

Introduction

This report presents the second publication of experimental¹ estimates of gross earnings and the gender pay gap in Jersey. The publication of these experimental statistics is designed to invite feedback from users on the results and the methodology whilst these continue to be developed. This report includes real-term earnings statistics for the first time and improved international comparisons. Further development work is being undertaken with the aim of publishing statistics using an updated method towards the end of 2024.

These statistics were produced using data already held by Government for administrative purposes, specifically Social Security contributions and Manpower returns². They provide a greater level of detail and additional information than is currently available in our existing survey based official statistics.

[Appendix A](#) contains a detailed methodology description and proposed future improvements. Any future changes to the methodology or inclusion of additional data sources may lead to revisions of these figures.

The production of these statistics is part of a wider program of work by Statistics Jersey to produce or improve statistical outputs, using administrative data. This would include more frequent earnings statistics than the annual Average Earnings Index (AEI) and additional employment analysis, in a report to be published shortly.

The report presents monthly **median** earning levels on a full-time equivalent (FTE) employee basis. Employment and demographic information are linked by combining administrative data sources. This enables breakdowns by:

- industrial sector
- age
- sex³
- self-declared nationality
- “pay quarter”; this splits the population into four groups based on earnings level and then calculates medians of each group, which provides measures for those on upper, middle, and low incomes

Additionally, changes over time can be calculated, including annual changes and changes by approximate cohort over a 5-year period.

Breaking down average earnings by sex enables gender pay gap measures to be calculated, overall and for each of the variables listed above.

Throughout this report, public sector values will differ from those in Government of Jersey gender pay gap reports. This is due to two main reasons; firstly, the public sector in this report includes more than just the Government of Jersey, e.g. parish employees. Secondly this analysis includes all employment income received by an individual, whereas the Government of Jersey analysis excludes certain employment income, such as overtime.

¹ See [Experimental Statistics – Guidance and interpretation](#).

² Manpower returns are a return to Government, from employers and sole traders, providing information on all people employed and details such as their contract type; full-time, part-time, or zero-hour.

³ This field is from the data provided by Customer and Local Services within the Social Security contributions data.

Earnings Summary

For June 2023

- overall median earnings for the month were around £3,480⁴; this was a nominal annual increase of 8.8% from June 2022, which was a 2.0% decrease in real-terms (adjusting for inflation)
- median earnings were highest in the 45-49 age bracket (£4,140)
- the highest median earnings were in the financial and legal activities sector (£4,910)
- the lowest median earnings were in the hotels, restaurants and bars sector (£2,400)
- when analysing by self-declared nationality⁵:
 - the highest median earnings were seen for South African employees (£4,880)
 - the lowest median earnings were seen for Kenyan employees (£2,440)
- median earnings for the highest pay quarter (£6,770) were more than three times the median earnings for the lowest pay quarter (£1,970)

Gender Pay Gap Summary

For June 2023

- median earnings for males were £3,660 whilst median earnings for females were £3,260, producing an overall gender pay gap of 12%⁶; the gender pay gap was unchanged from June 2022.
- all age groups 40 years old and above saw higher gender pay gaps than the overall average (12%)
- the highest gender pay gap of any sector was in the information and communication sector (28%)
- the lowest gender pay gap of any sector was in the education, health and other services sector (4%)
- the gender pay gap in the financial and legal activities sector increased with age, starting near parity for those aged 20-29 and widening to 74% for those aged 60-64
- when analysing by self-declared nationality⁵:
 - Portuguese / Madeiran employees saw the largest gender pay gap (24%)
 - Kenyan employees saw the smallest gender pay gap (7%)
- the two middle pay quarters both essentially saw gender parity, but the lowest and highest pay quarters saw 4% and 7% gender pay gaps respectively

For 2022

- Jersey's overall gender pay gap for full-time employees (11%) was lower than the OECD average (12%)⁷

⁴ Values are rounded to nearest £10 throughout the report.

⁵ Self-declared to Customer and Local Services. Only nationalities with over 100 males and over 100 females were included in the analysis.

⁶ A value greater than zero signifies males are paid more than females.

⁷ OECD data only currently available to 2022 or earlier depending on the country.

Earnings

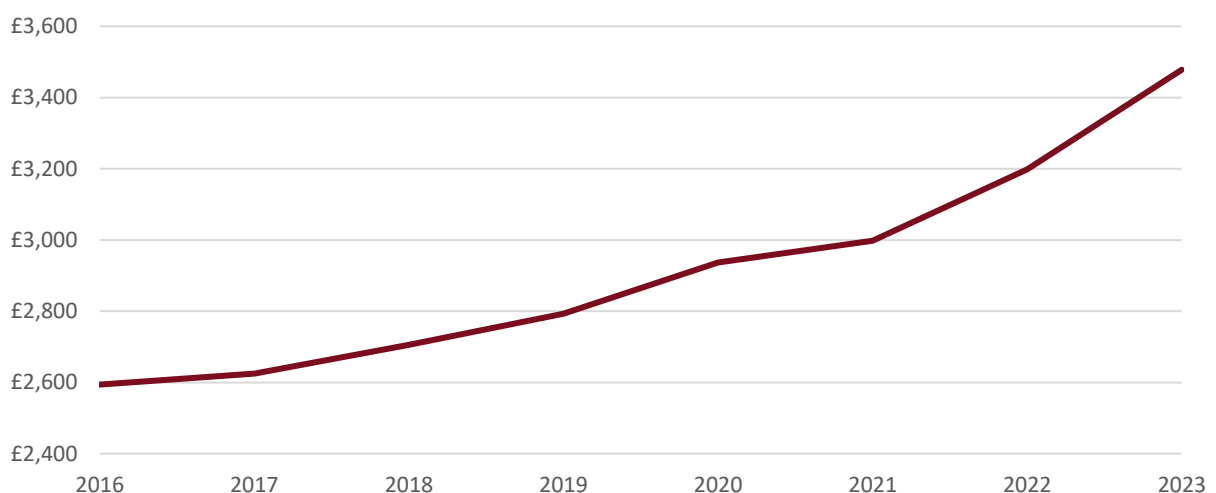
Overall earnings

The median earnings of an employee, on an FTE basis have been calculated by linking Social Security and Manpower return datasets. Currently these datasets are available for 2016 onwards. Until the combined employer return was implemented in January 2022, Manpower returns were only completed in June and December, so the analysis is currently only available for these months. Additionally Social Security returns are only completed for jobs which are dependently employed, therefore this analysis does not include any jobs that are self-employed. Essentially all (96% in June 2023) jobs which are dependently employed are included in this analysis. People with more than one dependently employed job will appear multiple times.

All jobs are adjusted to a full-time basis, meaning that the earnings analysed are adjusted for what that individual would have earned for that job if they worked full-time for the full month of June. However, hours worked by full-time employees vary by sector and sometimes by job role. Availability of hours for a full-time employee can also vary, particularly for certain sectors. A detailed description of the methodology can be found in [Appendix A](#).

Figure 1 shows the level of median earnings overall for June 2016 to June 2023. These amounts are nominal, that is, the amount received by individuals at the time. [Real-term comparisons](#) (adjusted for inflation) are described later in this report.

Figure 1 – Level of median earnings in June; 2016-2023



These earnings values together with the annual percentage change are shown in Table 1 below:

Table 1 – Median earnings and annual percentage changes; June 2016 - June 2023

	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023
Overall, £	2,590	2,630	2,710	2,790	2,940	3,000	3,200	3,480
Annual percentage change	-	1.5%	3.0%	3.0%	5.4%	2.0%	6.7%	8.8%

These earnings values and annual percentage changes see a slightly different pattern of changes to that of the average earnings index (AEI). These experimental statistics saw a higher percentage increase from June 2016 to June 2023 (34.1%) than the average earnings index (30.1%)⁸. However, the overall level for the median in June 2023 is similar for both methods. The median AEI value being £800 for the last week of June, equivalent to £3,430 for the month of June, £50 lower than the overall median in Table 1.

The year with the largest difference between annual changes in the AEI and these experimental statistics is 2020, when the annual changes were 1.3% and 5.4% respectively. This difference is primarily as the AEI methodology adjusts to account for structural change, which is not done in this administrative data approach.

⁸ [Index of Average Earnings report for June 2023](#)

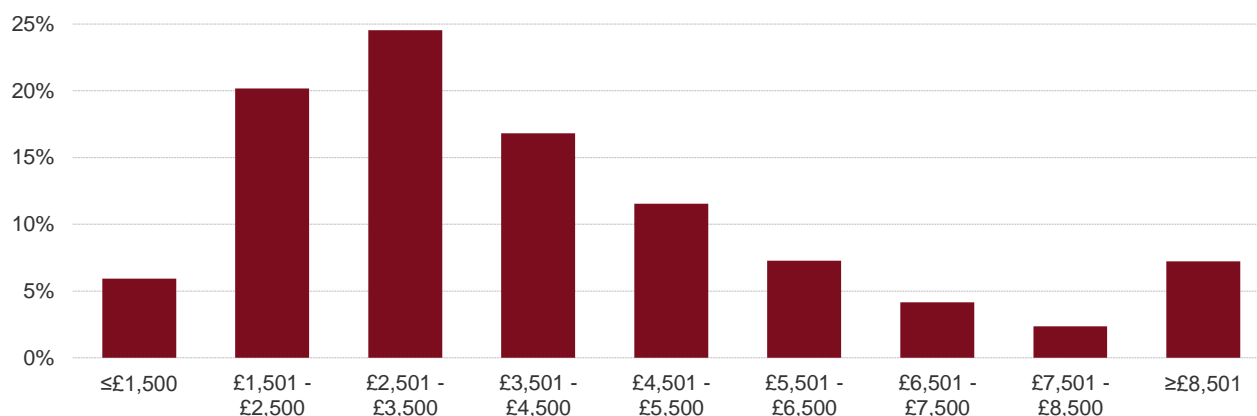
This will have a particular impact in June 2020 as there were a significant number of jobs lost due to the COVID-19 pandemic; the AEI deliberately does not reflect this. The median earnings in this report will reflect job losses and job growth, which is most noticeable when jobs are predominately lost or created towards one end of the earnings distribution.

As well as the structural change adjustments, the AEI is survey based and the statistics in this report use an administrative data approach. Another large difference is that the AEI uses mean earnings, whereas this administrative data approach uses median earnings. Therefore, it is expected for there to be differences between the results of the two methods.

Both methodologies are useful for different purposes. The AEI’s primary use is looking at changes in an individual’s pay, “pay rises”, and is useful when uprating values such as pensions. Whereas the methodology in this report shows actual gross earnings values and the distribution of earnings across various industrial sector and demographic groups in the population. This is useful when measuring inequalities, such as the gender pay gap. Improvements outlined in [Appendix A](#) should enable additional administrative data-based analysis allowing for structural change, to produce statistics more comparable with the AEI.

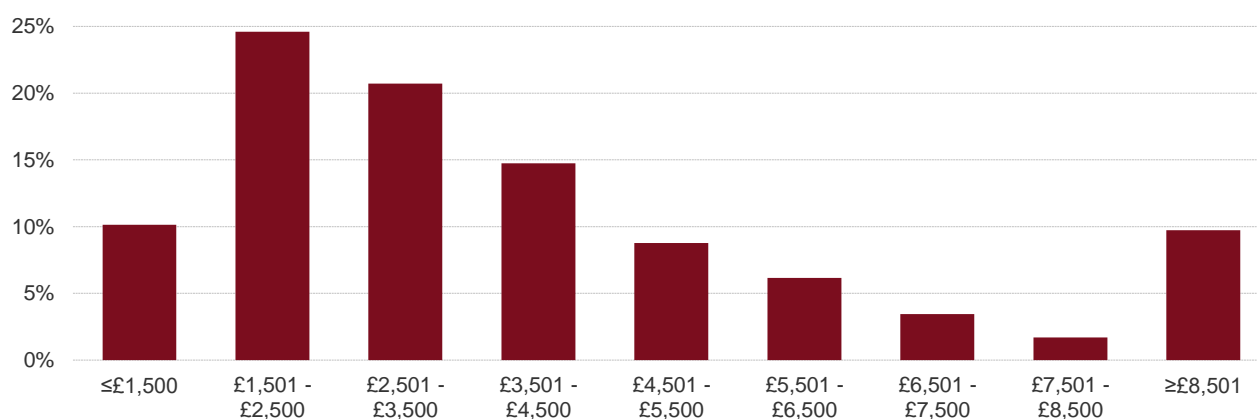
Figure 2 shows the overall distribution of employees by earnings bracket for June 2023.

