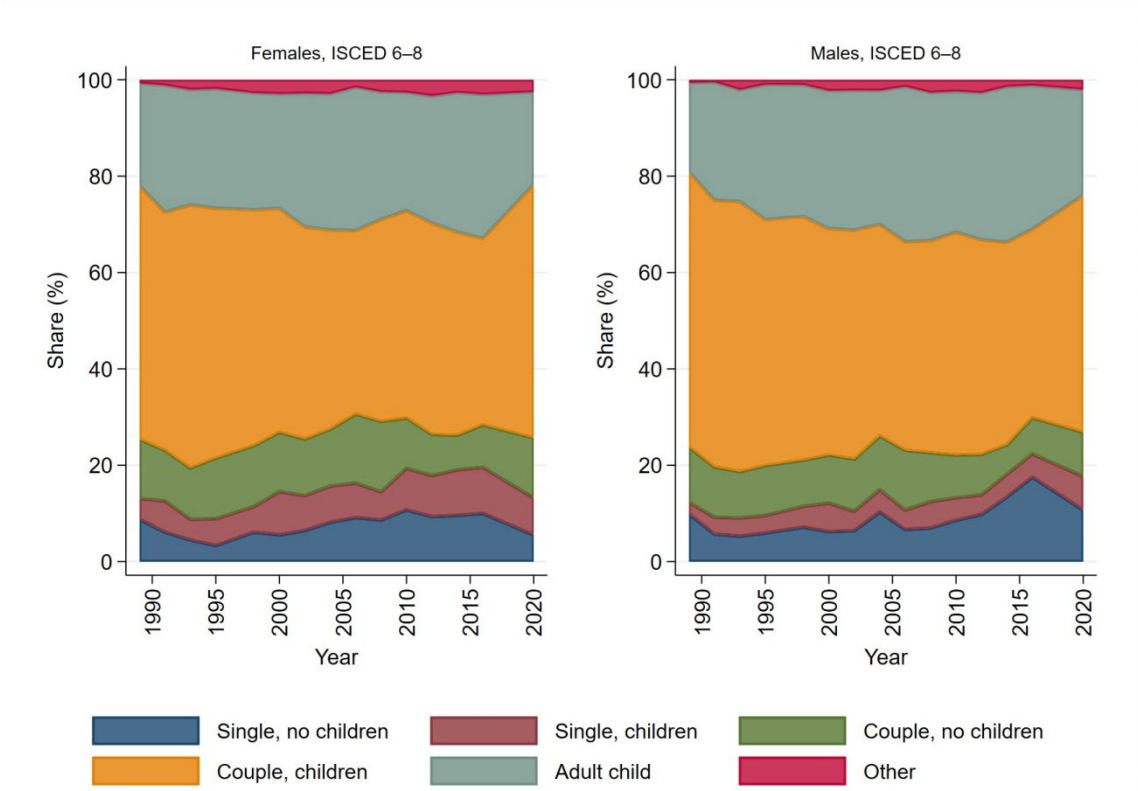
Figure 30. Share of individuals by position in the household, over time



Note: Sample is individuals aged 25–60. 'Single, children' and 'couple, children' refer to dependent children only. Parents of adult children are categorised as 'other'.

Figure 8. Share of individuals by position in the household, by sex and education, over time



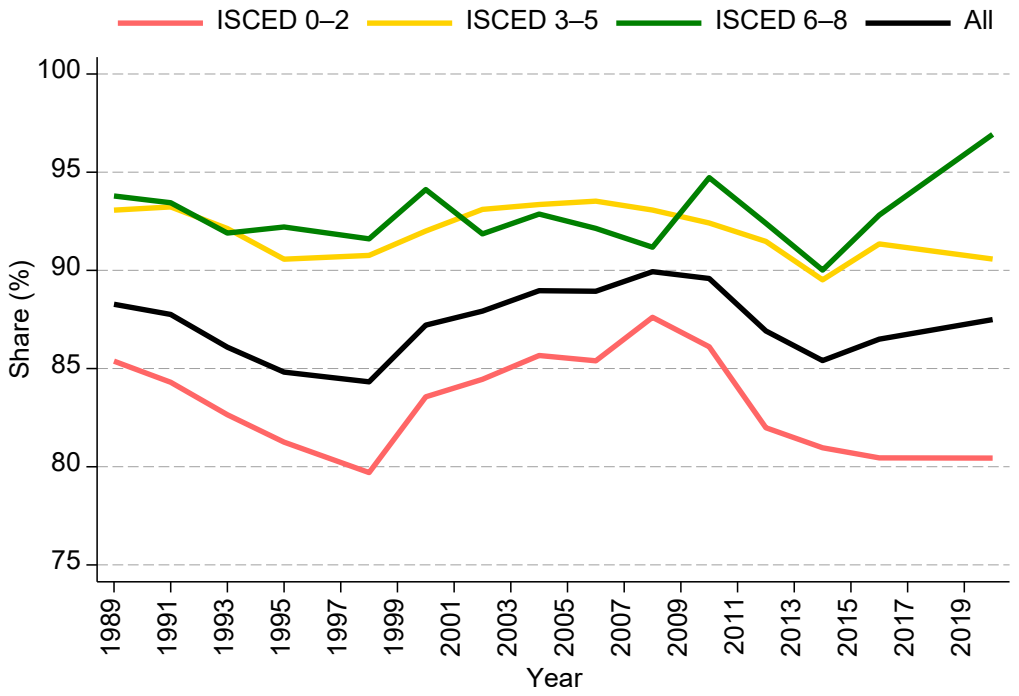


Note: Sample is individuals aged 25–60. 'Single, children' and 'couple, children' refer to dependent children only. Parents of adult children are categorised as 'other'. Before 1994, due to data limitations, 'adult child' refers only to adults living in a household whose head is their parent.

6.2 Earnings and incomes among working households

Figure 32 shows that the share of individuals living in a working household (i.e., a household where at least one adult works) is very similar between middle- and high-educated individuals, while it is about 10 percentage points lower for low-educated ones. Having fallen from 1989, the share of those with no or low-level qualifications in a working household increased, but then this trend reversed, reaching a level of about 80%.

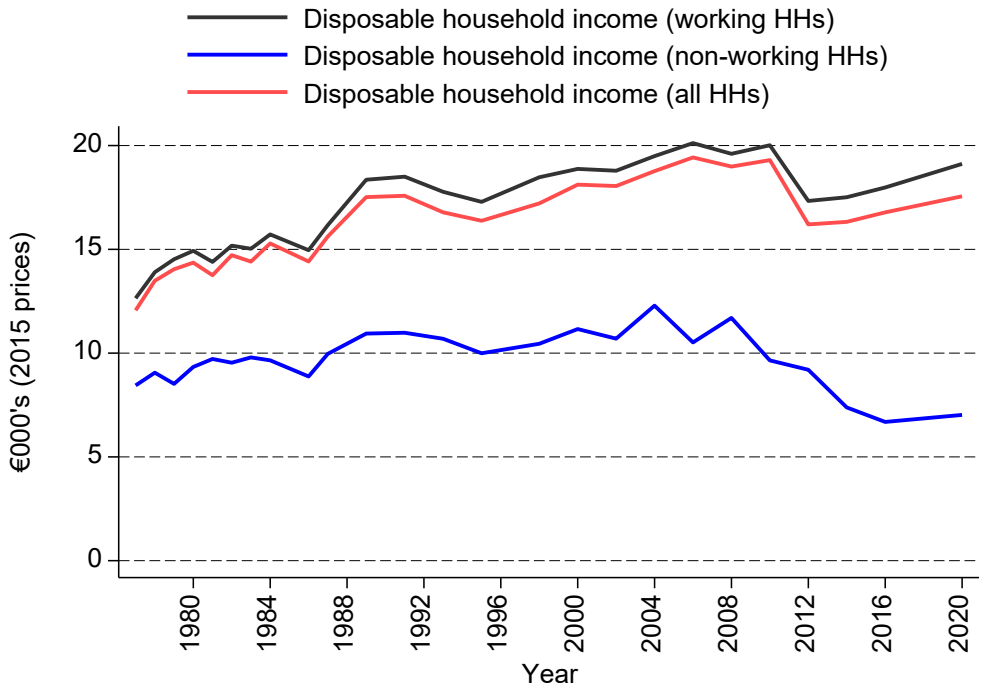
Figure 32. Share of individuals in a working household, overall and by education, over time



