Scottish labour market trends 2019-22

Report summary

Purpose of report

This report summarizes trends in the labour market for those aged 16-64 using LFS data from 2019-2022. This is in preparation for using the Labour Force Survey (LFS) to update Family Resources Survey (FRS) data to provide a snapshot of household income, inequality, and poverty after the pandemic. To update the 2019-20 FRS data, we apply a reweighting matrix to the FRS data to match labour market characteristics in the first quarter of 2022. Reweighting is performed within groups defined by gender, age, and highest qualification achieved.

Summary of findings

▶ Employment and unemployment rates for men 25 and older with less than degree-level qualifications worsened during the pandemic and have not recovered, while men with degrees or higher education qualifications and most women have returned to pre-pandemic levels of employment.
▶ Weekly hours worked by those in employment fell during the pandemic and had recovered by the beginning of 2022.
▶ Real weekly pay remained mostly steady for those in employment through the pandemic, but began to fall towards the end of 2021 as inflation increased. This points to the efficacy of furlough schemes for maintaining income for those in employment, but does not say anything about the income of those that were unemployed or became inactive during the pandemic.

A summary of changes in the labour market between the first quarter of 2020 and 2022 is shown in Table 1. Statistics are grouped by gender, age group (16-49 and 50+), and level of qualification. Due to the small sample size, no differences are significant at the 95% level of confidence. Trends over the period 2019-2022 are discussed in more detail in the following report.

Table 1: Summary of labour market changes, 2020Q1-2022Q1

Age 16-49	Qualification	Δ Emp. rate	Δ Unemp. rate	Δ Hours	Δ Weekly pay (2019Q1 £)
Female	Degree or higher ed	5.28	-2.17	0.65	23.38
	Highers	2.62	-2.30	0.75	1.96
	Standard Grades, other, or less	1.39	-6.04	0.96	-51.91
Male	Degree or higher ed	3.88	-1.76	-0.04	31.79
	Highers	2.73	-0.60	3.17	-55.46
	Standard Grades, other, or less	-3.25	1.04	2.64	49.10
Age 50+					
Female	Degree or higher ed	0.94	0.41	0.71	41.16
	Highers	-5.25	0.98	6.92	-54.60
	Standard Grades, other, or less	3.91	-2.84	0.33	78.38
Male	Degree or higher ed	-1.07	1.43	1.34	-38.62
	Highers	-8.24	1.37	4.04	67.67
	Standard Grades, other, or less	-2.58	3.86	1.09	3.80

Notes: Green indicates an improvement in 2022Q1 over 2020Q1, and red indicates a decline. No differences are statistically significant at the 95% level.

Data

The Labour Force Survey (LFS) is conducted on a quarterly basis by calendar quarters (e.g. Jan-Mar is Q1). The LFS questionnaire asks households about a wide range of labour force characteristics and related topics, including economic activity and employment status, hours, and pay. Individual and household data also contain respondents' demographic characteristics, including age, gender, and education level. The survey is nationally representative given the use of appropriate individual-level weights; all figures are weighted averages reflecting population-level estimates of key statistics. A one-year moving average is applied to all figures to account for seasonality unless otherwise noted.[1]
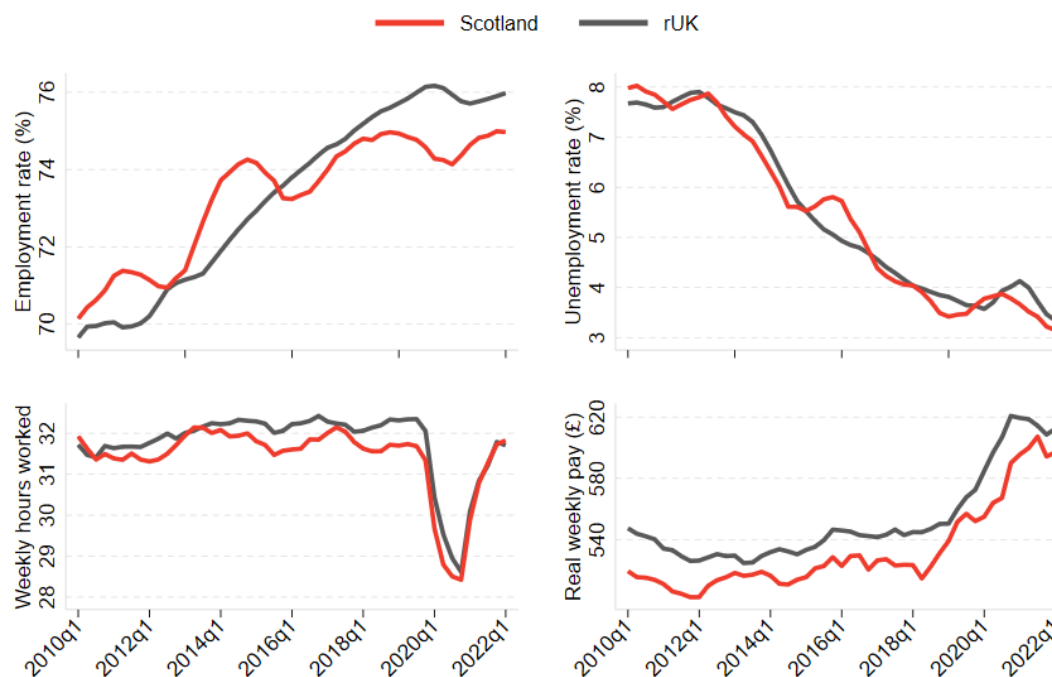
Overall labour market trends in Scotland and rUK

Figure 1: Employment trends in Scotland vs. rUK
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using a moving average to account for seasonality.

Overall trends in key labour market statistics are shown in Figure 1 for Scotland, benchmarked against the rest of the UK. Compared to just prior to the pandemic, the Scottish labour market has generally recovered in terms of employment and average hours worked per week, and seen improvements in real weekly pay and the unemployment rate. Employment rebounded faster in

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[1] The Scottish Government applies their own seasonality adjustment; therefore, these charts may not match exactly with figures published in labour market reports.

Scotland than in the rest of the UK after hitting a low in 2020Q3, and remains approximately 1 percentage point (1pp) lower than the rest of the UK's rate. The employment rate has now resumed a general upward trend in both Scotland and rUK. Similarly, after a rise during the pandemic, unemployment has resumed a downward trend. Unemployment peaked in 2020Q3 for Scotland, at a lower rate than that for the rest of the UK, and has since fallen to about 0.6pp lower than the first quarter of 2020. Weekly hours worked by those in employment tracked closely with the rest of the UK through the pandemic dip and are now roughly comparable to pre-pandemic levels.

Finally, real weekly pay among employed people has trended upwards over the last four years after stagnating from 2010-2018. Analysis of trends in real pay during the pandemic is complicated by furlough effects and compositional effects. In Scotland as well as in the rest of the UK, workers returning to full pay after furlough drove some of the increase in the real wage in 2020-2021, as did a shift in the composition of the labour market towards higher-paying jobs earlier in the pandemic (Cominetti et al. 2022). The subsequent decline at the end of 2021 is likely due to a growing rate of inflation (Gillespie 2022).