Figure 2 – Distribution of employees by earnings bracket; June 2023



The distribution of earnings seen in this analysis is similar to the distribution of employment income in the recent 2021-2022 Income Distribution report, although there are slight differences in the lowest and highest earnings brackets. This will be partly caused by increases in earnings, particularly the minimum wage since the Living Costs and Household Income Survey was conducted. Figure 3 shows the overall distribution of monthly earnings from the 2021-2022 Income Distribution report⁹.

Figure 3 – Distribution of employees by earnings bracket; 2021-2022 Income Distribution report results



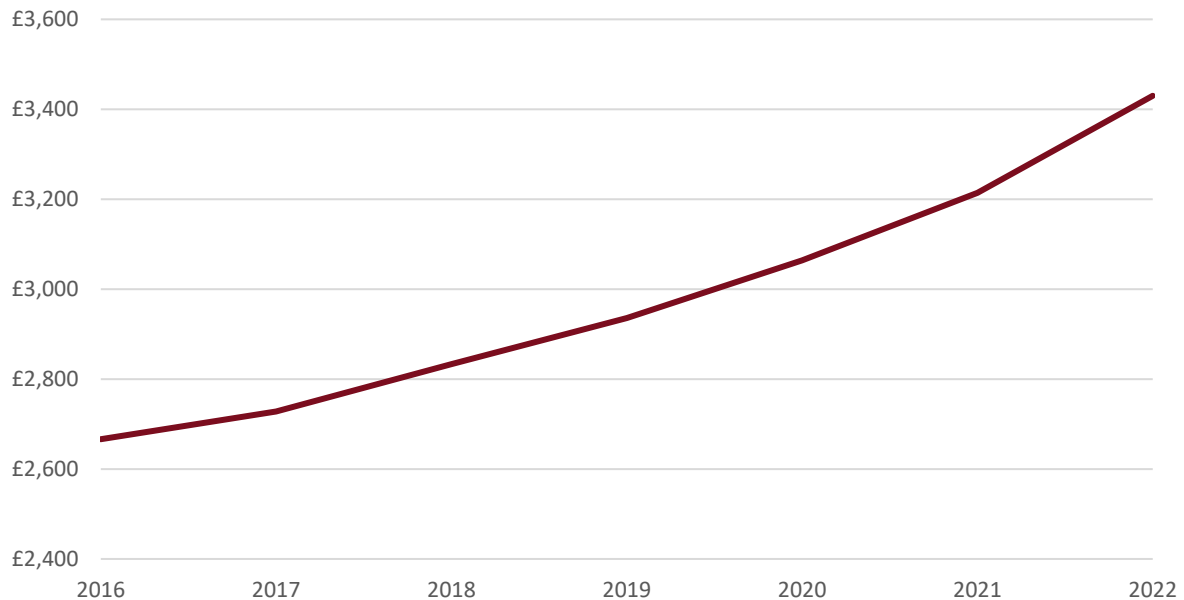
⁹ Only jobs with contracted hours were included. Individuals were asked about employment income over 12 months, which was then averaged to a monthly full-time equivalent value.

December earnings

It is also possible to produce these median earnings values for December.

Figure 4 shows the level of earnings overall for December 2016 to December 2022.

Figure 4 – Level of earnings in December; 2016-2022



Earnings in December are higher than in June of the same year. This is partially attributable to pay rises during the year, but is also due to the effect of bonuses within certain industries. Table 2 shows nominal earnings values for each year from 2016 to 2022 and the annual percentage changes. The change from December 2016 to December 2022 was an increase of 24.5%, similar to the 23.6% increase seen from June 2016 to June 2022.

Table 2 – Median earnings; December 2016 - December 2022

	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022
Overall, £	2,670	2,730	2,830	2,940	3,060	3,210	3,430
Annual percentage change	-	2.2%	3.7%	3.9%	4.1%	4.9%	6.9%

Earnings by Sector

Using the Standard Industrial Classification 2007 (SIC 2007) the median earnings of an employee, on an FTE basis, can be calculated by the sector of employment¹⁰.

The public sector consists of all Government of Jersey employees, including teachers and nurses. Some other organisations such as employees of the Jersey's 12 parishes are also in the public sector. The education, health and other services sector includes teachers and healthcare employees who work in the private sector but does not include any public sector jobs.

Figure 5 shows the median earnings for each sector.

Figure 5 – Median earnings by sector, June 2023



Table 3 shows the median earnings for each sector overall for June 2022 and June 2023 with the annual percentage change.

Table 3 – Median earnings by sector, June 2022 - June 2023

	June 2022	June 2023	Annual % change
Agriculture and fishing	2,690	3,340	24%
Construction and quarrying	3,240	3,560	10%
Education, health and other services	2,600	2,860	10%
Financial and legal activities	4,580	4,910	7%
Hotels, restaurants and bars	2,240	2,400	7%
Information and communication	3,950	4,200	6%
Manufacturing	2,700	3,060	13%
Miscellaneous business activities	2,920	3,210	10%
Public sector	3,870	4,120	6%
Transport and waste	3,200	3,490	9%
Utilities and waste	3,420	3,940	15%
Wholesale and retail	2,310	2,460	6%
All sectors	3,200	3,480	8.8%

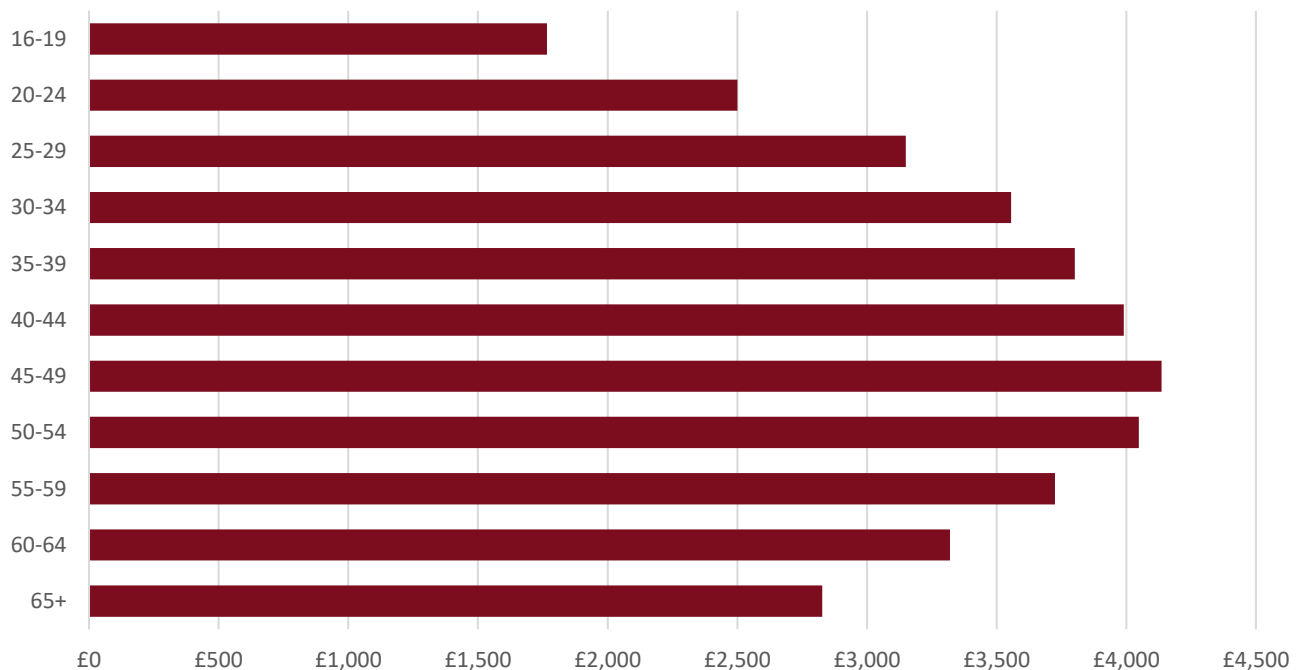
¹⁰ Note that this is the sector of their employer, which may differ from the sector of the individual's occupation.

The AEI uses SIC 2003 instead of SIC 2007 so the sectoral annual percentage changes are not directly comparable, however broadly similar patterns are seen across both methodologies. The largest increase in earnings being in the agriculture and fishing sector for both methodologies. With lower increases in earnings for the wholesale and retail sector for both methodologies.

Earnings by age

The median level of earnings can also be analysed by the age of the employee. Figure 6 shows the median level of earnings by age bracket.

Figure 6 – Median earnings by age, June 2023



The lowest median earnings are seen in the 16-19 age group. However, it should be noted that the majority of individuals in this age group will still be in full-time education. As such it does not follow the same trends as other age groups, with most individuals undertaking lower paid part-time work alongside full-time education. Median earnings then increase until reaching the highest level at the 45-49 age group (£4,140 overall). Median earnings then steadily decrease with age.

Table 4 shows the median earnings for each age group overall.

Table 4 – Median earnings by age group, June 2023

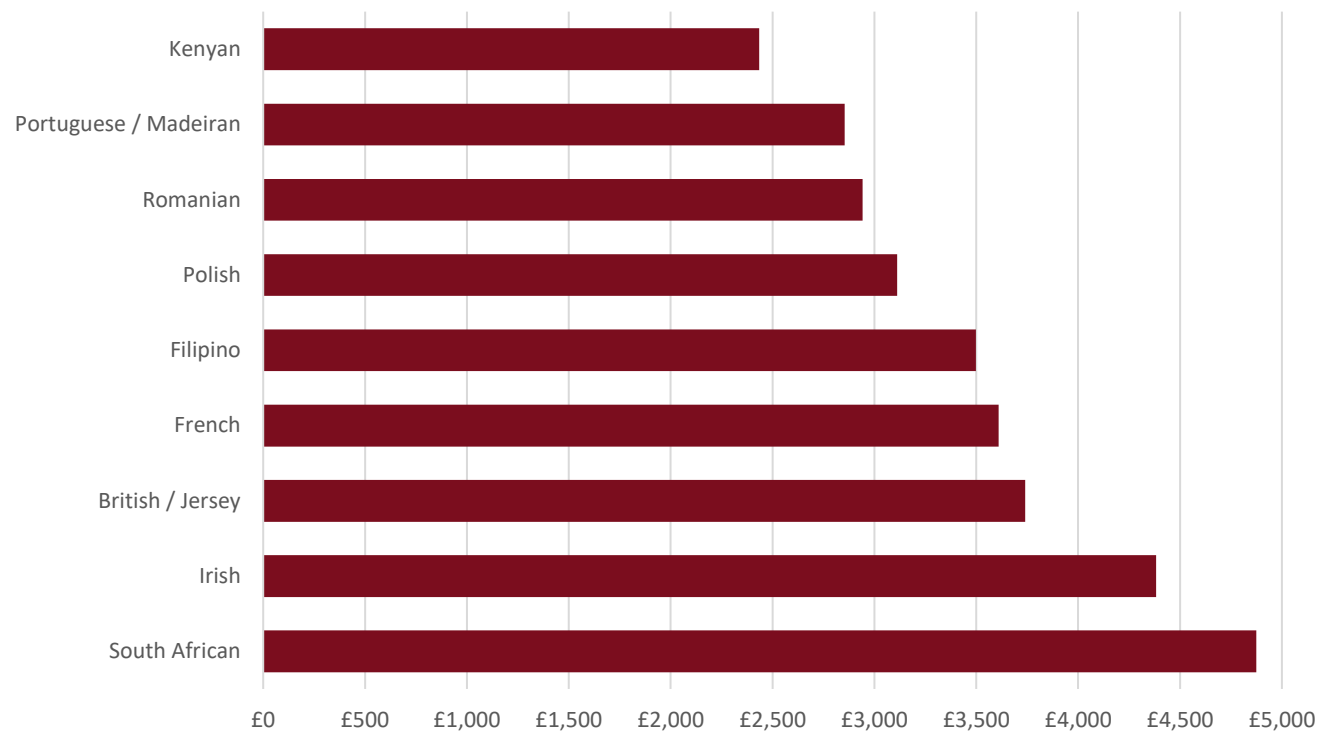
Age group	Overall, £
16-19	1,770
20-24	2,500
25-29	3,150
30-34	3,560
35-39	3,800
40-44	3,990
45-49	4,140
50-54	4,050
55-59	3,720
60-64	3,320
65+	2,830

Earnings by nationality

Using self-reported nationality from administrative data, it is possible to calculate median earnings by the nationality¹¹ of the employee. To ensure estimates are robust, results are presented only for nationalities with more than 100 males and 100 females. Those nationalities are British / Jersey, French, Irish, Polish, Portuguese / Madeiran, Romanian, Filipino, Kenyan, and South African.