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

Figure 33 shows the trend in disposable household income over time for working and non-working households. The latter group is obviously on a lower level of disposable income, but the trends appear very similar across the two groups of households: disposable household income increases from 1977 to 2010. It then sharply decreases, probably in response to the sovereign debt crisis, in 2012 and had not gone back to the old trend by 2020.

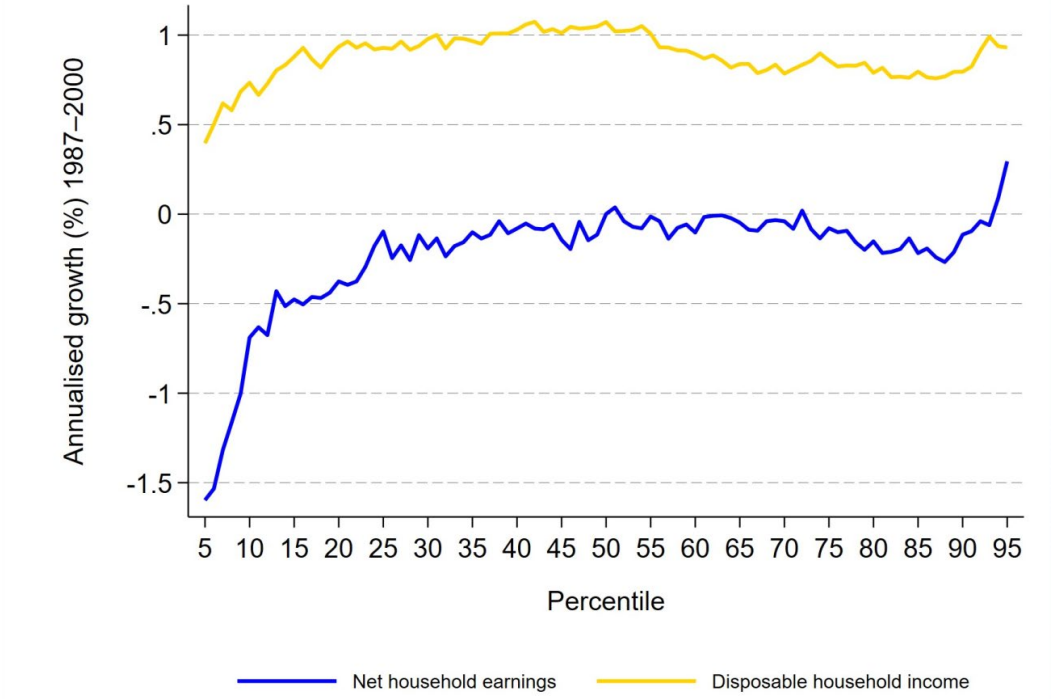
Figure 33. Median real disposable household income among working households, over time