Employment trends 2019-2022
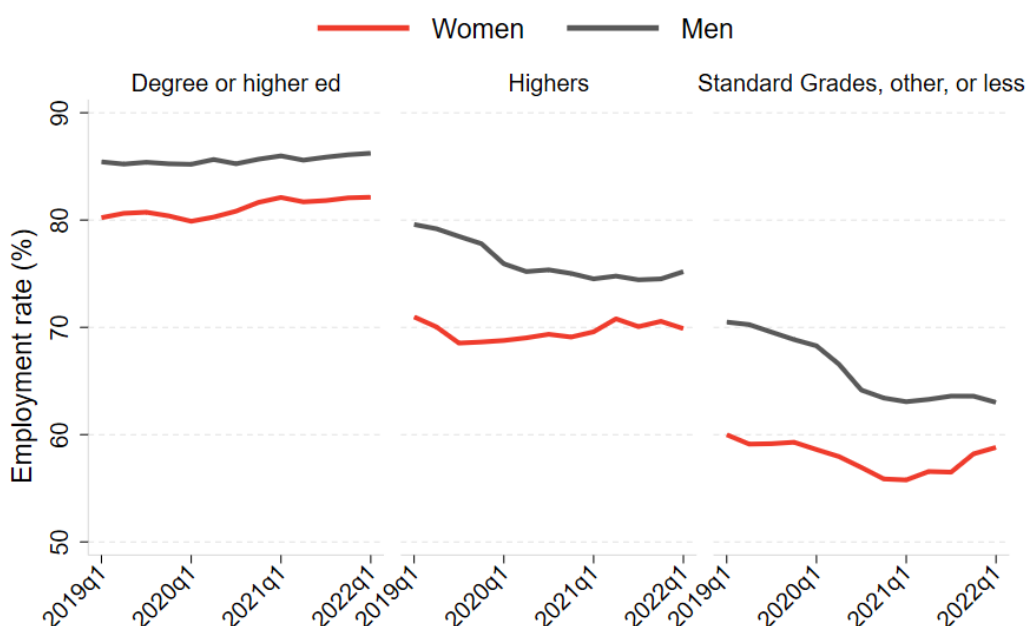
Employment rates

Figure 2: Employment rates by gender and qualification level
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality.

The employment rate is defined as the proportion of the total population aged 16-64 who are in paid work or temporarily not working (such as those on holiday or off sick). The overall employment rate in Scotland for those aged 16-64 ranged between 70-75% from 2010-2019, and 73-75% during the pandemic. Employment rates are typically lower for women, those under 24 or over 50, and those with lower educational credentials.

From 2019 to the first quarter of 2022, employment rates held relatively steady for those with degrees or higher education qualifications (Figure 2). Women with Higher qualifications or less had slight dips in employment which rebounded by the first quarter of 2022, while men with these qualifications have had persistently falling employment rates.

The persistence of reductions in employment for men with lower qualifications may be partially explained by the continuing impact of the pandemic on services and trade occupations (Figure 3). Trades, process and plant, services, sales, and elementary occupations made up 46.1% of employment in the first quarter of 2019; this number fell to 40.3% in the second quarter of 2020, and had increased to only 41.5% by the first quarter of 2022.
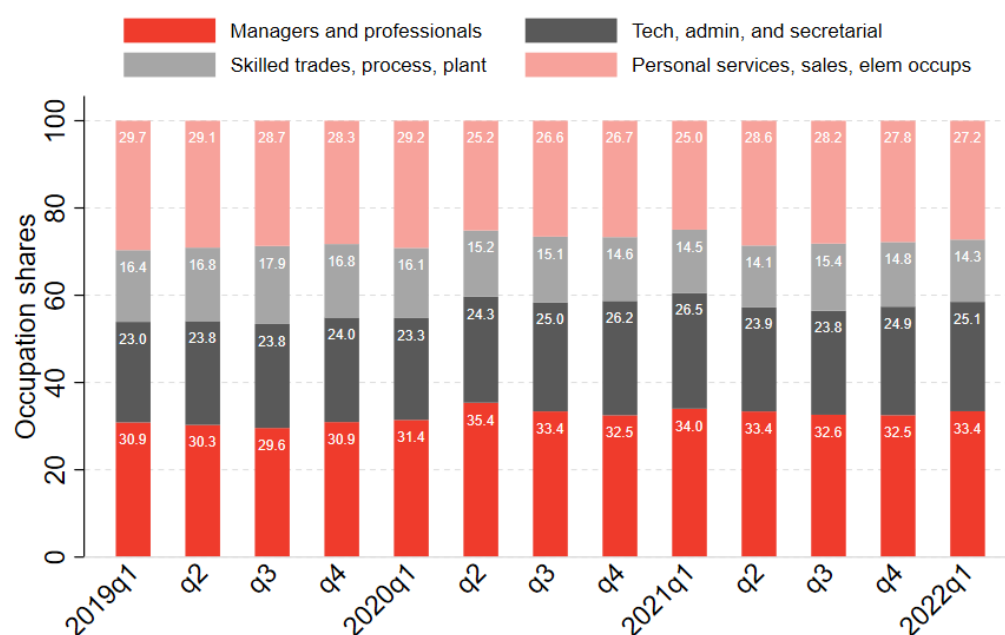

Figure 3: Shares of employment by occupation
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality.

Gendered patterns of employment are also apparent by age group (Figure 4). The employment of those aged 16-24 and men aged 25-49 was in decline going into the pandemic, possibly due to the return of employed immigrants to the EU during the Brexit transition. Employment rates for both men and women aged 16-24 had risen slightly above their level in the first quarter of 2019, and well above the rates in the first quarter of 2020.
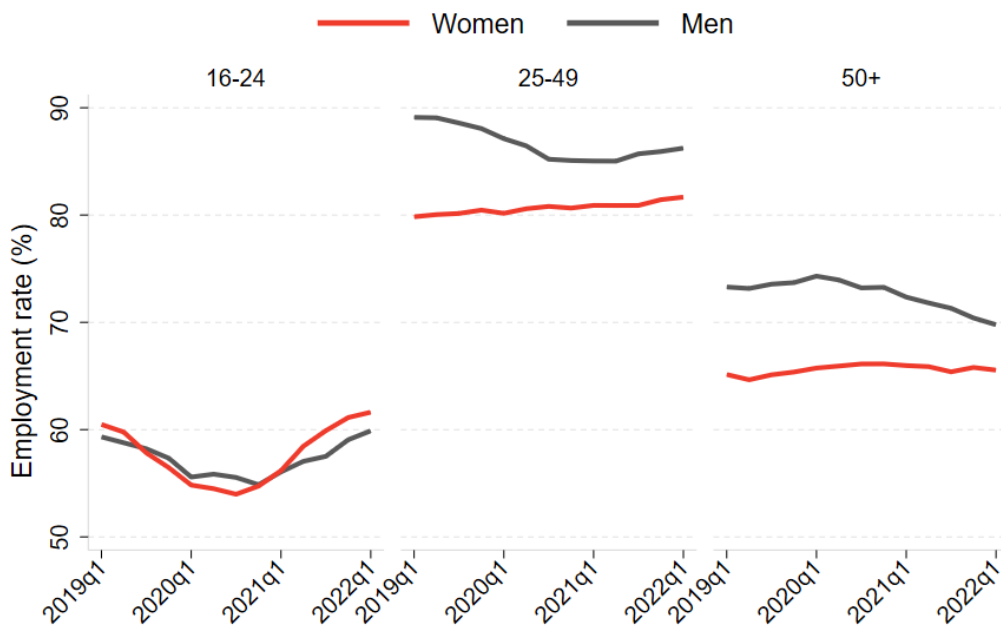
Figure 4: Employment rates by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality.