Figure 7 shows the median earnings for each nationality overall.

Figure 7 – Median earnings by nationality; June 2023



When analysing by nationality the highest median earnings were seen for South African employees (£4,880), while the lowest median earnings were seen for Kenyan employees (£2,440). It is worth noting that a high proportion of South African employees (63%) worked in the highest paying sector, finance and legal activities. Additionally, a high proportion of Kenyan employees (73%) worked in the lowest paying sector, hotels, restaurants and bars.

¹¹ Self-declared to Customer and Local Services.

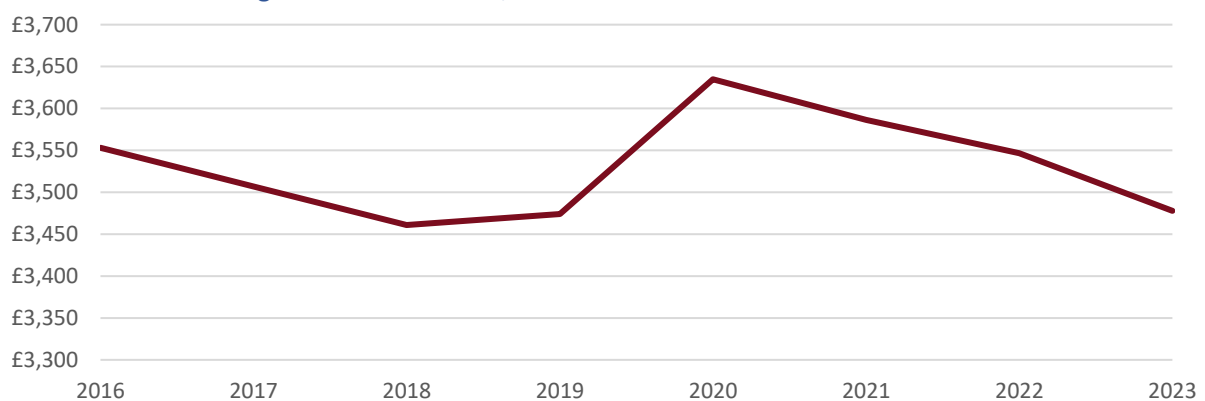
Real-term earnings

Nominal earnings discussed earlier in this report can be adjusted using the Retail Prices Index (RPI) to provide real-term values, which are presented in this report for the first time. Figure 8 and Table 6 demonstrate how earnings have changed in real terms between 2016 and 2023. All values are in June 2023 constant prices.

Overall, between June 2016 and June 2023, earnings have decreased by 2% in real terms, and real median earnings in June 2023 are at a similar level to that seen in 2018 and 2019. The period June 2016 to June 2019 saw a 2% decrease in real terms, then an increase of 5% was seen in real-term median earnings from June 2019 to June 2020. In 2020 there was a decrease in total jobs due to COVID-19, particularly lower paid jobs worked by female employees. Additionally, 2020 saw low levels of inflation, with RPI between 0.5% and 2.7%. This was followed by a 4% real-term decrease in median earnings from June 2020 to June 2023.

Figure 8 shows the level of earnings in real terms overall for June 2016 to June 2023.

Figure 8 – Level of earnings in real terms June; 2016-2023



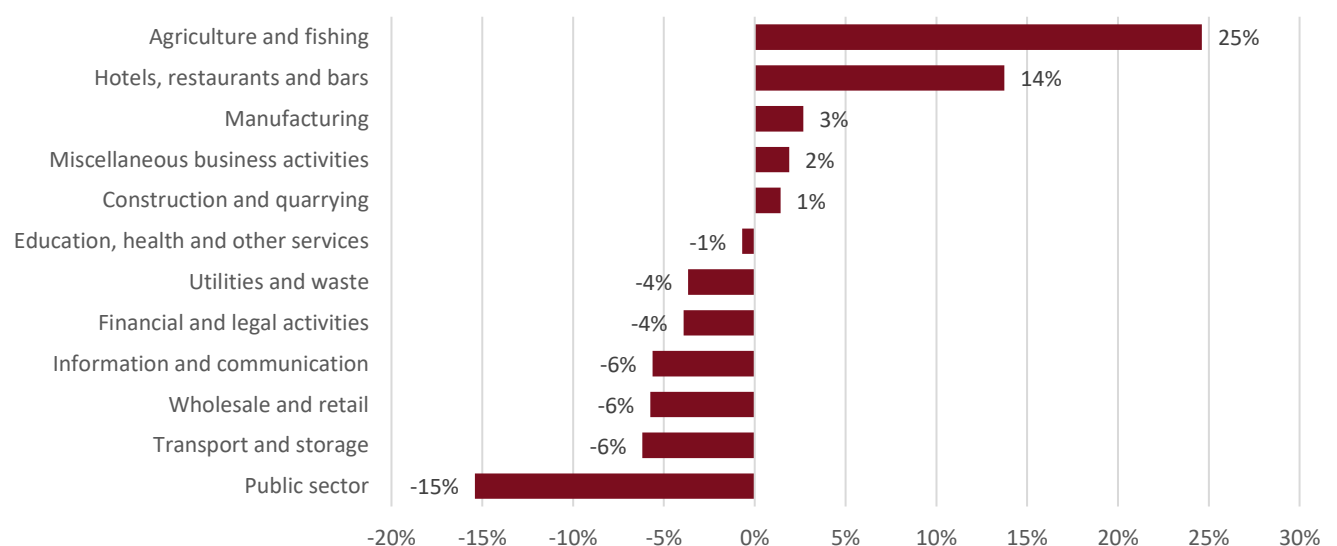
These earnings values together with the annual percentage change are shown in Table 5 below.

Table 5 – Real terms median earnings and annual percentage changes; June 2016 - June 2023

	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023
Overall, £	3,550	3,510	3,460	3,470	3,630	3,590	3,550	3,480
Annual percentage change	-	-1.1%	-1.4%	0.3%	4.6%	-1.1%	-1.1%	-2.0%

These real-term earnings values can also be examined by employment sector. Figure 9 shows the real-term change from June 2016 to June 2023 for each sector.

Figure 9 – Real-term change in median earnings by sector, June 2016 - June 2023



While overall there has been a decrease in real-term earnings, some sectors have seen increases in real terms earnings. The largest increase was seen in the agriculture and fishing sector, which saw a 25% real-term increase between June 2016 and June 2023. It should be noted that this sector has a high proportion of employees on the minimum wage, which has increased 10% in real terms over the same period. The largest decrease seen was in the public sector, which saw a 15% real-term decrease from June 2016 to June 2023.

Table 6 shows the median earnings for each sector in real-term 2023 constant prices overall and the real-term percentage change from June 2016 to June 2023.

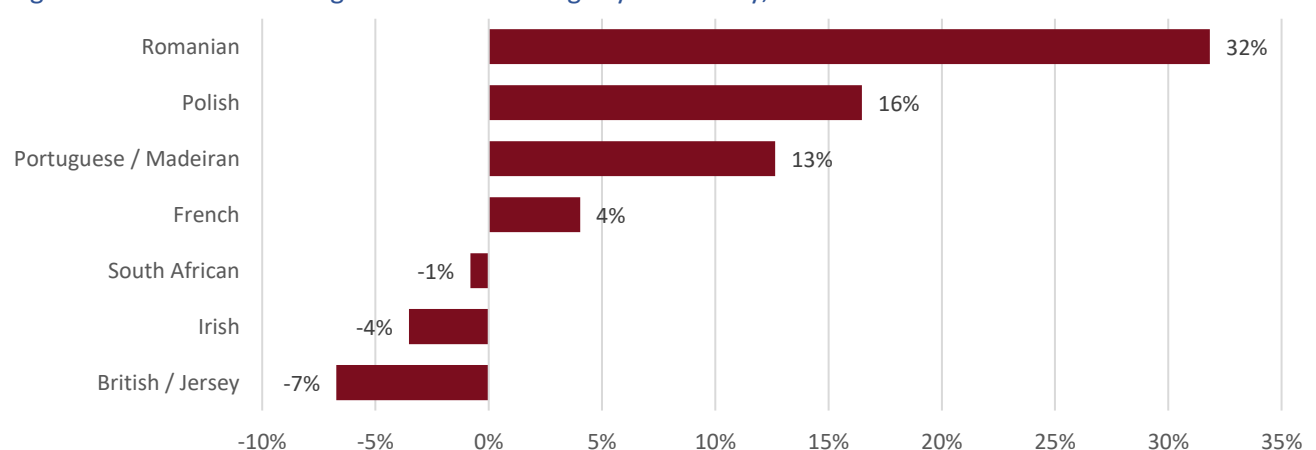
Table 6 – Real-term median earnings by sector, June 2016 - June 2023

	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023	2016-2023 change
Agriculture and fishing	2,680	2,830	3,080	2,810	3,080	2,850	2,980	3,340	25%
Construction and quarrying	3,510	3,570	3,500	3,450	3,490	3,560	3,590	3,560	1%
Education, health and other services	2,880	2,830	2,740	2,910	2,990	2,950	2,880	2,860	-1%
Financial and legal activities	5,110	5,030	4,940	5,020	5,160	5,080	5,080	4,910	-4%
Hotels, restaurants and bars	2,110	2,150	2,160	2,240	2,080	2,310	2,490	2,400	14%
Information and communication	4,450	4,510	4,460	4,280	4,460	4,510	4,380	4,200	-6%
Manufacturing	2,980	3,070	2,970	2,990	2,910	3,120	2,990	3,060	3%
Miscellaneous business activities	3,150	3,230	3,140	3,120	3,220	3,290	3,230	3,210	2%
Public sector	4,870	4,600	4,490	4,540	4,840	4,500	4,290	4,120	-15%
Transport and waste	3,720	3,830	3,550	3,520	3,390	3,570	3,550	3,490	-6%
Utilities and waste	4,090	4,180	4,160	3,980	4,010	4,060	3,800	3,940	-4%
Wholesale and retail	2,610	2,480	2,630	2,530	2,500	2,490	2,570	2,460	-6%
All sectors	3,550	3,510	3,460	3,470	3,630	3,590	3,550	3,480	-2%

Additionally, we can look at real-term earnings by some of the self-declared nationalities presented above¹². The largest real-term increase seen was for Romanians, who saw a 32% real-term increase between June 2016 and June 2023. The largest decrease seen was for British / Jersey employees, who saw a 7% real-term decrease between June 2016 and June 2023. The three nationalities with the largest real-term increases in earnings had a higher proportion (45%) of employees in the three sectors with the lowest median earnings compared with the other nationalities (25%).