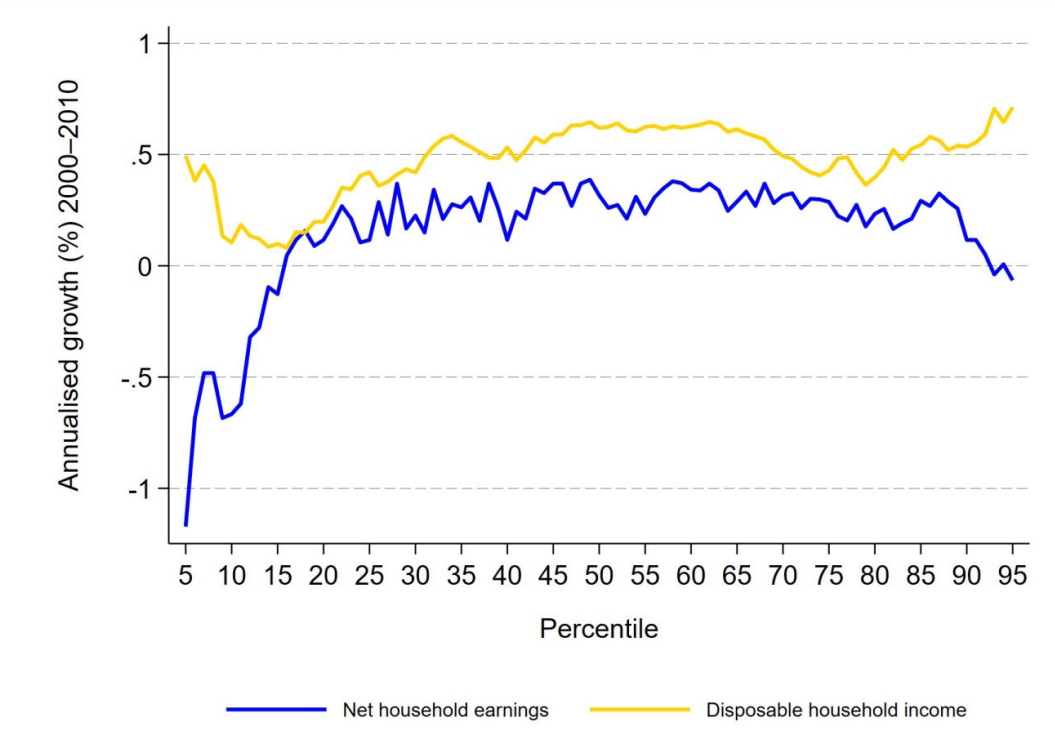


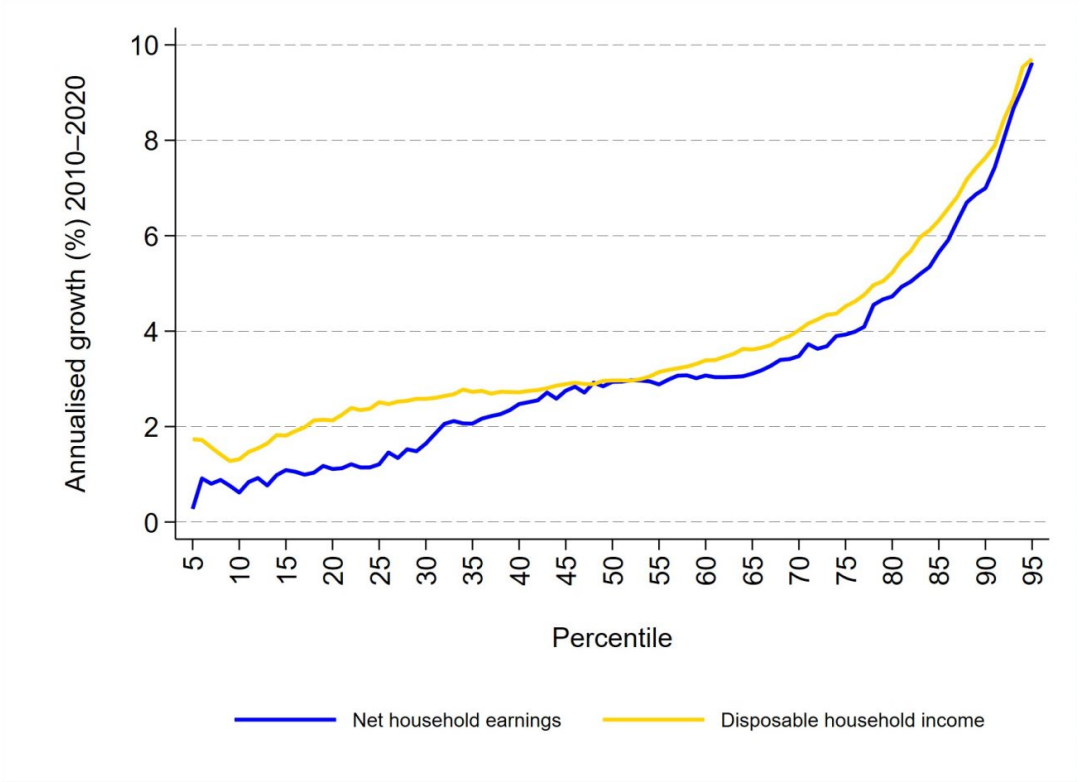
Note: Sample is individuals aged 25—60 in working households. A working household is defined as a household in which at least one adult is in work. We exclude households in the bottom and top 1% of the gross household earnings distribution. All incomes have been equivalised using the modified OECD equivalence scale.

Figure 34 plots net disposable income and earnings growth by percentiles. Disposable income displays positive growth; this is not the case for net earnings, which decreased for all percentiles from 1987 to 2000 and from 2000 to 2010. This trend reversed in 2010–20, especially for the highest percentiles.

Figure 34. Annualised growth in real net household earnings and household disposable income for working households, by percentile, selected years







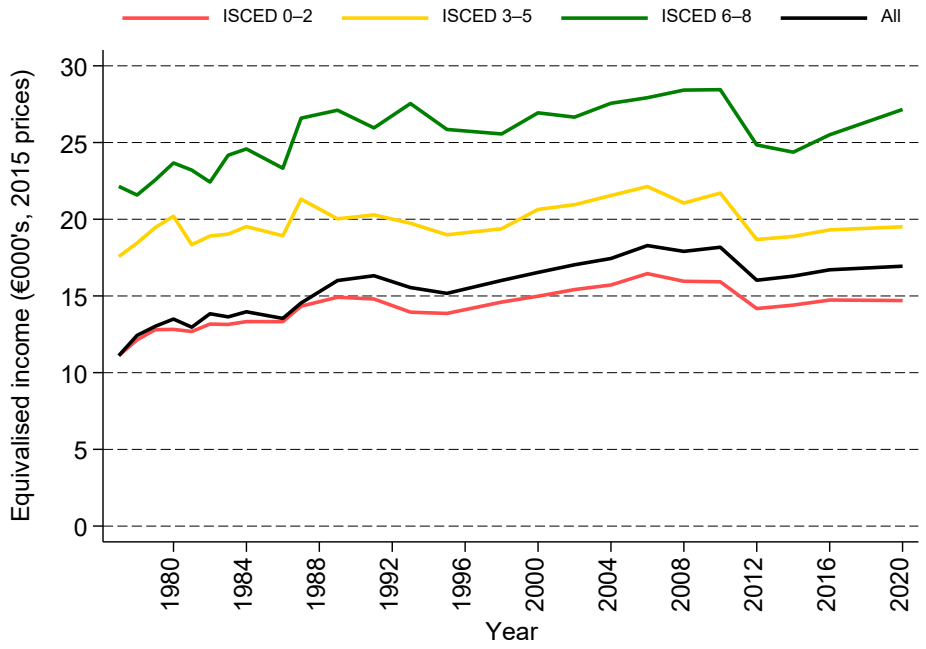
Note: Sample is individuals in working households. A working household is defined as a household in which at least one adult is in work. All incomes have been equivalised using the modified OECD equivalence scale.

6.3 Inequality in incomes among all households

Figure 35 plots the median real disposable household income by education level (of the head of the household). Disposable income includes income from labour and capital, and is net of taxes and contributions. As expected, median real disposable household incomes are higher the higher is the level of education of the household head. However, for those with degree-level qualifications (ISCED 6–8) equalised real income fell more than for the other education groups following the 2011 sovereign debt crisis. No changes in income are detectable in 2020, despite the economic disruption caused by the pandemic.

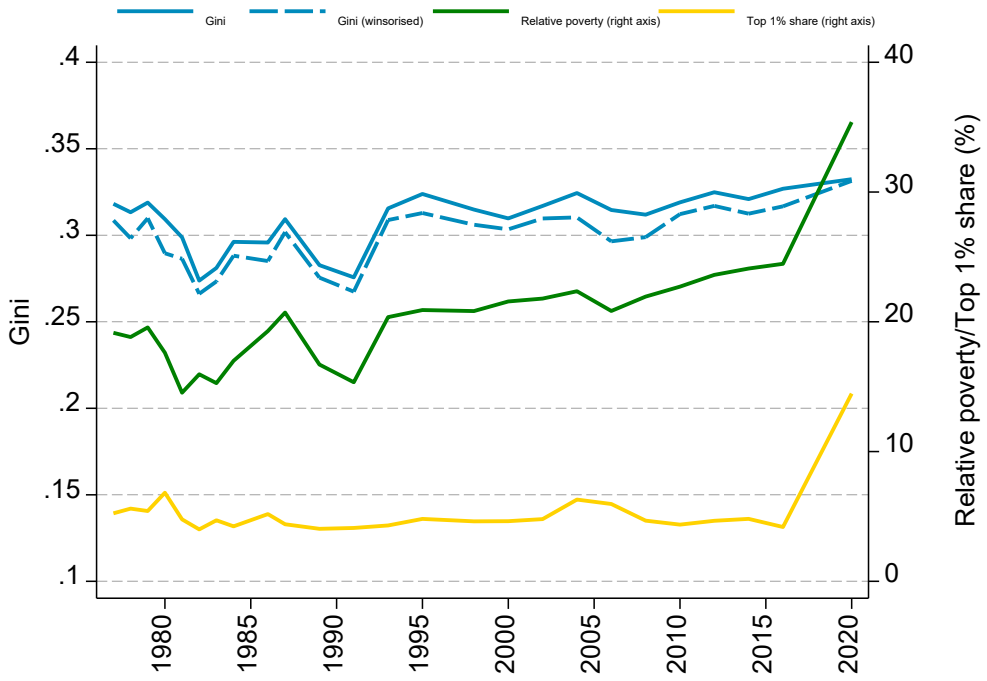
Figures 36 and 37 plot inequality measures of household income from 1977 to 2020. The Gini index fluctuated around 0.35 from 1977 to 2006, and since then it has increased. The income earned by the top 1% households had increased considerably by 2020.

Figure 35. Median real disposable household income for all households, overall and by education, over time



Note: Incomes are in 2019–20 prices. All incomes have been equivalised using the modified OECD equivalence scale.