Men aged 25-49, however, have an employment rate that is still about 5pp lower than it was in the first quarter of 2019. For the over-50 population, men's employment declined from the start of the pandemic to the first quarter of 2022, while women's employment remained fairly level throughout. Men's activity rates followed the same patterns by age and qualification as did employment (see Figures A1-A2).

Unemployment

The unemployment rate refers to the proportion of the economically active population aged 16-64 that is not working, but is actively seeking work. In contrast to reports for the entire UK (Cribb et al. 2021, Bell et al. 2021), furlough schemes in Scotland were not entirely successful in holding unemployment down for all groups, although they did reduce unemployment from what it might have been (Gillespie 2020). In particular, younger people and those with lower levels of education saw rises in unemployment during the pandemic, and not all groups have fully recovered.

Unemployment rates varied widely through the pandemic period by qualification level (Figure 5), with relatively steady, low unemployment around 3% for those with degrees (particularly women) and more volatile patterns for other qualification levels. For those with Higher qualifications, unemployment rose during the first few quarters of the pandemic, but then fell back to roughly pre-pandemic levels. Men in this category have slightly lower unemployment then in the first quarter of 2019, and women have slightly higher unemployment. The most drastic change is for men with Standard Grade, other, or no qualifications. These men saw a

sharp rise in unemployment from 2020Q1 to 2021Q1; their unemployment has started to decrease, but remains a little over 9%. On the other hand, women in this qualification category had higher unemployment during the pandemic but had returned to pre-pandemic levels of unemployment by the last quarter of 2021.
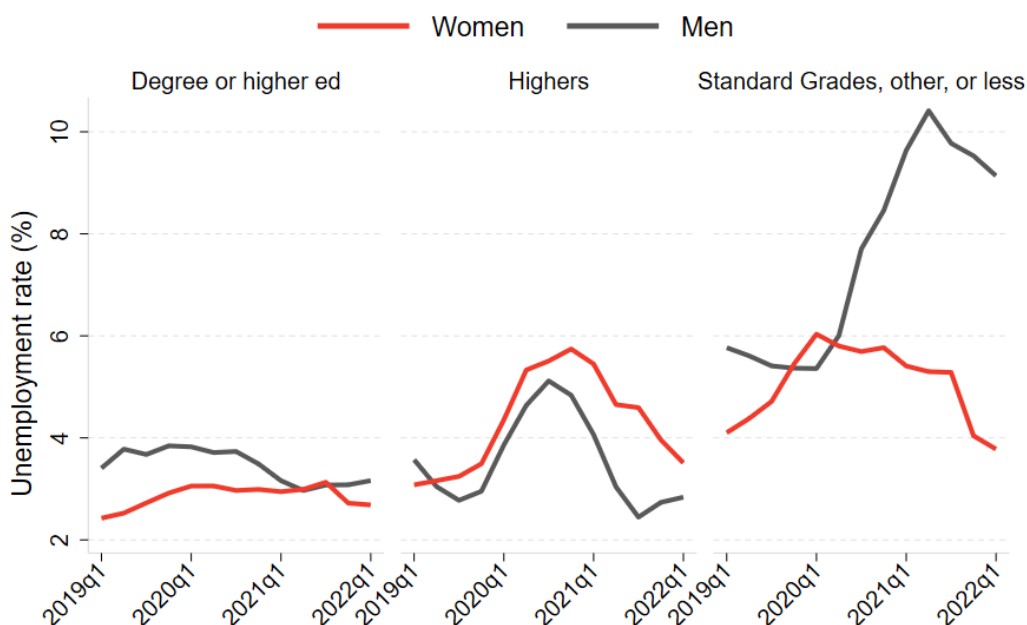

Figure 5: Unemployment by gender and qualification level
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality.

Changes in unemployment rates also varied by age group (Figure 6). Those aged 16-24 were most affected by the pandemic, with unemployment rates rising over 12% for both men and women. Men in this age group had a higher unemployment rate to start in 2019, about 10%; their unemployment rate had fallen to approximately 8% by the first quarter of 2022. Women aged 16-24 started 2019 with unemployment of just over 5%, and by 2022 their rate had fallen to nearly the same level.

While younger men's unemployment recovery matches the speed of that in the UK as a whole (Murphy 2022), the unemployment of women aged 16-24 had not quite returned to the pre-pandemic level of just over 5%. Older age groups had much more stable rates of unemployment during the pandemic. Those aged 25-49 and women over 50 experienced relatively small changes in unemployment and remained at similar levels in the first quarter of 2022 to three years prior. In contrast, men over 50 have had rising rates of unemployment from 2020Q1 through the first quarter of 2022.
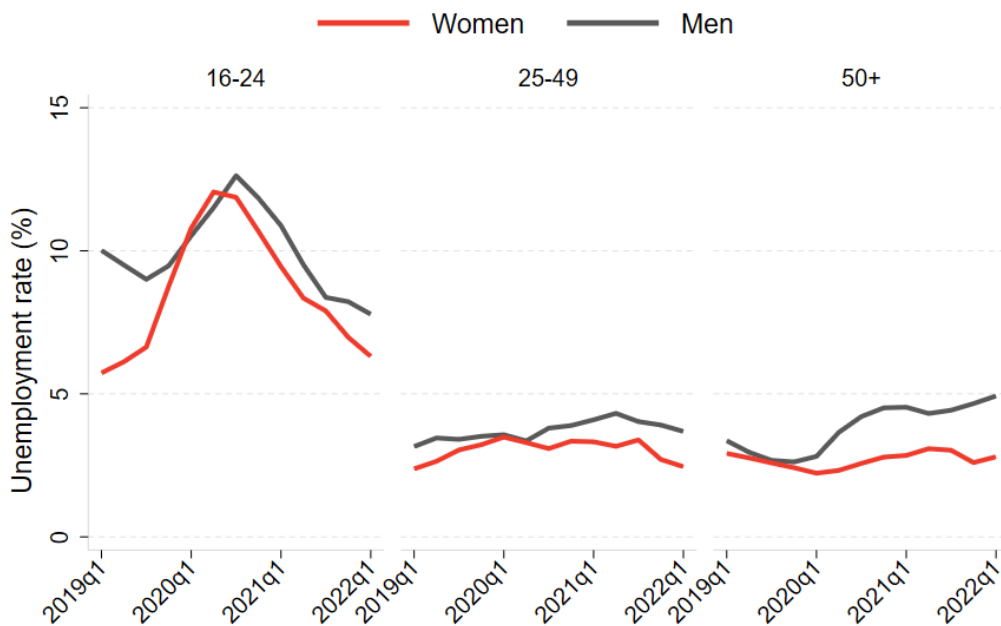
Figure 6: Unemployment by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality.