Figure 10 shows the real-term change from June 2016 to June 2023 for each nationality.

Figure 10 – Real-term change in median earnings by nationality, June 2016 - June 2023



¹² Some nationalities presented above for June 2023 have fewer than 100 males or 100 females at some point between June 2016 and June 2022, so a real-term series cannot be produced for them.

Table 7 shows the median earnings for each nationality in real-term 2023 constant prices overall and the real-term percentage change from June 2016 to June 2023.

Table 7 – Real-term median earnings by nationality, June 2016 - June 2023

	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023	2016-2023 change
British / Jersey	4,010	3,920	3,840	3,850	4,030	3,900	3,820	3,740	-7%
Irish	4,540	4,560	4,410	4,560	4,810	4,610	4,590	4,380	-4%
South African	4,920	5,080	5,340	5,440	5,800	5,490	5,340	4,880	-1%
French	3,470	3,390	3,420	3,410	3,710	3,630	3,570	3,610	4%
Portuguese / Madeiran	2,530	2,530	2,570	2,650	2,730	2,800	2,890	2,850	13%
Polish	2,670	2,730	2,830	2,820	2,940	3,000	3,140	3,110	16%
Romanian	2,230	2,340	2,480	2,540	2,650	2,730	2,930	2,940	32%
All sectors	3,550	3,510	3,460	3,470	3,630	3,590	3,550	3,480	-2%

Approximate cohort analysis

Looking at the change in earnings over a 5-year period (2018-2023) allows the change in earnings as people age to be observed. While the same jobs will not be being worked, the majority of the people working will be the same when looking at the 5-year change between a five-year age group in 2018 and the next age group in 2023, e.g. 20-24 in 2018 will be 25-29 in 2023.

The Retail Prices Index (RPI) increased by 27.9% from June 2018 to June 2023. Using this we can deflate current earnings values to June 2018, to see the real-term change for a cohort from June 2018 to June 2023.

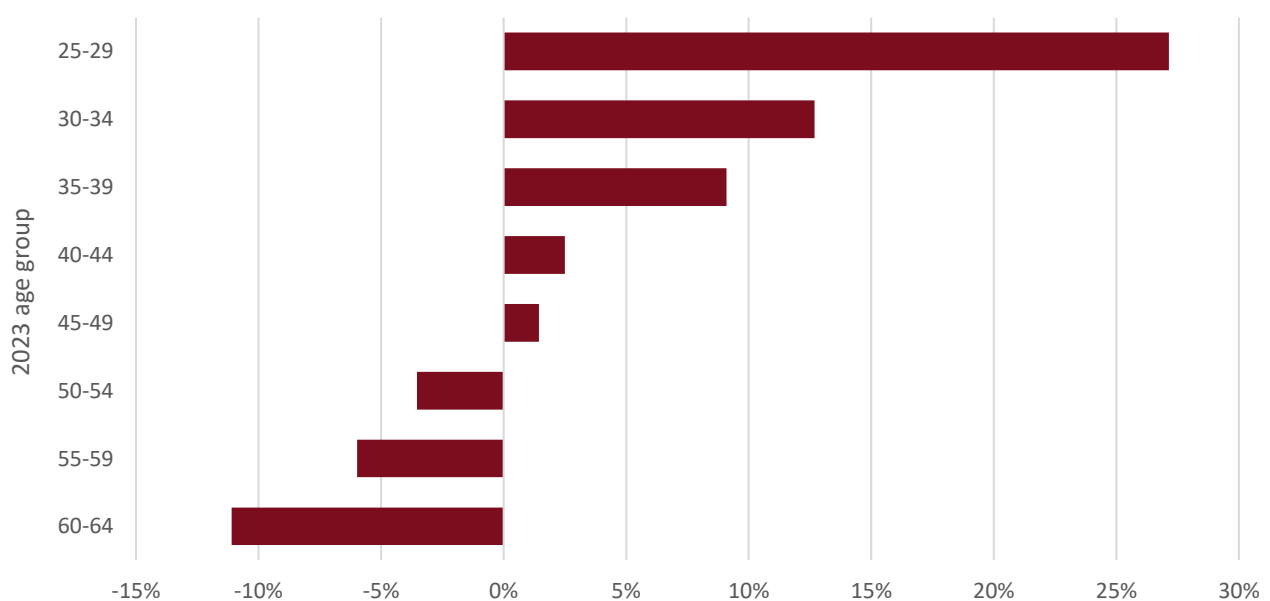
Table 8 shows the median earnings for each age group in 2018 and 2023, and the real-term change that a cohort has seen from 2018 to 2023. The real-term changes are illustrated in Figure 11.

Table 8 – Median earnings by age group, overall; June 2018 and June 2023

2018 age group ¹³	2018 Overall, £	2023 age group	2023 Overall, £	Real-term change, £	Real-term change, %
20-24	1,940	25-29	3,150	530	27%
25-29	2,470	30-34	3,560	310	13%
30-34	2,730	35-39	3,800	250	9%
35-39	3,040	40-44	3,990	80	2%
40-44	3,190	45-49	4,140	50	1%
45-49	3,280	50-54	4,050	-120	-4%
50-54	3,100	55-59	3,720	-180	-6%
55-59	2,920	60-64	3,320	-320	-11%

The cohort now aged 25-29 has seen the largest real-term increase in earnings over the 5 year period, with median earnings increasing by £530 from June 2018 to June 2023. The real-term change in earnings becomes progressively smaller for each age group, becoming negative for the cohort now aged 50-54, and progressively more negative for each age group until it reaches -£320 for the cohort now aged 60-64.

Figure 11 – Real-term change in median earnings by age cohort, June 2018 - June 2023



¹³ The 16-19 age group are excluded as it is only a 4-year age group, not 5-year. 15-year-olds are not required to pay Social Security contributions so are rarely present in the data, causing this age group to be smaller than the others.

Gender pay gap

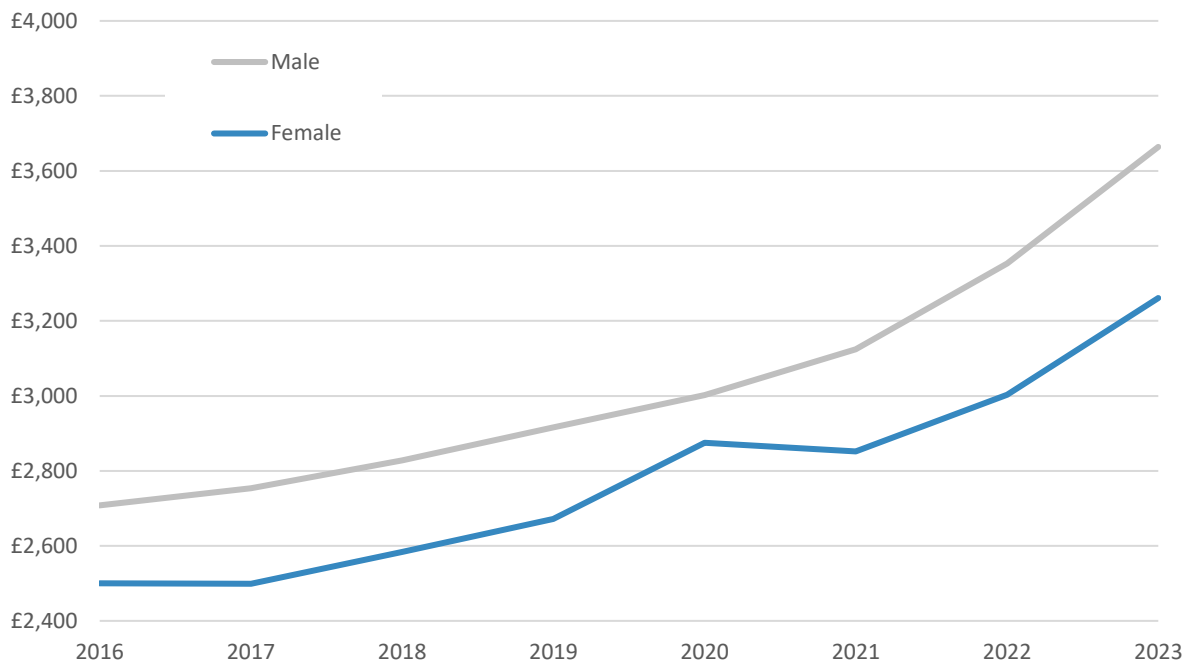
Overall gender pay gap

Gender pay gap measures look at the difference in earnings between males and females. These are calculated as a percentage difference between male and female earnings. A percentage larger than zero means that males are paid more than females on average. A percentage less than zero means that females are paid more than males on average.

The field used is the “sex” field contained in the data provided by Customer and Local Services. Using this field, gender pay gap measures from the **median** earnings can be presented, overall and for breakdowns included in the earnings section of this report.

Figure 12 shows the level of earnings by sex for June, 2016 to 2023. These amounts are nominal, that is, the amount received by individuals at the time. [Real-term earnings by sex](#) (adjusted for inflation) are described later in this report.

Figure 12 – Level of earnings by sex in June; 2016-2023



From these overall earnings values for males and females the overall gender pay gap for the Island can be calculated for each year – see Table 9.

Table 9 – Gender pay gap; June 2016 - June 2023

	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023
Overall, £	2,590	2,630	2,710	2,790	2,940	3,000	3,200	3,480
Males, £	2,710	2,750	2,830	2,920	3,000	3,120	3,350	3,660
Females, £	2,500	2,500	2,580	2,670	2,880	2,850	3,000	3,260
Gender pay gap	8%	10%	9%	9%	4%	10%	12%	12%

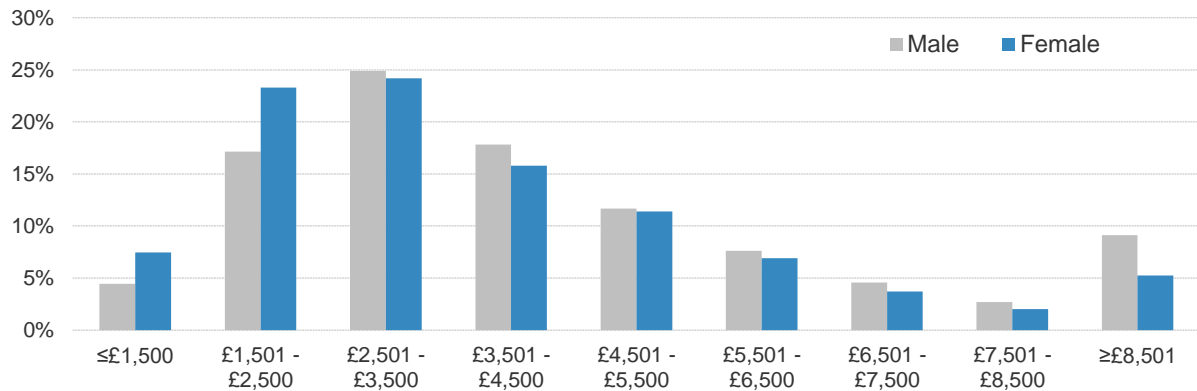
While June 2020 saw the lowest gender pay gap, this month was highly affected by the COVID-19 pandemic and related measures introduced by Government. This is explained in the previous report¹⁴. The effects of the pandemic on [real-term earnings by sex](#) are discussed later this report.

¹⁴ Page 11: [Median earnings June 2022 experimental statistics report](#)

The overall gender pay gap for the Island in June 2023 was 12%, the same as in June 2022. The pay gap in June 2023 was the joint-highest value seen from 2016 to date.

Figure 13 shows the overall distribution of earnings for males and females.

Figure 13 – Distribution of earnings for males and females; June 2023



December gender pay gap

It is also possible to calculate gender pay gap values for December.