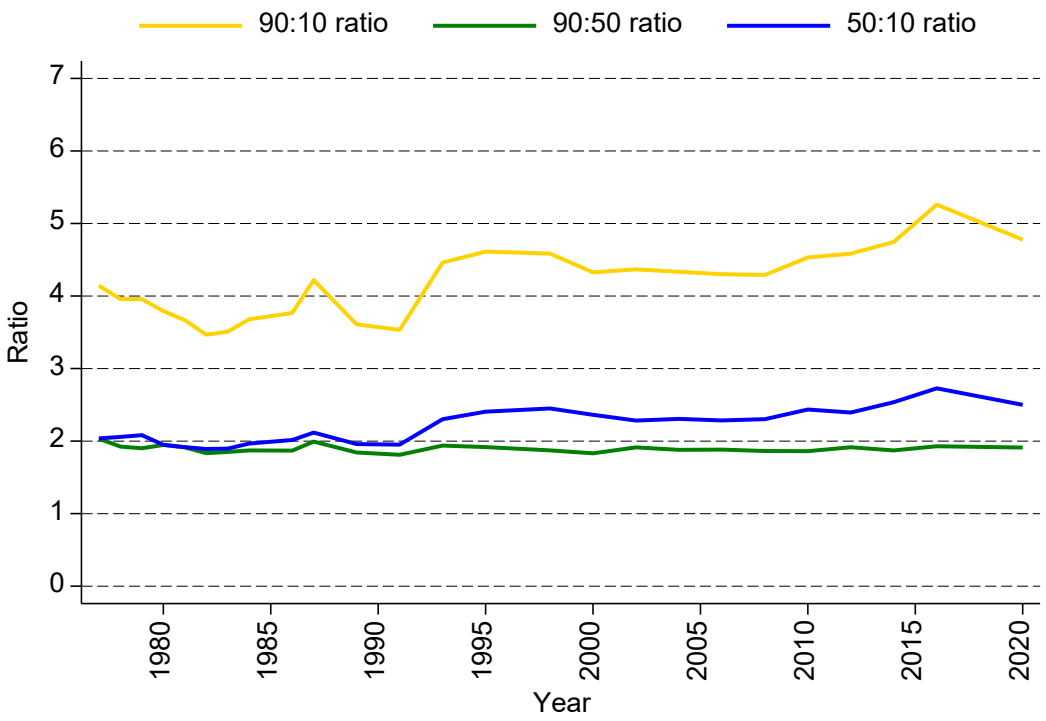
Figure 36. Gini, relative poverty and top 1% share of net household income for all households, over time



Note: The inequality measures are based on incomes measured net of taxes and benefits but before the deduction of housing costs. The relative poverty rate is defined as the proportion of people living in households with less than 60% of

contemporaneous median disposable income before the deduction of housing costs. All incomes have been equivalised using the modified OECD equivalence scale.

Figure 37. Percentile ratios of disposable household incomes for all households, over time



Note: The inequality measures are based on incomes measured net of taxes and benefits but before the deduction of housing costs. All incomes have been equivalised using the modified OECD equivalence scale.

7. Immigration

This final section examines changes in the population that are driven by changes in immigration. In this section we take the definition of an immigrant as a person who was born abroad.

Figure 38 shows that the fraction of the working-age (25–60) population that was born abroad increased exponentially from 1989 to 2012, reaching a level of about 14%, and then fell and plateaued at 12%.

Figure 38 Share of immigrants in the population aged 25–60 over time

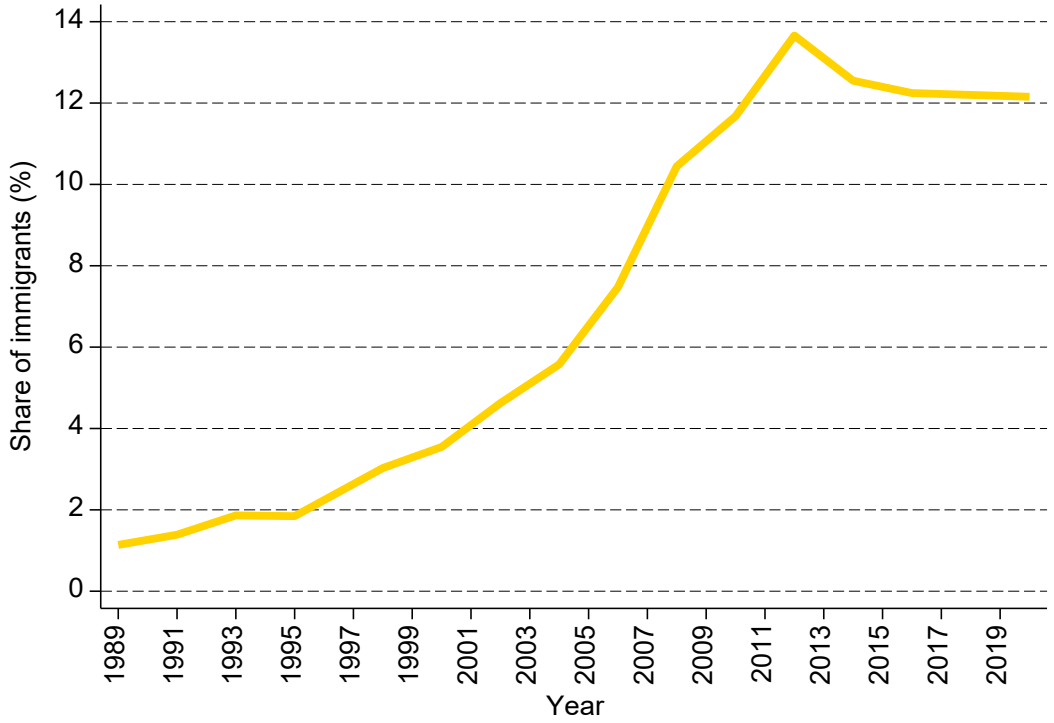


Figure 39 shows that immigrants are particularly clustered towards the bottom of the income distribution both in 2008 and 2020, while they are uniformly distributed across the income distribution in 1995. It is worth noticing, however, that the 1995 sample contains a very small number of immigrants compared to 2008 and 2020, thus providing less reliable information. Figure 40 offers a comparison between foreign-born and natives in Italy in 2008 and 2020. On average immigrants work more than natives (at both the extensive and intensive margin) but have much lower disposable income. Over time the share of highly educated and personal earnings falls considerably relative to natives from 2008 to 2020.

Figure 39. Share of immigrants in the population, across the disposable income distribution, 25–60 years of age, 1995, 2008 and 2020