Trends in hours and pay 2019-2022

This section presents trends in hours worked and weekly pay in Labour Force Survey data for 2019-2022. Mean hours and pay are adjusted by annual moving averages to avoid seasonal trends. Hours worked and pay per week are summed over all jobs and averaged among all employed people in each group. The figures presented represent all workers, include part-time workers. Nominal wages are deflated to 2019Q1 £ using the quarterly consumer price index including housing costs (CPIH). In general, women tend to work fewer hours and earn less per week on average, explained by their higher participation in part-time work compared to men.

Weekly hours worked

Hours worked per week decreased during the pandemic for all groups and then rebounded to roughly pre-pandemic levels (Figures 7-9). Those with lower levels of qualifications had greater decreases in hours worked (Figure 7), likely because these groups were more likely to work in occupations that were most impacted by lockdown and distancing measures like skilled trades (Figure 8). This pattern holds across age groups (Figure 9), but with a sharper decline in hours worked for older and younger workers during the pandemic.

Figure 7: Weekly hours worked by gender and qualification level
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
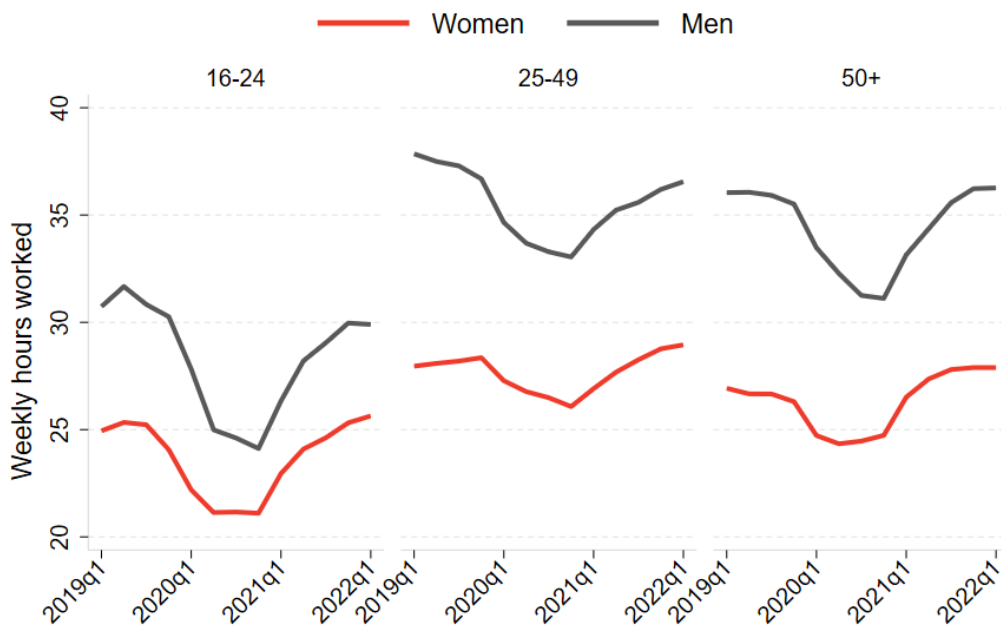*Notes: All figures are smoothed using an annual moving average to account for seasonality.*
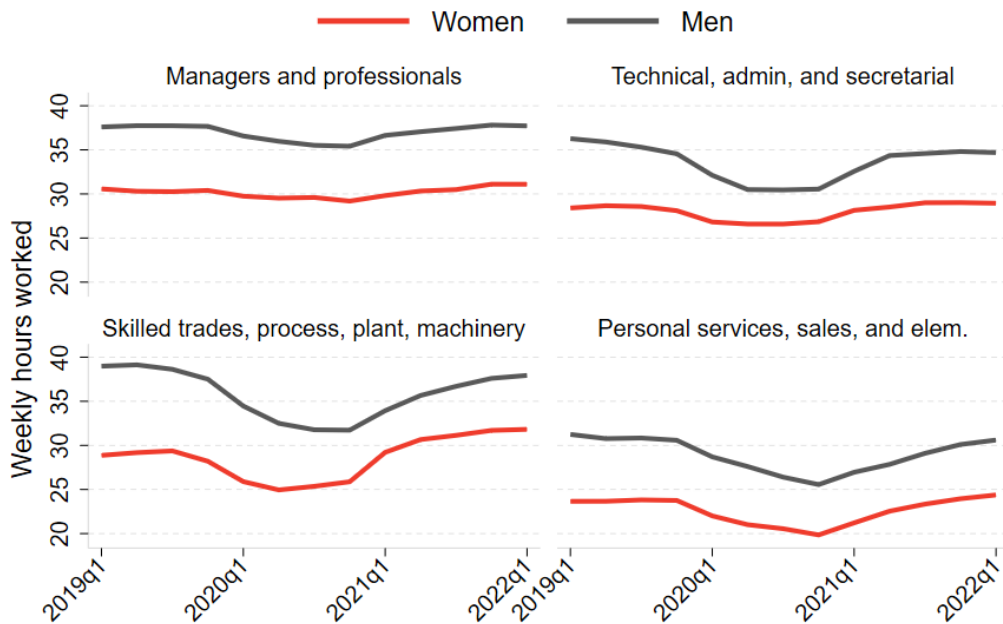
Figure 8: Weekly hours worked by gender and occupation
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality.

Figure 9: Weekly hours worked by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality.

It is worth noting that across these disaggregations (Figures 7-9), many groups of employed women work slightly more hours per week than they did prior to the pandemic, whereas some groups of men work slightly less. This compounds the differences in employment rates by gender, so that some groups of men (particularly those of working age with fewer qualifications) are less likely to be employed and working fewer hours as compared to 2019.

Total weekly pay

Weekly pay is calculated as a total amount received from all jobs and averaged among all employed people, including those working part-time jobs. Weekly pay is expressed in real 2019Q1 £.