Figure 14 and Table 10 show the level of earnings by sex for December; 2016 to 2022.

Figure 14 – Level of earnings by sex in December; 2016-2022

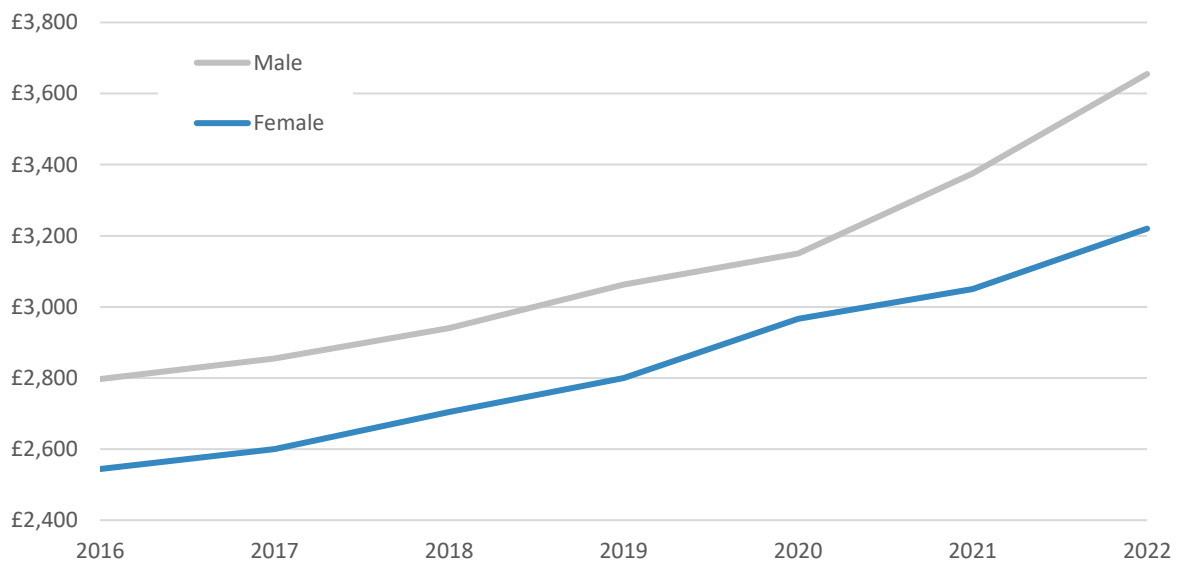


Table 10 – Gender pay gap; December 2016 - December 2022

	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022
Overall, £	2,670	2,730	2,830	2,940	3,060	3,210	3,430
Males, £	2,800	2,860	2,940	3,060	3,150	3,380	3,660
Females, £	2,540	2,600	2,700	2,800	2,970	3,050	3,220
Gender pay gap	10%	10%	9%	9%	6%	11%	14%

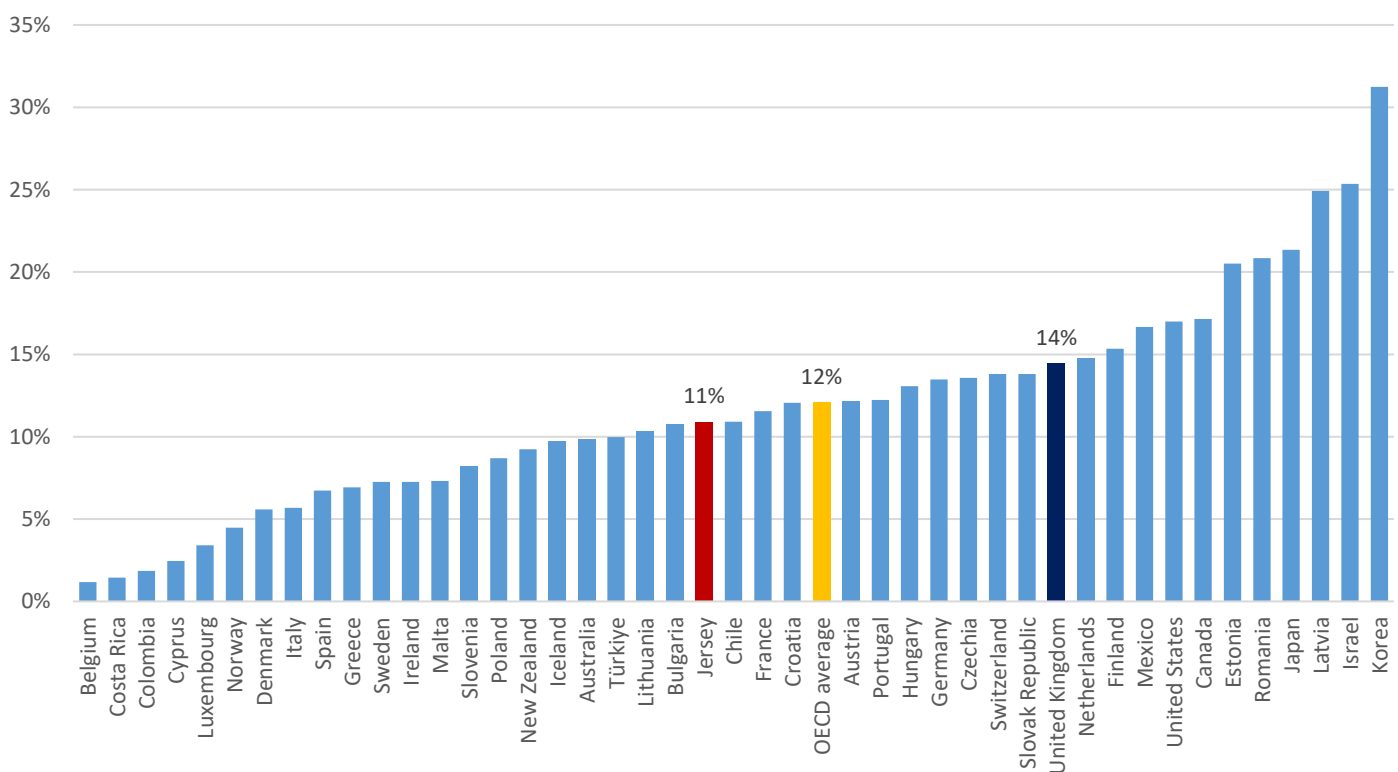
The overall gender pay gap for the Island in December 2022 was 14%; this was the highest value seen from 2016 to date.

International comparison of the gender pay gap¹⁵

The Organisation for Economic Co-operation and Development (OECD) compares the gender pay gap of full-time employees (based on median earnings) between member countries. Member countries measure over different time periods and have different methods of collection, however when excluding part-time employees this methodology is broadly comparable with Jersey. Note that the statistics presented in this section were calculated using the OECD methodology, which only uses full-time jobs, so they are not comparable with any of the statistics presented elsewhere in this report, which use both full-time and part-time jobs.

The gender pay gap for **full-time** dependently employed individuals was 11% in 2022 for Jersey using the new methodology¹⁶. Jersey’s gender pay gap of 11% in 2022 ranked the Island 22nd out of 44 OECD countries and partner countries, when ranking from smallest pay gap to largest. On the same basis this is an increase of 3 percentage points from 2021 for Jersey¹⁶ and a decrease of 6 places, from 16th smallest gender pay gap to 22nd smallest. Figure 15 shows the comparison with OECD countries (2022 or latest available year) and Jersey (2022).

Figure 15 – Gender pay gap for full-time employees; OECD (2022 or latest available year) and Jersey (2022)



¹⁵ OECD data only currently available to 2022 or earlier depending on the country.

¹⁶ This uses a 1-2-1 weighting for December 21 (10%), June 22 (10%), December 22 (13%). This is a change in method from last year, and may change in the future if we can produce more frequent figures.

Gender pay gap by age

The median level of earnings can also be analysed by the age of the employee. This can also be further broken down into median earnings for males and females in each age bracket, allowing a gender pay gap for each age group to be calculated. Figure 16 shows the median level of earnings by age bracket for males and females.

Figure 16 – Median earnings by age and sex; June 2023

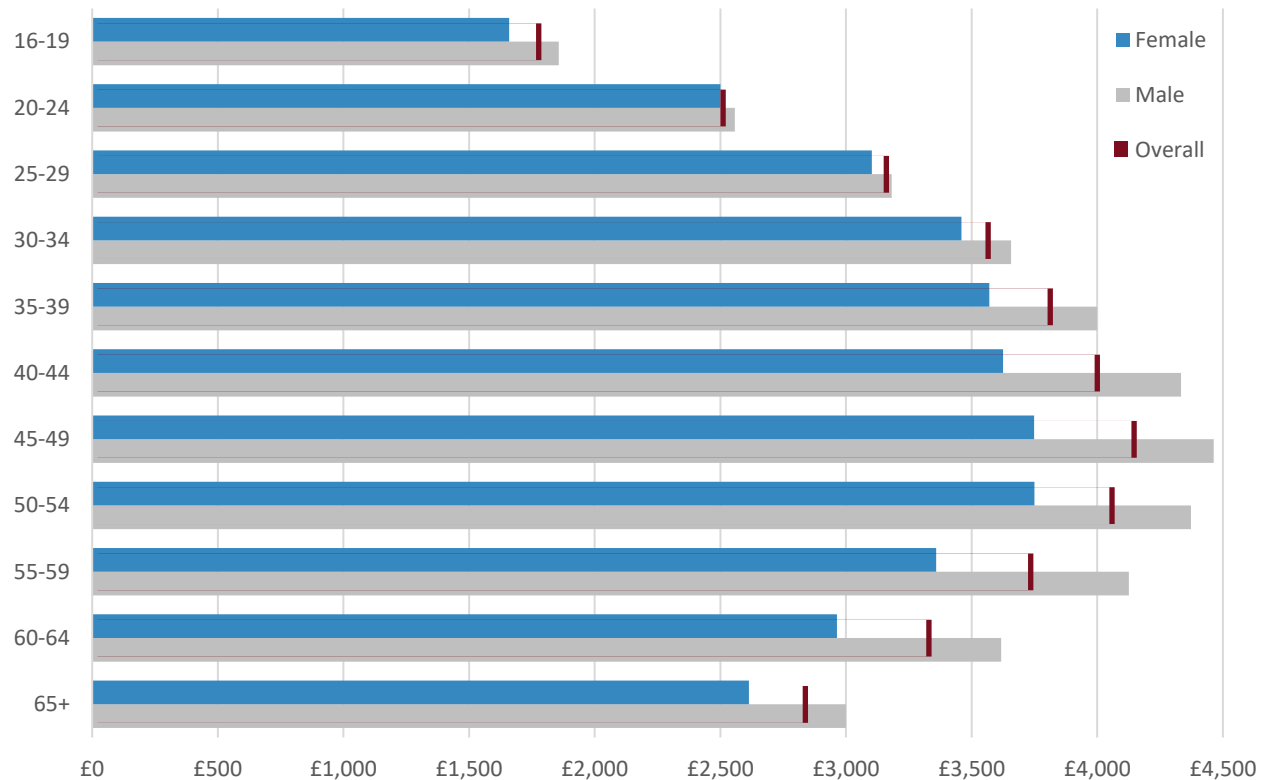


Table 11 shows the median earnings for each age group overall and by sex, as well as the gender pay gap.

Table 11 – Median earnings by age group, overall and by sex, and the gender pay gap; June 2023

	Overall, £	Male, £	Female, £	Gender pay gap
16-19	1,770	1,860	1,660	12%
20-24	2,500	2,560	2,500	2%
25-29	3,150	3,180	3,100	3%
30-34	3,560	3,660	3,460	6%
35-39	3,800	4,000	3,570	12%
40-44	3,990	4,330	3,630	20%
45-49	4,140	4,460	3,750	19%
50-54	4,050	4,370	3,750	17%
55-59	3,720	4,130	3,360	23%
60-64	3,320	3,620	2,960	22%
65+	2,830	3,000	2,610	15%

Median earnings for both males and females were similar for workers aged 20-34 years. However, all age groups aged 40 years old and above saw higher gender pay gaps than the overall average (12%). The 55-59 age group saw the highest gender pay gap at 23%, while the lowest was the 20-24 age group, which saw near pay parity (2%).