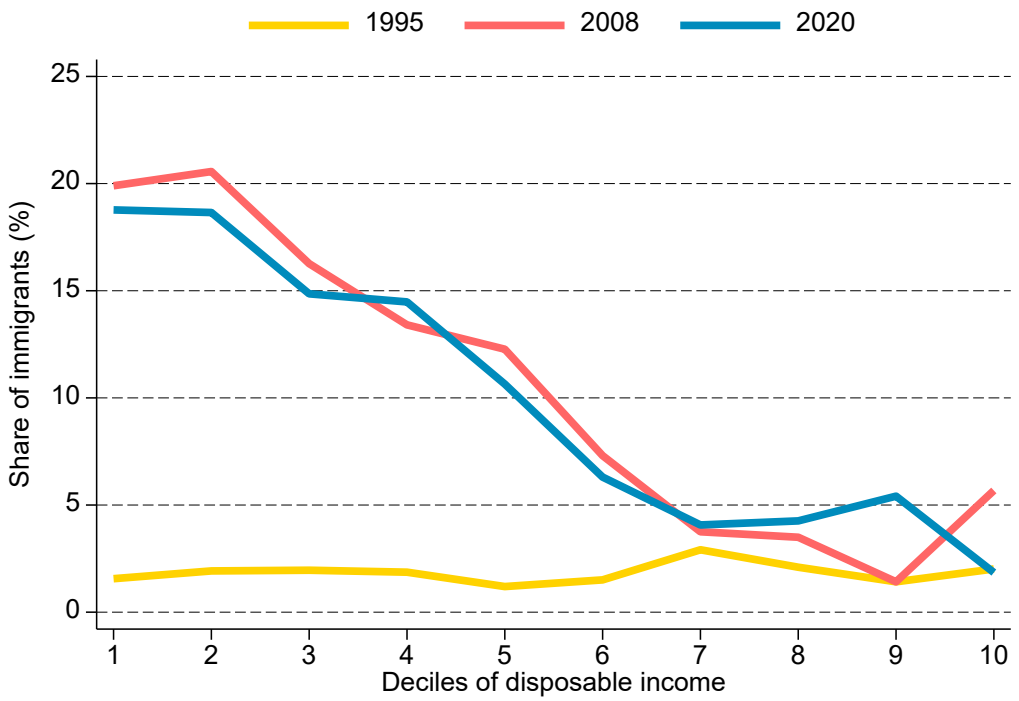
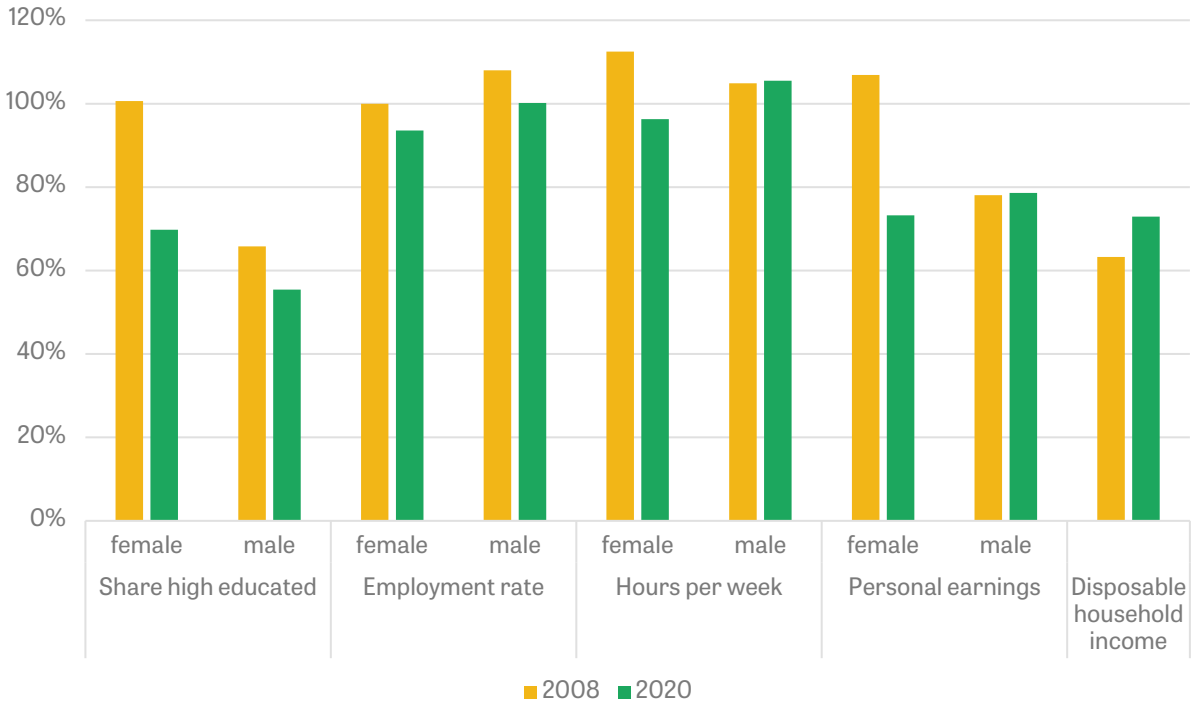


Figure 40. Outcomes of immigrants relative to natives, ages 25–60, 2008 and 2020



8. References

Boeri, T. and Garibaldi, P., 2007. Two tier reforms of employment protection: A honeymoon effect? *Economic Journal*, *117*, F357–F385.

Checchi, D., 2012. Labour market reforms and inequality in Italy. In H. Magara and S. Sacchi (eds), *The Politics of Social and Industrial Reforms: A Comparative Analysis of Italy and Japan*. Cheltenham: Edward Elgar.

Daruich, D., Di Addario, S. and Saggio, S., 2022. The effects of partial employment protection reforms: Evidence from Italy. Bank of Italy Temi di discussione No. 1390.

9. Data appendix

Surveys used:

- We use cross-sectional data from the Survey on Household Income and Wealth (SHIW) for the period 1977–2020.
- The SHIW runs every 2 years, with the exceptions of 1998 (a 3-year gap) and 2020 (a 4-year gap due to the COVID-19 crisis). The SHIW is a representative sample of the Italian resident population. The sample design is consistent with that used by the Labour Force Survey conducted by ISTAT (the Italian national statistical institute). Data are collected through personal interviews in the first months of the calendar year, thus earnings and disposable income refer to the previous fiscal year, which in Italy coincides with the calendar year; wealth and debt variables are end-of-period values. Questions concerning the whole household are answered by the head of the family or by the person most knowledgeable about the family finances; questions on individual incomes are answered by each member, wherever possible. The unit of observation is the family, which is defined to include all persons living in the same dwelling who are related by blood, marriage or adoption. Individuals selected as 'partners or other common-law relationships' are also treated as families.

Measurement of hours, earnings, income

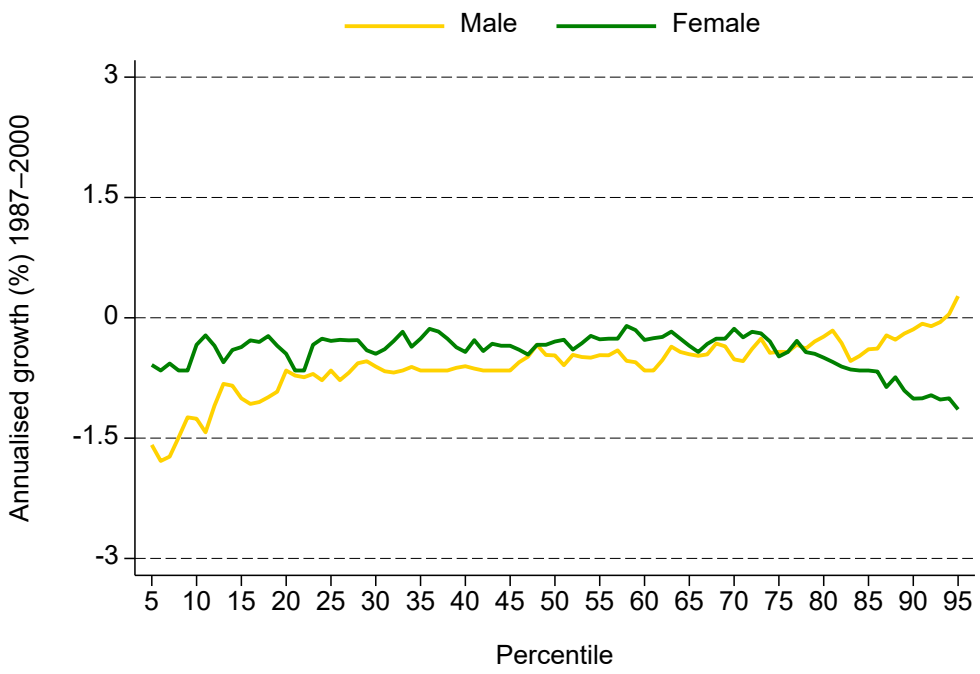
- Earnings from employment are measured by asking respondents who were employed for most of the previous year the amount their annual net earnings.
- Earnings from self-employment are measured by asking respondents who were self-employed for most of the previous year their annual net earnings from self-employment.