Real weekly pay held fairly steady across gender and qualification groupings from 2019-2022 for those in employment, likely due to furlough schemes (Figure 10). This is in contrast to the UK overall, where reports in 2021 suggested that workers with lower levels of qualifications experienced stronger earnings growth due to a rise in the National Living Wage in 2020 (Cribb et al. 2021). Static pay for those in employment suggests that decreases in household income during the pandemic were more likely to come from disemployment than from reduced hours or pay rates.
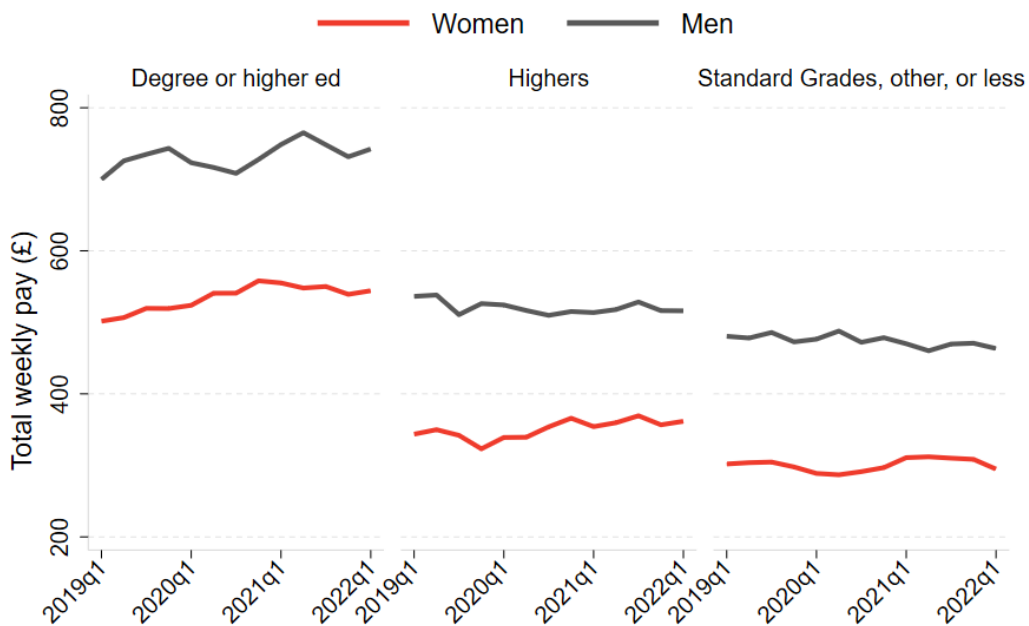
Figure 10: Real weekly pay by gender and level of education
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality. Real weekly pay is expressed in 2019Q1 £.

The differences between these static figures and the rise in real wages over the same period in the Scottish economy overall (Figure 1) are likely due to compositional shifts in the labour market, which have been noted in UK-wide statistics as a key driver of wage growth during the pandemic (Cominetti et al. 2022).[2] Workers with degrees had slight increases in real pay, while those with lower qualifications saw more stagnant pay. Similar patterns held across occupations, with more variation between occupational groupings than over the course of the pandemic (Figure 11).

Trends in weekly pay were slightly more variable within gender and age groupings (Figure 12). Weekly pay trended upwards for women above the age of 50 from 2019-2022; for men, it remained more level until partway through 2020, when it began to climb. Real weekly pay in the last quarter of 2021 and first quarter of 2022 stagnated or fell for most groups due to higher rates of inflation.

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[2] Although the LFS is not the preferred dataset for detailed analysis of pay, mean weekly pay for men and women as calculated from LFS data 2019-2022 roughly matches pay as measured in the Annual Survey of Hours and Earnings (ASHE) (Office for National Statistics 2022).
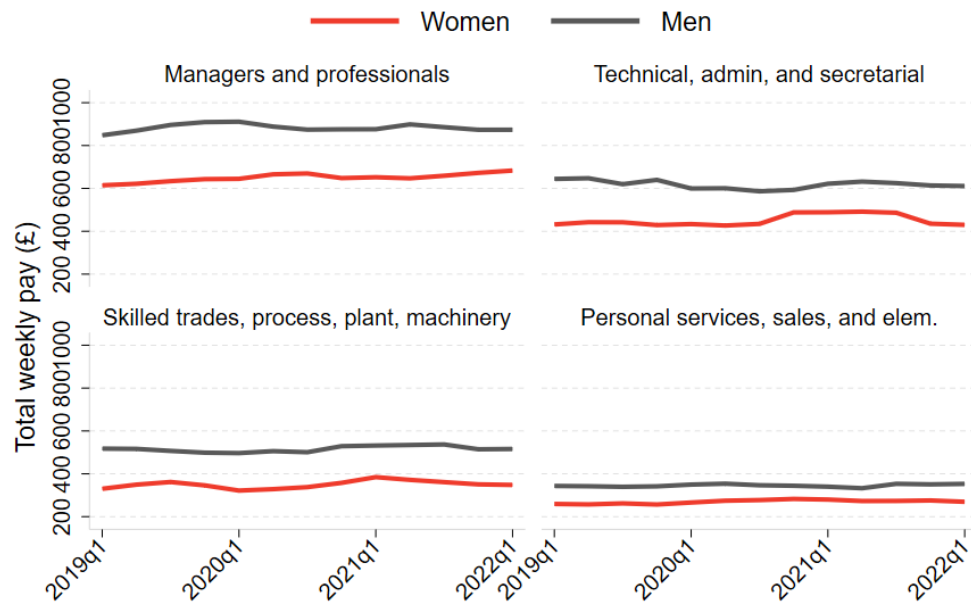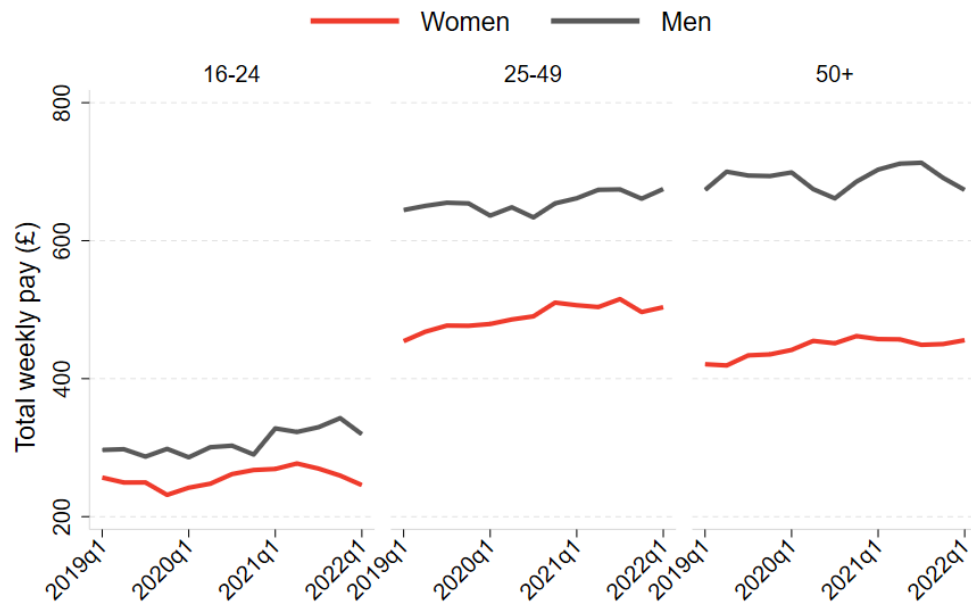
Figure 11: Real weekly pay by gender and occupation
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality. Real weekly pay is expressed in 2019Q1 £.

Figure 12: Real weekly pay by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures are smoothed using an annual moving average to account for seasonality. Real weekly pay is expressed in 2019Q1 £.