Gender pay gap by sector

The sector of employment being worked in¹⁰ is also important to consider when looking at the gender pay gap, as industries see significant differences in their pay levels, overall and for males and females.

Figure 17 shows the median earnings for each sector overall and by sex.

Figure 17 – Median earnings by sector, overall and by sex; June 2023

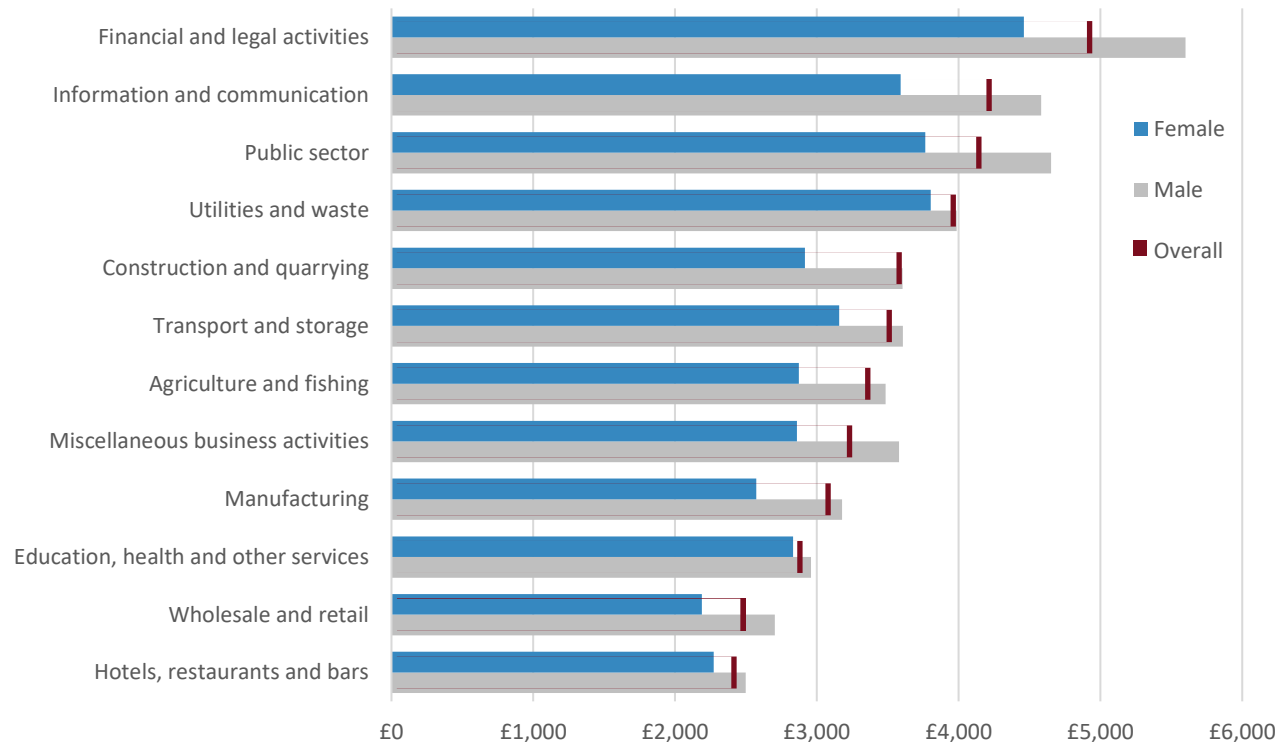


Table 12 shows the median earnings for each sector overall and by sex, as well as the gender pay gap for each sector.

Table 12 – Median earnings by sector, overall and by sex, and the gender pay gap by sector; June 2023

	Overall, £	Male, £	Female, £	Gender pay gap
Agriculture and fishing	3,340	3,490	2,870	21%
Construction and quarrying	3,560	3,600	2,920	24%
Education, health and other services	2,860	2,960	2,830	4%
Financial and legal activities	4,910	5,600	4,460	26%
Hotels, restaurants and bars	2,400	2,500	2,270	10%
Information and communication	4,200	4,580	3,590	28%
Manufacturing	3,060	3,180	2,570	24%
Miscellaneous business activities	3,210	3,580	2,860	25%
Public sector	4,120	4,650	3,770	24%
Transport and waste	3,490	3,610	3,160	14%
Utilities and waste	3,940	3,990	3,800	5%
Wholesale and retail	2,460	2,700	2,190	23%
All sectors	3,480	3,660	3,260	12%

In June 2023 the sector with the highest gender pay gap was the information and communication sector (28%). Conversely the lowest gender pay gap was in the education, health and other services sector, with a difference of 4% between males and females on average.

Effects of labour market composition

Most sectors have gender pay gaps that are greater than the overall gender pay gap. The education, health and other services, hotels, restaurants and bars, and utilities and waste sectors had lower gender pay gaps. It is important to note that the overall median earning values are not created by combining the sectoral level medians. They are calculated from the full dataset, which is impacted by the composition of the labour force. Over half (52%) of female employees work in the three highest paid sectors, while only 38% of male employees work in those sectors. The result is that the overall gender pay gap is lower than the individual sector results might suggest.

From Figure 18 it can be seen that females are more likely than males to work in two of the three highest paying sectors: public sector and financial and legal activities. Therefore, these high earning sectors have more of an impact on the overall median earnings of females than they do for males. The median earnings of females in these sectors are lower than the median earnings of males within these sectors, but they are higher than the median earnings of males in almost all other sectors. This narrows the overall gender pay gap.

Figure 18 – Median earnings and likelihood of females and males working in each sector; June 2023

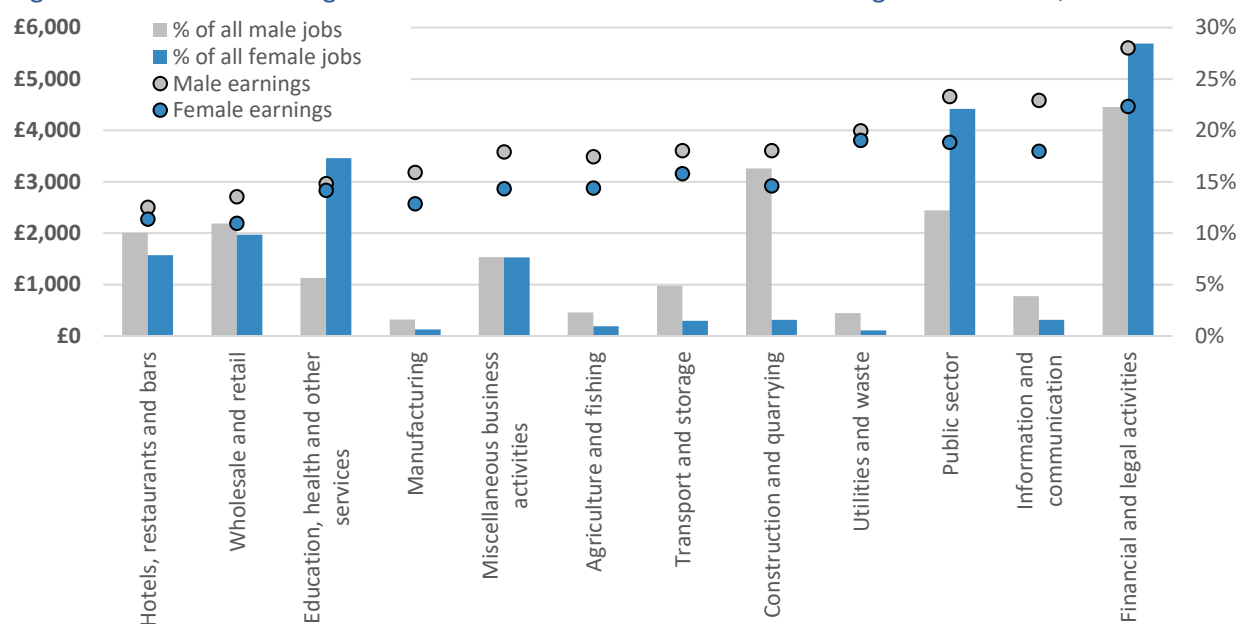


Table 13 shows the employee counts included in the analysis overall and by sex for each sector. See [Appendix B](#) for a comparison with the June 2023 Labour Market employee totals.

Table 13 – Employee counts by sector, overall and by sex; June 2023

	Overall	Male	Female	Proportion male	Proportion female
Agriculture and fishing	840	600	240	71%	29%
Construction and quarrying	4,630	4,230	400	91%	9%
Education, health and other services	5,790	1,460	4,330	25%	75%
Financial and legal activities	12,910	5,780	7,120	45%	55%
Hotels, restaurants and bars	4,580	2,610	1,970	57%	43%
Information and communication	1,400	1,010	390	72%	28%
Manufacturing	570	410	160	72%	28%
Miscellaneous business activities	3,900	1,990	1,920	51%	49%
Public sector	8,700	3,170	5,530	36%	64%
Transport and waste	1,650	1,280	370	78%	22%
Utilities and waste	720	580	140	81%	19%
Wholesale and retail	5,300	2,840	2,470	54%	47%
All sectors	50,980	25,940	25,030	51%	49%

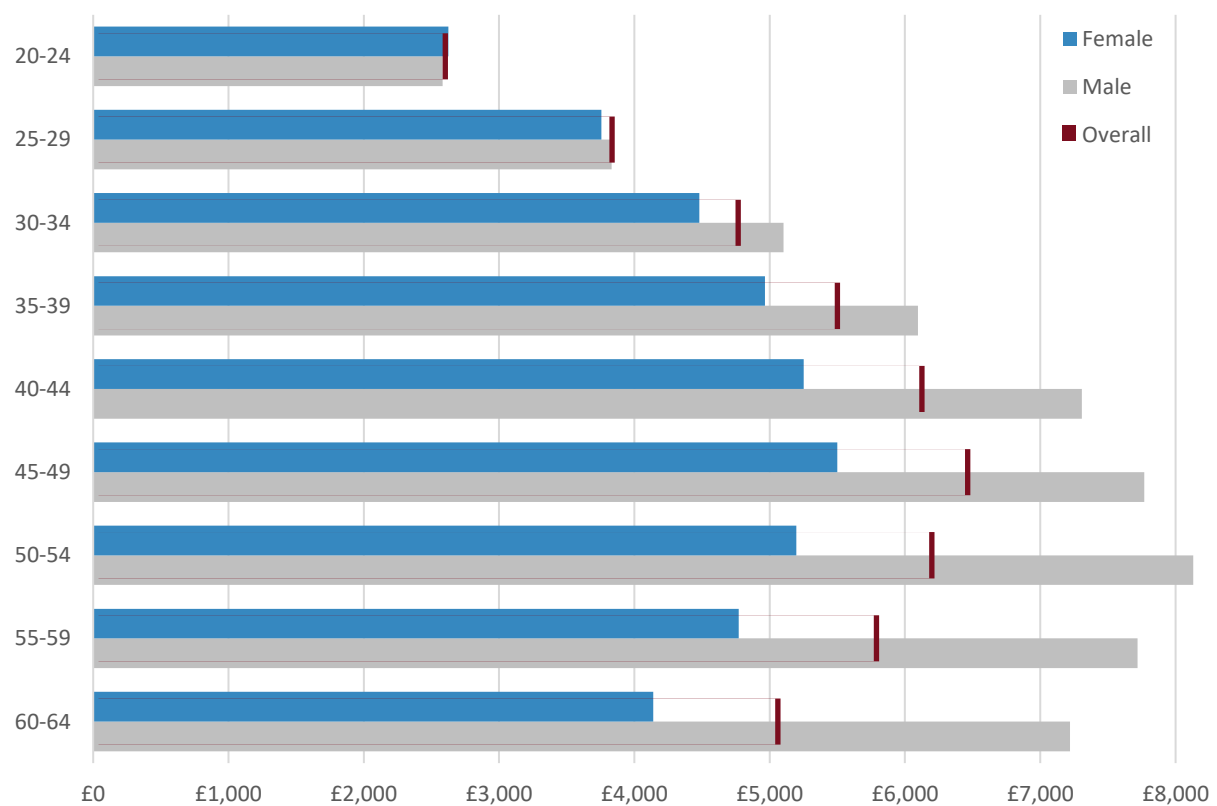
For certain sectors that have large numbers of employees it is possible to look at the median earnings and gender pay gap by age within the sector. This is only possible for 6 of the 12 sectors, although certain age groups cannot be analysed in specific sectors. This is due to either fewer than 100 males or fewer than 100 females being employed in the sector for that age bracket¹⁷.