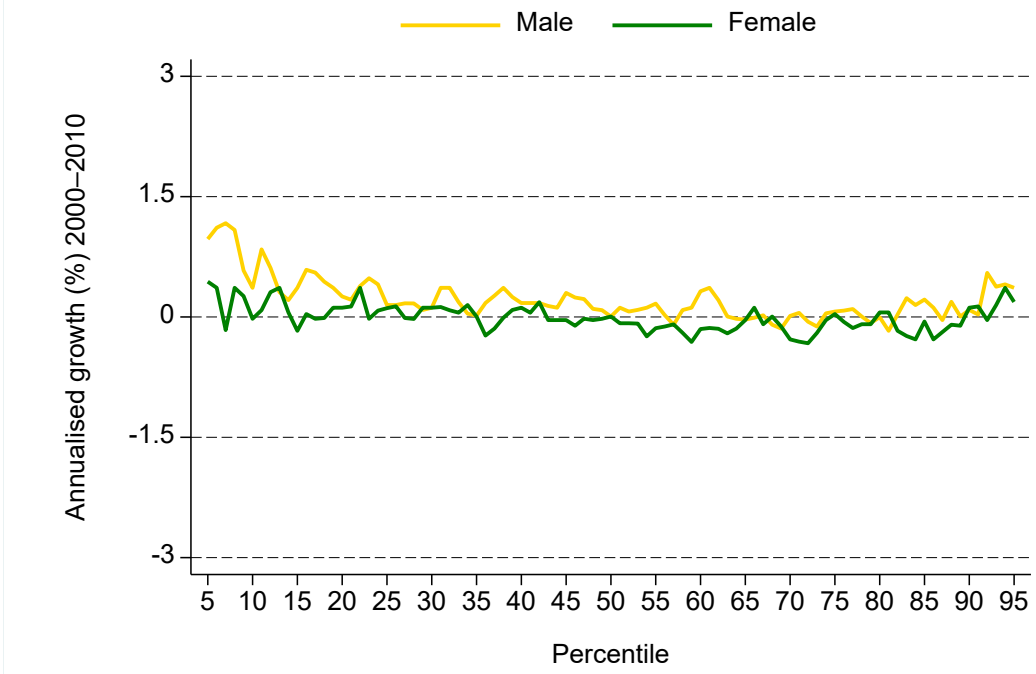
Weighting

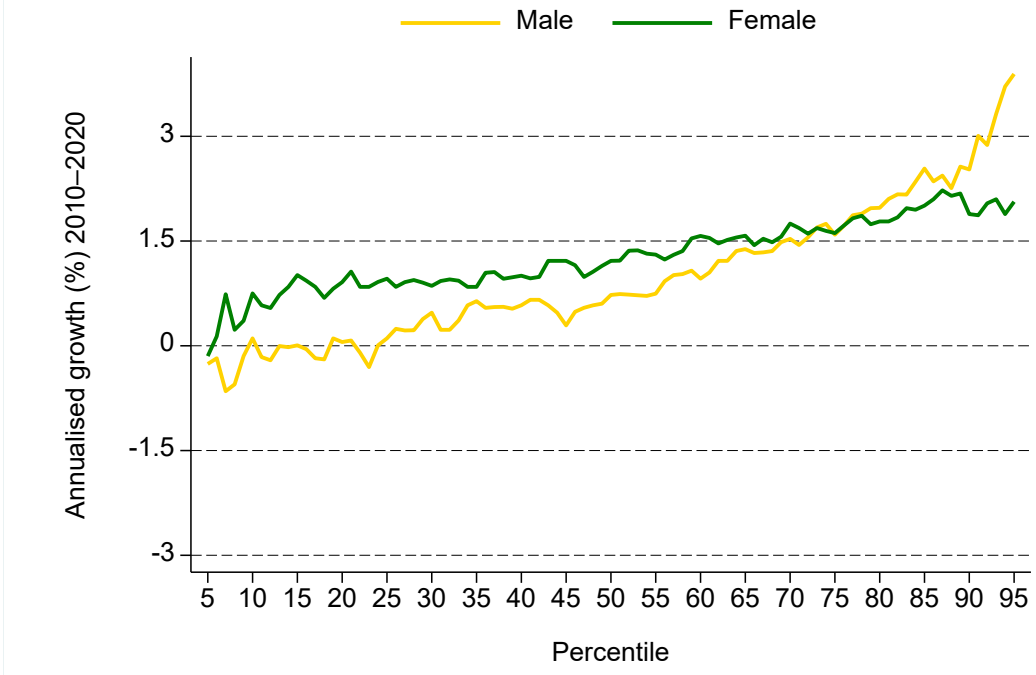
- In the surveys responses are weighted up to population totals to make the data representative with regard to a variety of characteristics, including (depending on the year) age, sex, region, tenure and family type.

10. Appendix: 25–74 age group

Figure 41. Annualised growth in hourly wages among employees by wage percentile, overall and by sex, selected periods