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Annex: Trends in non-seasonally adjusted population estimates

This annex contains charts of estimated population means and 95% confidence intervals for key employment statistics, disaggregated by combinations of sex, age, and level of qualifications. The means shown in these figures may differ from the main figures because they omit the moving average adjustment for seasonality.
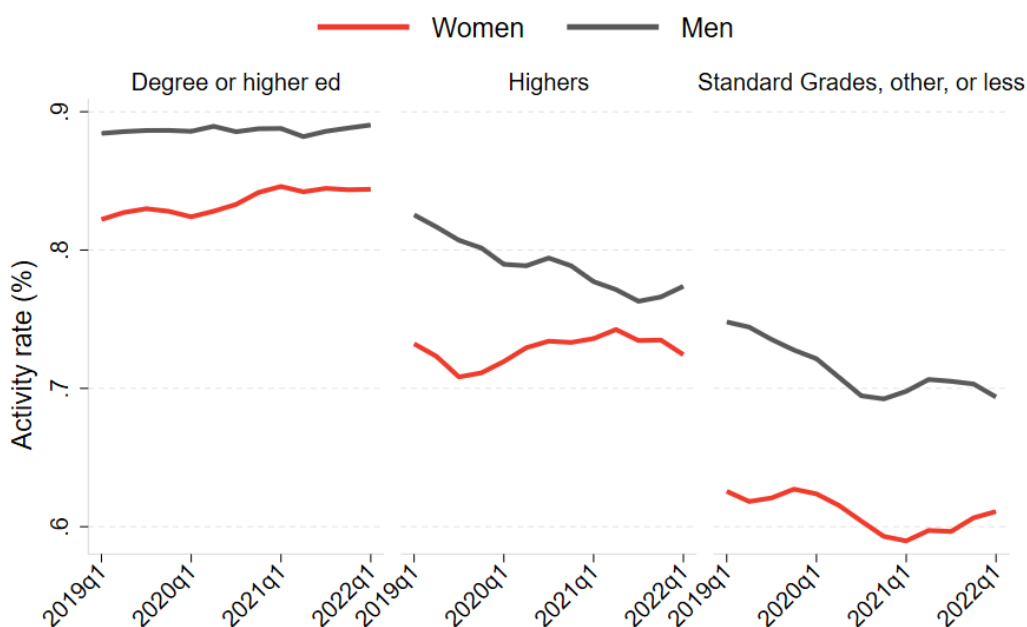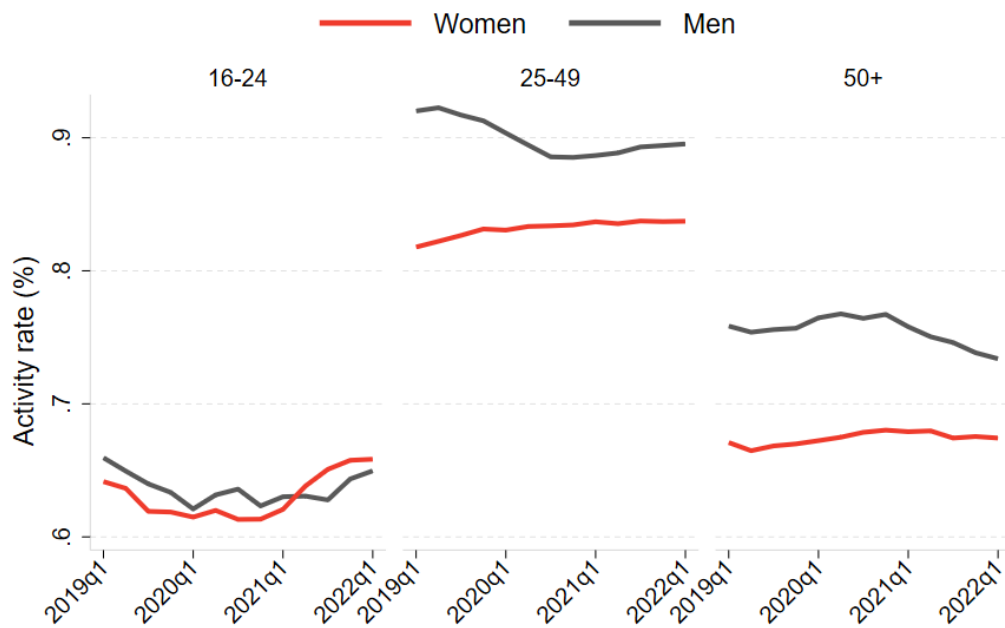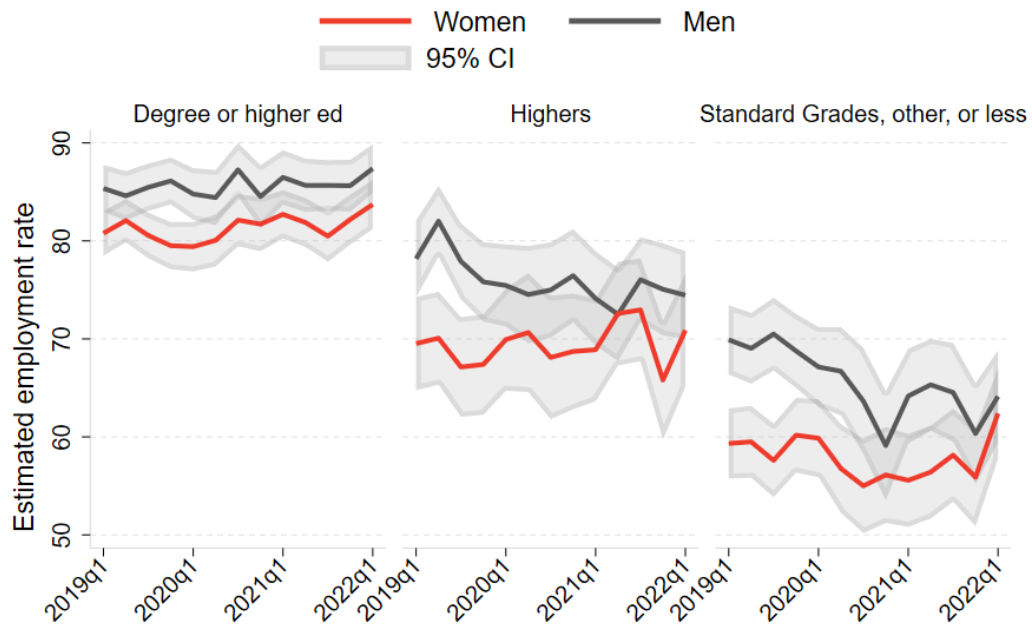