Financial and legal activities sector

The financial and legal activities sector employs more females (55% of the sector’s employees) than males (45% of the sector’s employees). The sector sees near parity in median earnings for males and females in age groups 20-29. However, the pay gap progressively widens with age, with males earning 74% higher than females on average in the 60-64 age group.

Figure 19 shows the median earnings for each age group overall and by sex, for the financial and legal activities sector.

Figure 19 – Median earnings by age and sex, financial and legal activities sector; June 2023¹⁸



¹⁷ This limit is based off research and subsequent recommendations made by the Royal Statistical Society, suggesting that medians can be unreliable with a lower sample size than this. Recommendation 8:

<https://rss.org.uk/RSS/media/News-and-publications/Publications/Reports%20and%20guides/RSS-s-10-Proposed-Reforms-for-Gender-Pay-Gap-Reporting.pdf>

¹⁸ Some age groups had fewer than 100 males or fewer than 100 females so are excluded.

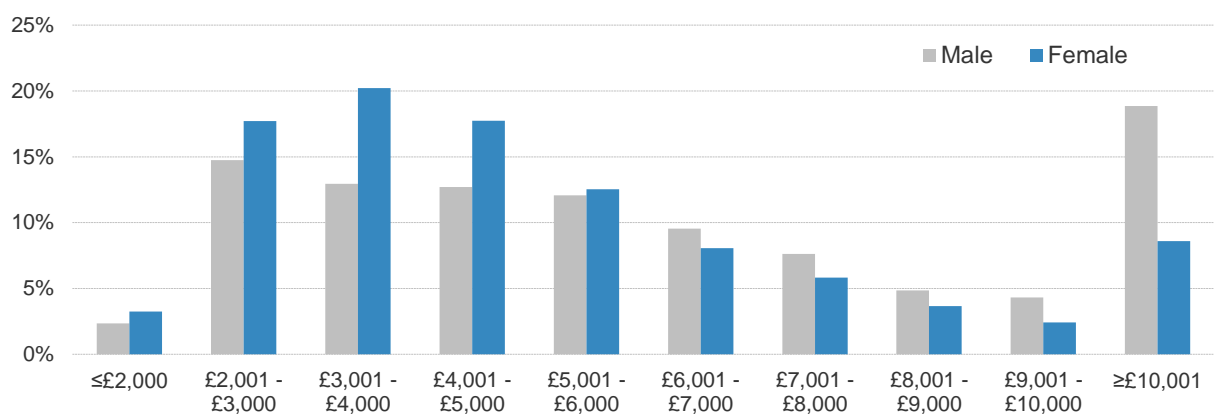
Table 14 shows the median earnings for each age group overall and by sex, as well as the gender pay gap for the financial and legal activities sector.

Table 14 – Median earnings by age group, overall, by sex, and the gender pay gap for the financial and legal activities sector; June 2023¹⁸

	Overall, £	Male, £	Female, £	Gender pay gap
20-24	2,580	2,580	2,630	-2%
25-29	3,820	3,830	3,760	2%
30-34	4,750	5,100	4,480	14%
35-39	5,480	6,100	4,960	23%
40-44	6,110	7,310	5,250	39%
45-49	6,440	7,770	5,500	41%
50-54	6,180	8,130	5,200	56%
55-59	5,770	7,720	4,770	62%
60-64	5,040	7,220	4,140	74%
All	4,910	5,600	4,460	26%

Figure 20 shows the distribution of earnings (on an FTE basis) for males and females in the financial and legal activities sector. It shows that males working in finance were more likely to earn greater than £10,000 a month compared with females; 19% of male employees earned more than £10,000, compared with 9% of female employees.

Figure 20 – Distribution of earnings in the financial and legal activities sector for males and females; June 2023



Public sector

The same data sources and methodology has been used for the public sector as all other sectors for this analysis. However, in some years certain pay groups received backpay in June relating to delayed pay awards while others did not. This led to distorted gender pay figures for the public sector in those years, so adjustments have been made to the incomes of these pay groups to ensure pay is comparable within the public sector.

The public sector employs more females (64% of the sector's employees) than males (36% of the sector's employees). Males were paid more than females in each age group, with the smallest pay gap being 2% for those aged 25-29 years, and the largest pay gaps being 37% for ages 40-44 and 36% for ages 60-64. It should be noted that in June 2023, nurses and teachers had not received their 2023 pay award. As these pay groups have more female employees than males this has driven the increase in the gender pay of 4 percentage points seen between June 2022 and June 2023.

Figure 21 shows the median earnings for each age group overall and by sex, for the public sector.

Figure 21 – Median earnings by age and sex, public sector; June 2023¹⁸

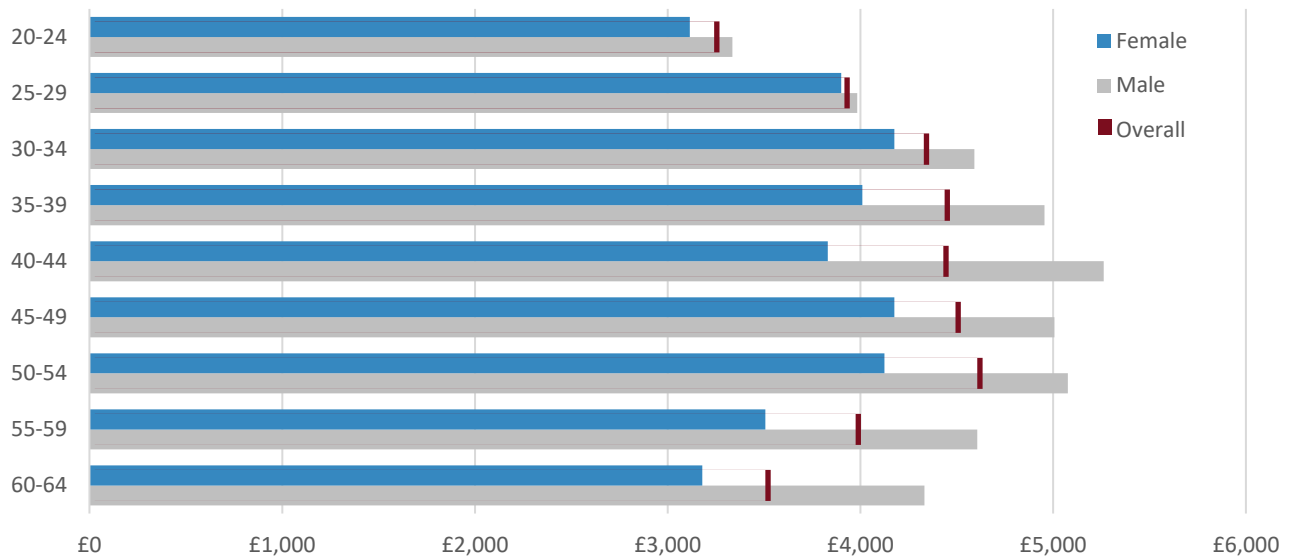


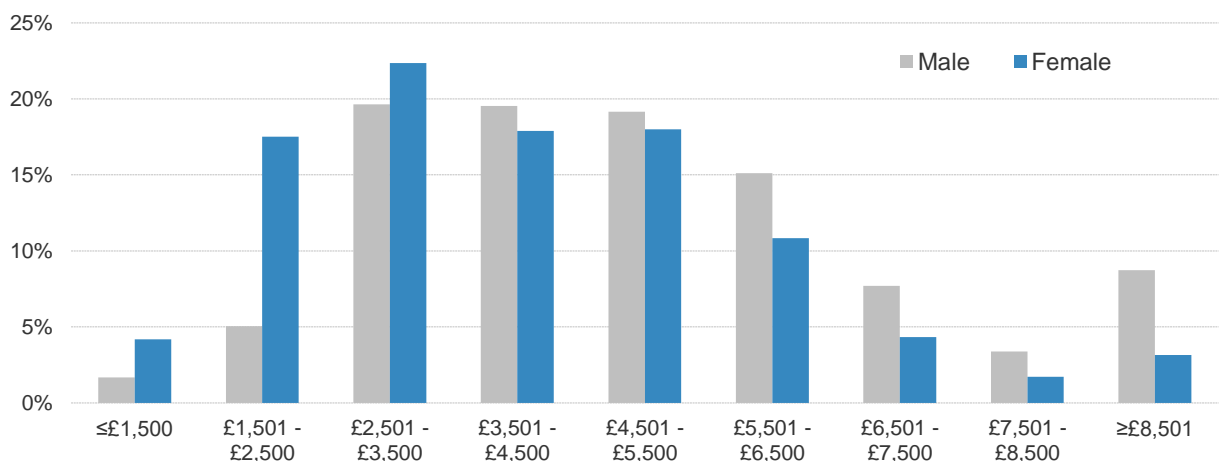
Table 15 shows median earnings for each age group overall and by sex, as well as the gender pay gap for the public sector.

Table 15 – Median earnings by age group, overall, by sex, and the gender pay gap for the public sector; June 2023¹⁸

	Overall, £	Male, £	Female, £	Gender pay gap
20-24	3,240	3,340	3,120	7%
25-29	3,920	3,980	3,900	2%
30-34	4,330	4,590	4,180	10%
35-39	4,440	4,960	4,010	24%
40-44	4,430	5,260	3,830	37%
45-49	4,490	5,010	4,180	20%
50-54	4,610	5,080	4,120	23%
55-59	3,980	4,610	3,510	31%
60-64	3,510	4,330	3,180	36%
All	4,120	4,650	3,770	24%

Figure 22 shows the distribution of earnings (on an FTE basis) for males and females in the public sector. It shows that females working in the public sector are more likely to have earnings in the bottom three earnings brackets, particularly the £1,501 - £2,500 a month bracket, compared with males.

Figure 22 – Distribution of earnings in the public sector for males and females; June 2023



Education, health and other services sector

The education, health and other services sector employs more females (75% of the sector's employees) than males (25% of the sector's employees). The education, health and other services sector includes private sector services usually provided to individuals. Services provided by the public sector are not included in this sector.

In the sector, females earned more than males in the younger age group (25-29). Whilst for the older age groups males earned more than females, with the greatest difference seen for employees aged 60-64 years (18%). In June 2023 the pay gap in this sector was 4%, which was smaller than in any other sector.

Figure 23 shows the median earnings for each age group overall and by sex, for the education, health and other services sector.