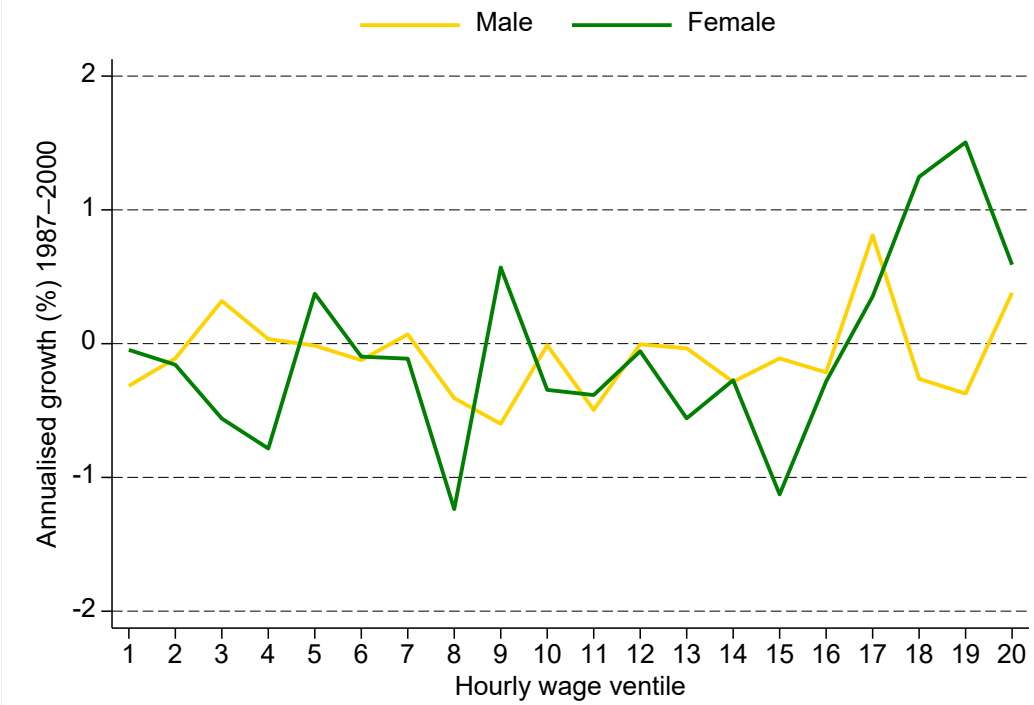


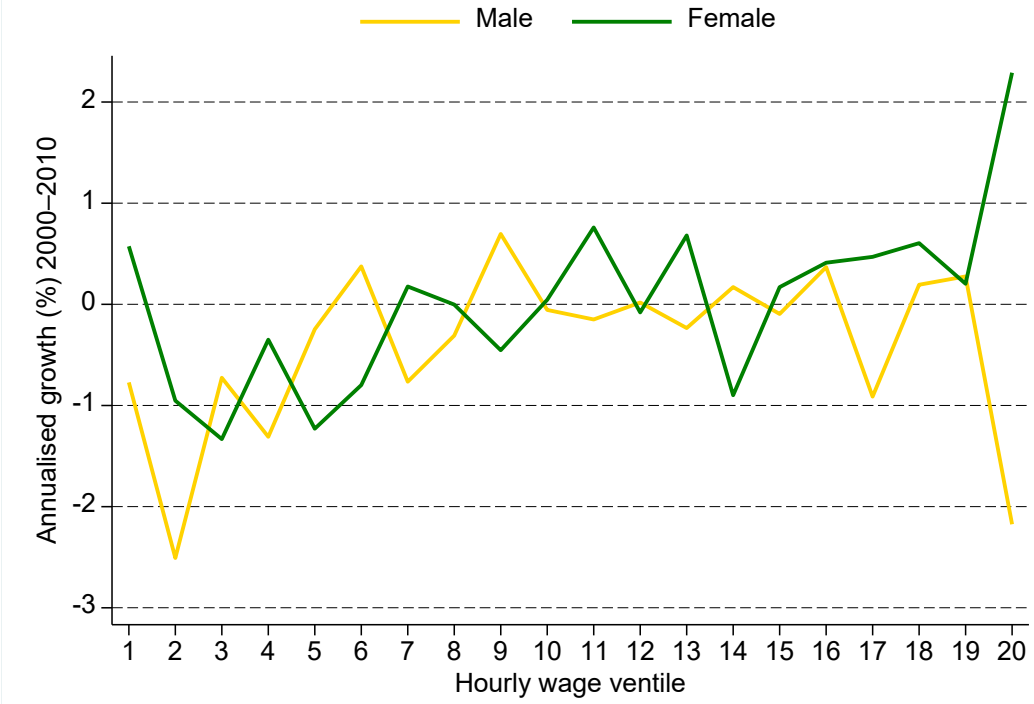


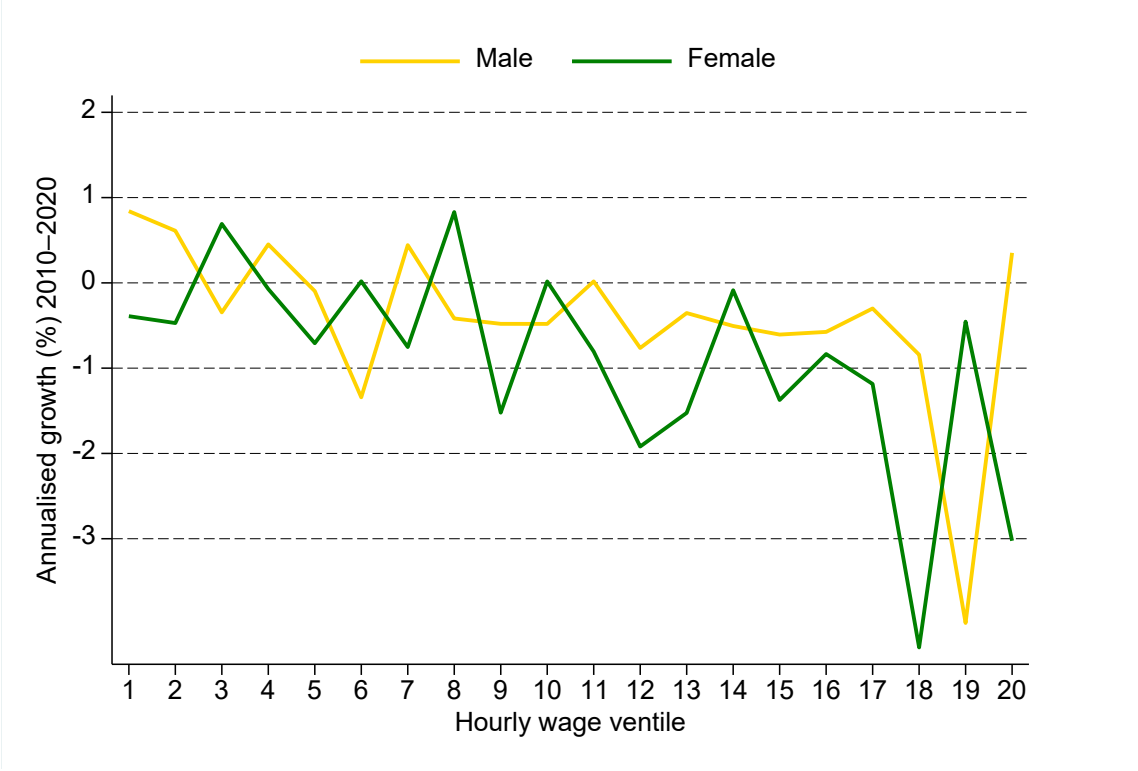


Note: Sample is employees aged 25–74. We do not include the bottom and top 1% when calculating the wage percentiles.

Figure 42. Annualised growth in mean hours worked among employees by hourly wage ventile, overall and by sex, selected years