Figure A1: Activity rate by gender and qualification
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
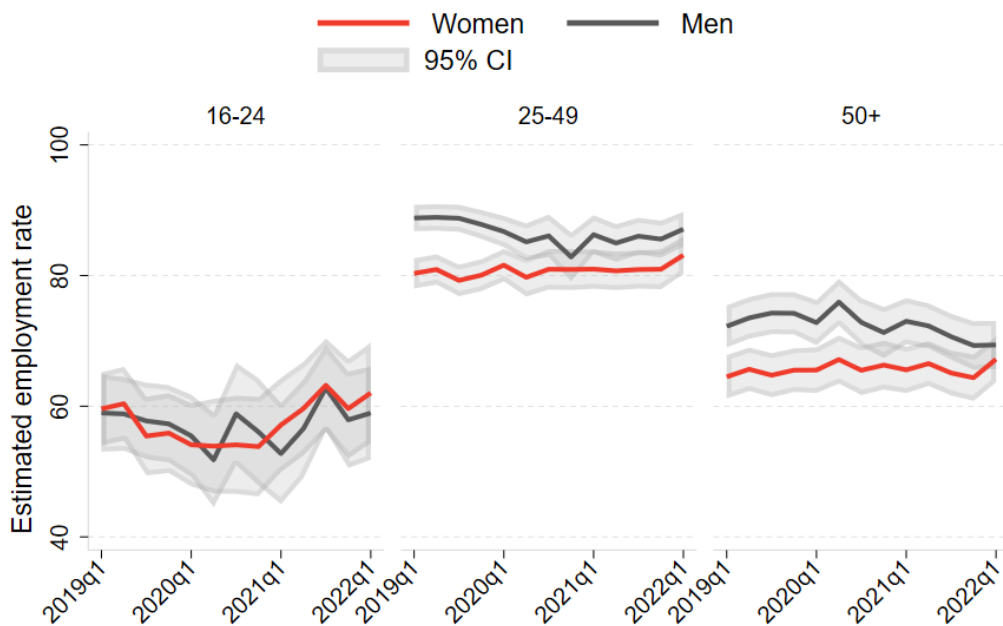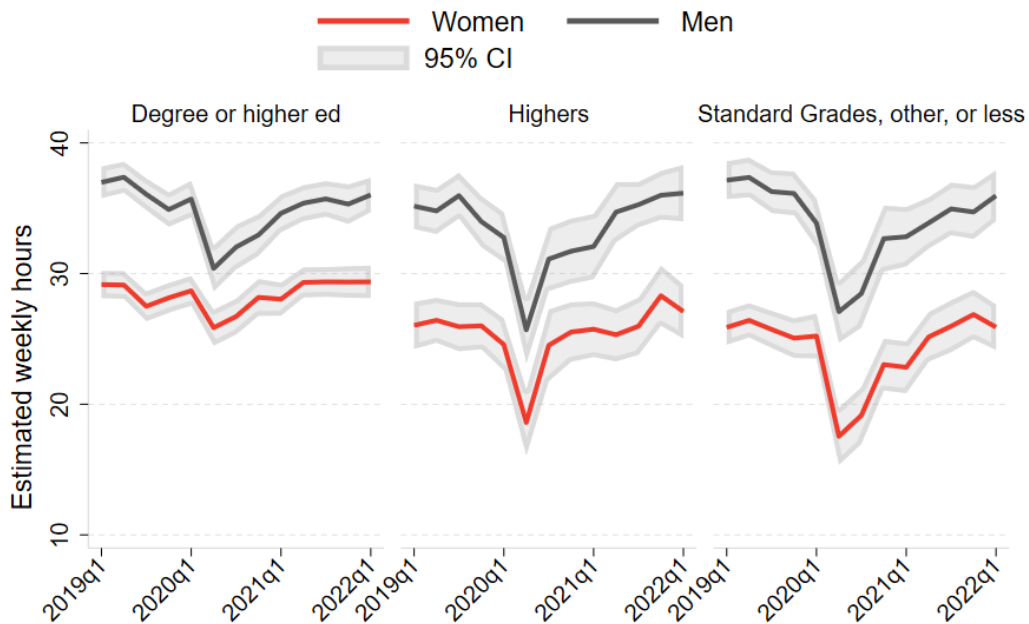*Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals.*

Figure A2: Activity rate by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals.

Figure A3: Employment rate by gender and qualification
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals.
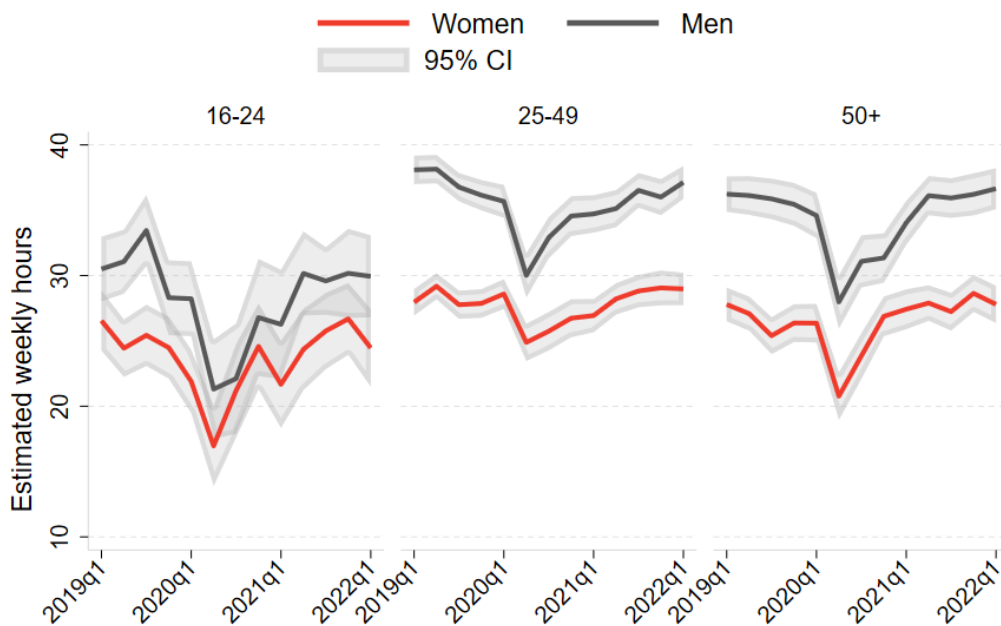
Figure A4: Employment rate by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals.
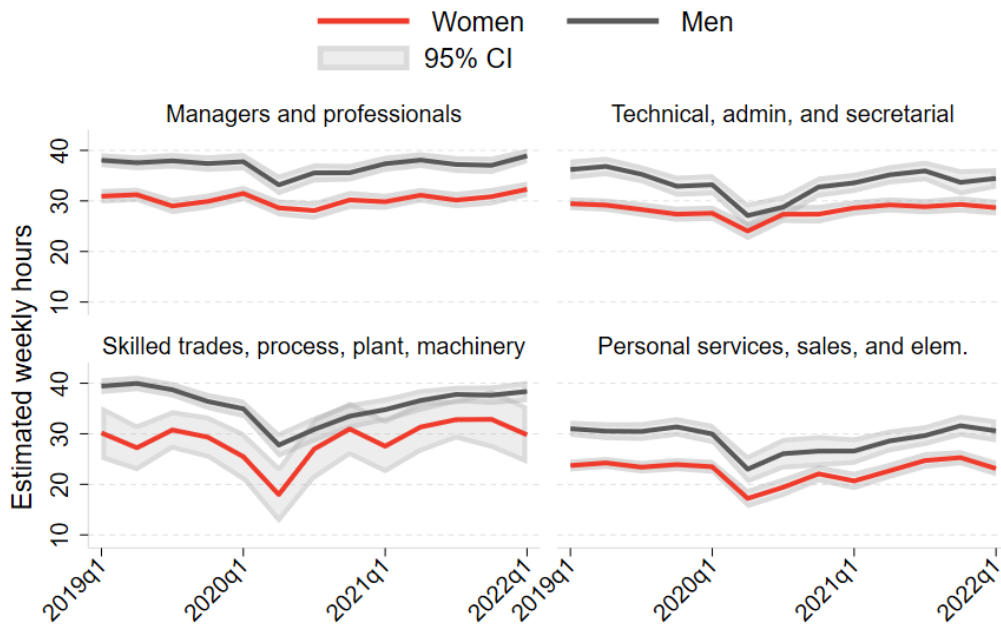

Figure A5: Weekly hours worked by gender and qualification
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals.

Figure A6: Weekly hours worked by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
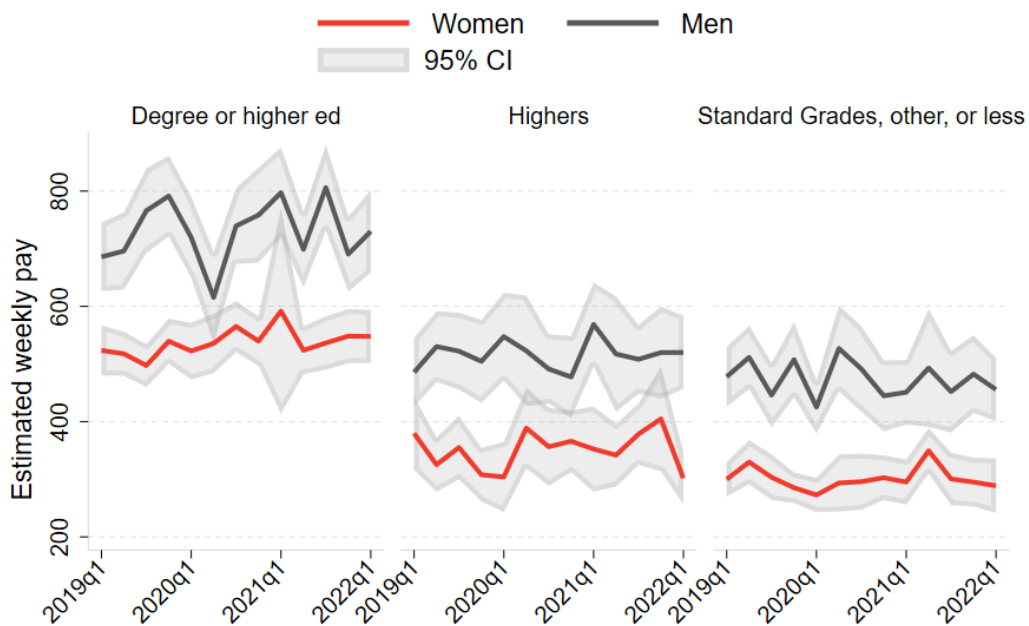*Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals.*

Figure A7: Weekly hours worked by gender and occupation
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals.

Figure A8: Real weekly pay by gender and qualification
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals. Real weekly pay is expressed in 2019Q1 £.
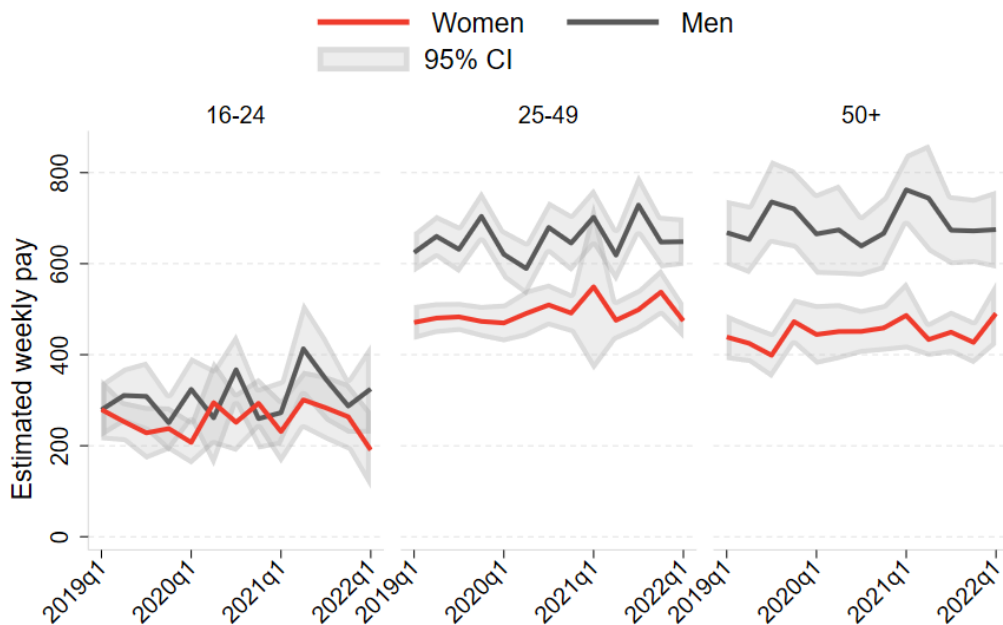

Figure A9: Real weekly pay by gender and age
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)

Figure A10: Real weekly pay by gender and occupation
Source: Author calculations from quarterly LFS data, 2010-2022 (ONS 2022)
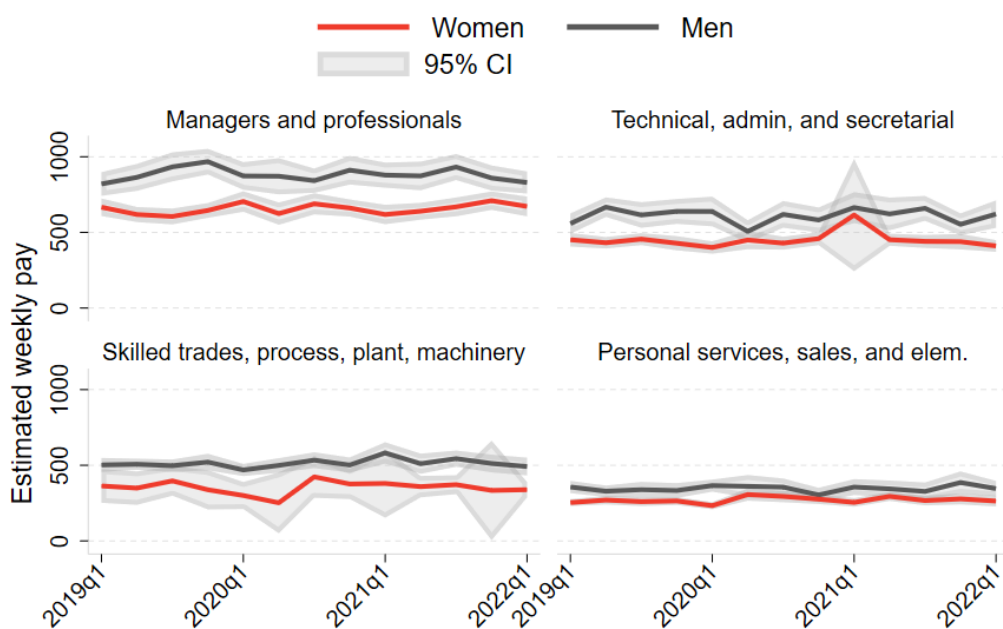*Notes: All figures reflect non-seasonally adjusted sample means and 95% confidence intervals. Real weekly pay is expressed in 2019Q1 £.*