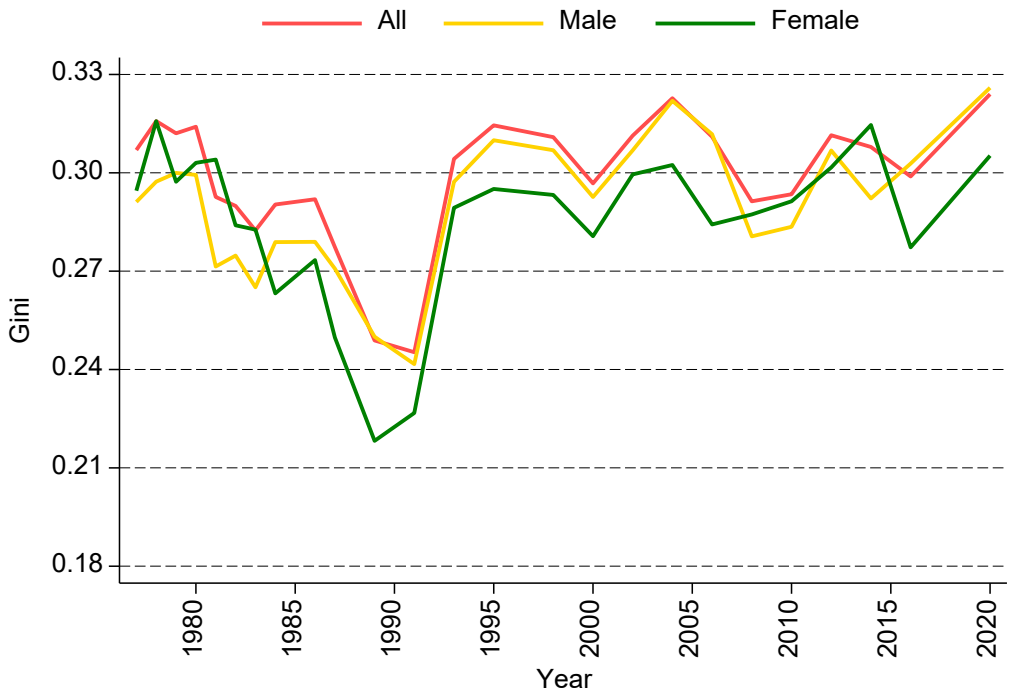






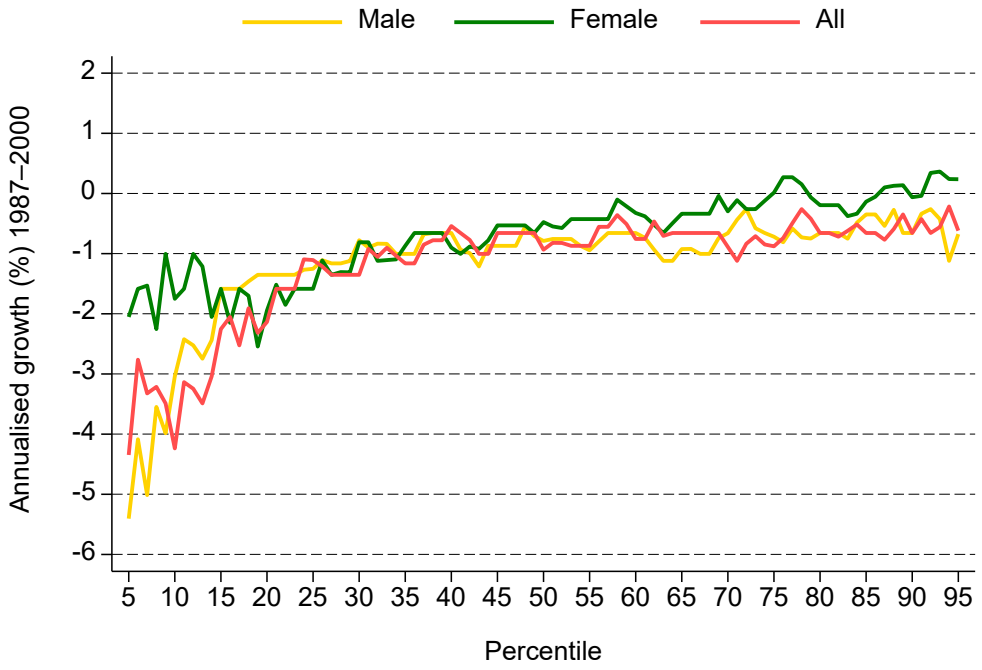
Note: Sample is employees aged 25–74. We do not include the bottom and top 1% of the gender-specific wage distribution. We pool data from across the three years to obtain hourly wage for each 3-year period.

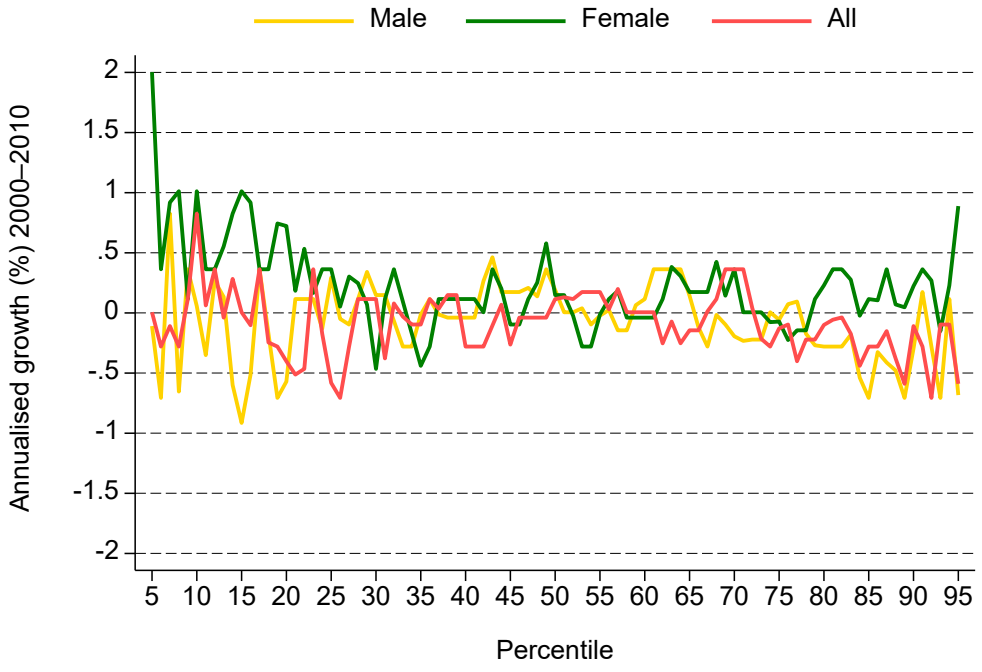
Figure 43. Gini coefficient of net individual earnings, overall and by sex, over time

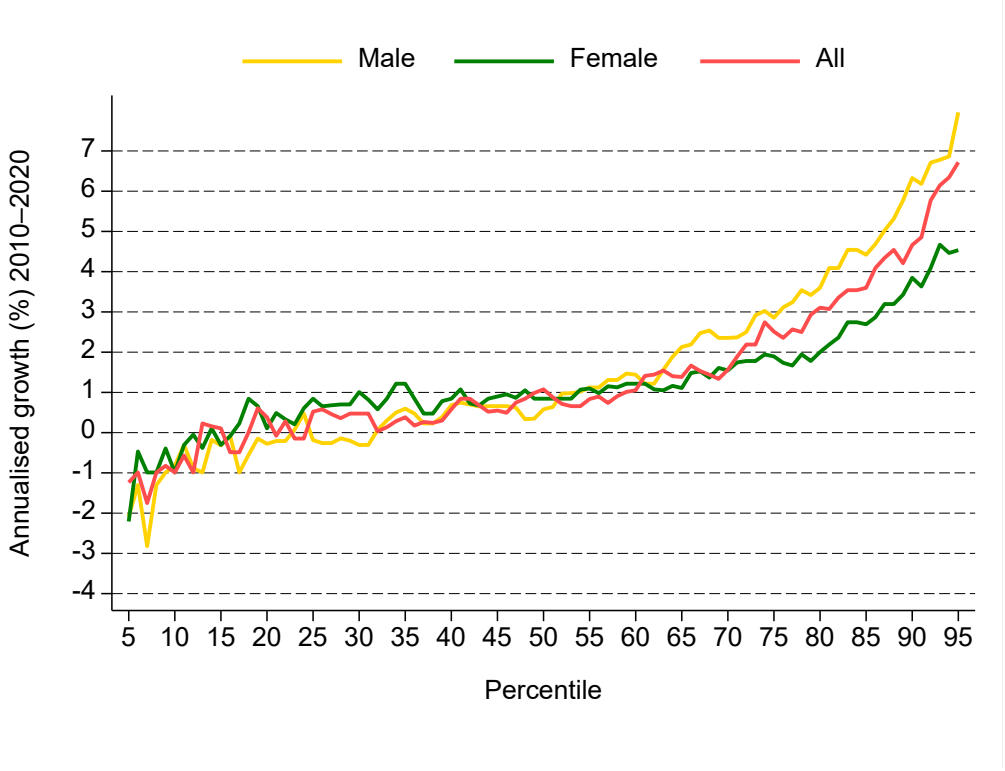


Note: Sample is individuals in work aged 25–74 with strictly positive earnings.

Figure 44. Annualised growth in net earnings by earnings percentile, overall and sex, selected periods







Note: Sample is individuals in work aged 25–74. We exclude those in the bottom and top 5% of the gender-specific wage-distribution.