Figure 23 – Median earnings by age and sex, education, health and other services sector; June 2023¹⁸

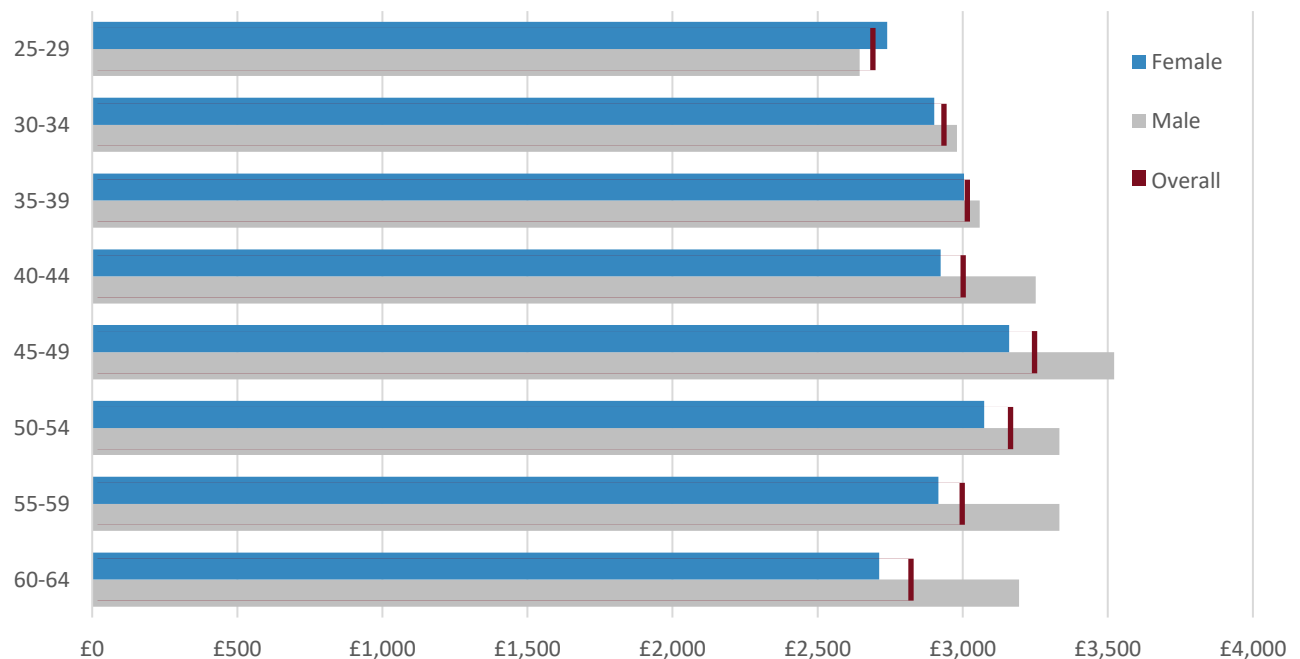


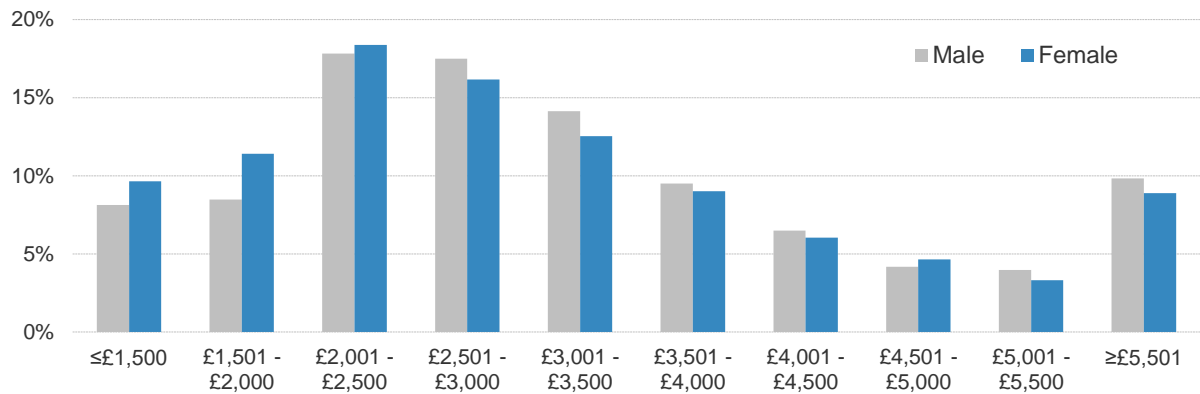
Table 16 shows the median earnings for each age group overall and by sex, as well as the gender pay gap for the education, health and other services sector.

Table 16 – Median earnings by age group, overall, by sex, and the gender pay gap for the education, health and other services sector; June 2023¹⁸

	Overall, £	Male, £	Female, £	Gender pay gap
25-29	2,680	2,640	2,740	-3%
30-34	2,930	2,980	2,900	3%
35-39	3,010	3,060	3,000	2%
40-44	2,990	3,250	2,920	11%
45-49	3,240	3,520	3,160	11%
50-54	3,160	3,330	3,070	8%
55-59	2,990	3,330	2,920	14%
60-64	2,810	3,190	2,710	18%
All	2,860	2,960	2,830	4%

Figure 24 shows the distribution of earnings (on an FTE basis) for males and females in the education, health and other services sector. The distribution was similar for both males and females.

Figure 24 – Distribution of earnings in the education, health and other services sector for males and females; June 2023



Hotels, restaurants and bars sector

The hotels, restaurants and bars sector employs more males (57% of the sector’s employees) than females (43% of the sector’s employees). For all age groups, males earn more than females, with the greatest difference seen for the 16-19 age group (29%).

Figure 25 shows the median earnings for each age group overall and by sex, for the hotels, restaurants and bars sector.

Figure 25 – Median earnings by age and sex, hotels, restaurants and bars; June 2023¹⁸

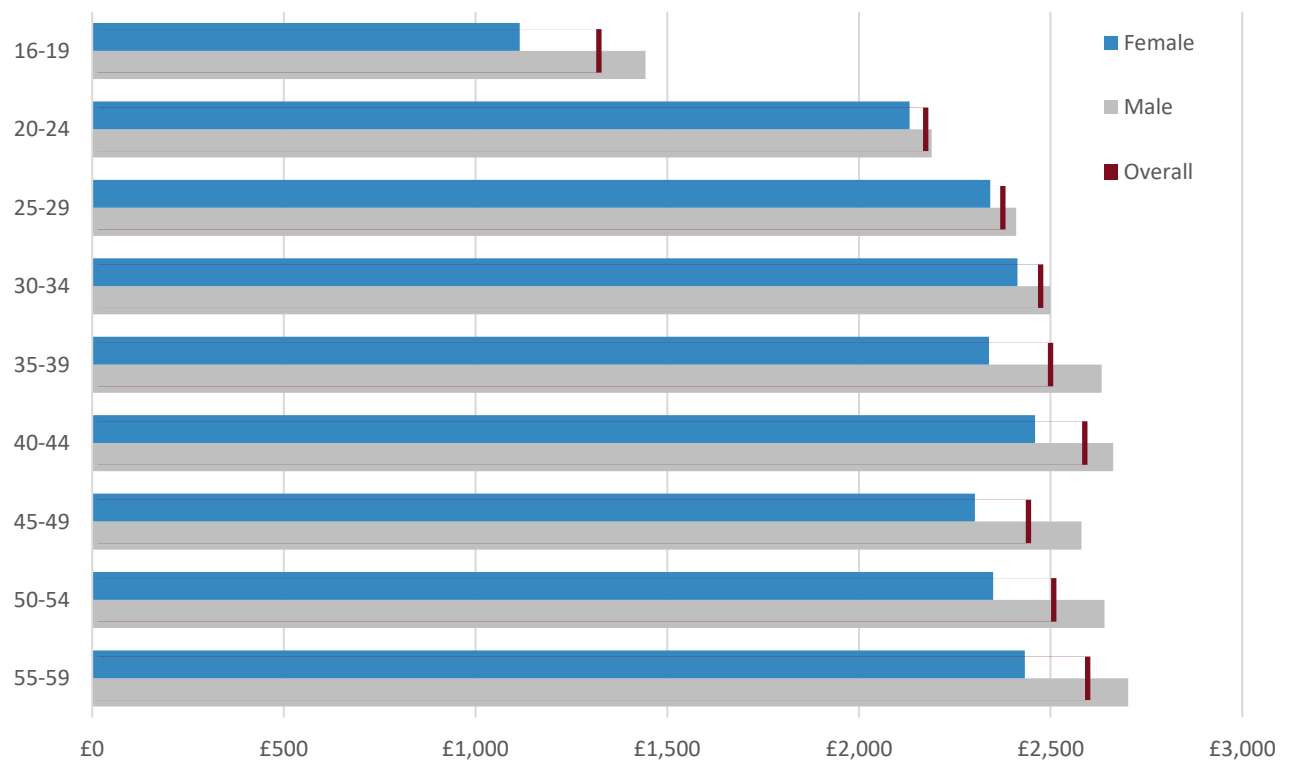


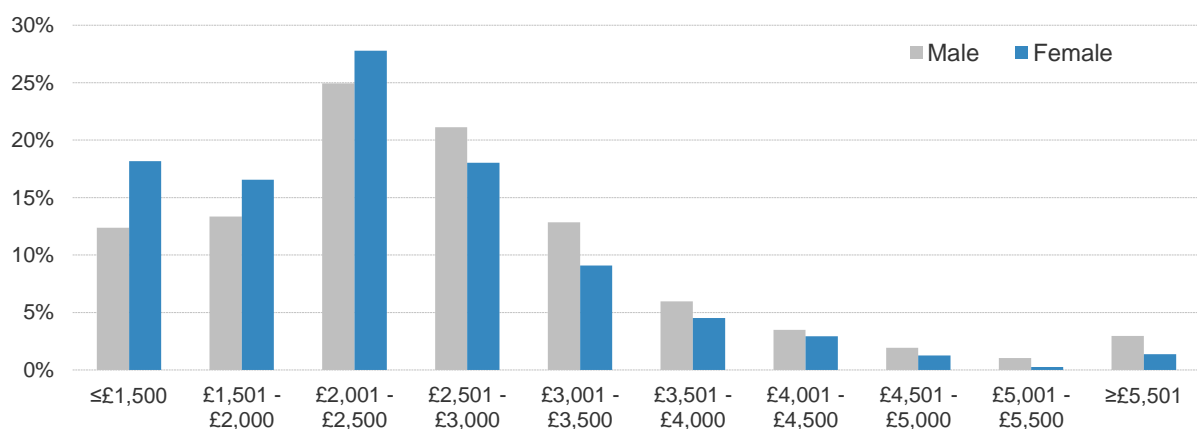
Table 17 shows median earnings for each age group overall and by sex, as well as the gender pay for the hotels, restaurants and bars sector.

Table 17 – Median earnings by age group, overall, by sex, and the gender pay gap for the hotels, restaurants and bars sector; June 2023¹⁸

	Overall, £	Male, £	Female, £	Gender pay gap
16-19	1,320	1,440	1,120	29%
20-24	2,170	2,190	2,130	3%
25-29	2,370	2,410	2,340	3%
30-34	2,470	2,500	2,410	4%
35-39	2,490	2,630	2,340	13%
40-44	2,580	2,660	2,460	18%
45-49	2,440	2,580	2,300	12%
50-54	2,500	2,640	2,350	12%
55-59	2,590	2,700	2,430	11%
All	2,400	2,500	2,270	10%

Figure 26 shows the distribution of earnings (on an FTE basis) for males and females in the hotels, restaurants and bars sector. Females are more likely to earn £2,500 a month or less when compared with males. This was particularly the case in the lowest income brackets, where 35% of females earned £2,000 per month or less, compared to 26% of males. In contrast, for each earnings bracket above £2,500 per month, the proportion of males was higher than the proportion of females.

Figure 26 – Distribution of earnings in the hotels, restaurants and bars sector for males and females; June 2023



Miscellaneous business activities sector

The miscellaneous business activities sector employs a similar number of males (51% of the sector’s employees) and females (49% of the sector’s employees). The miscellaneous business activities sector includes private sector services usually provided to businesses that are not classified elsewhere. These include:

- Real estate activities
- Professional, scientific and technical activities¹⁹
- Administrative and support service activities

Males working in this sector earn more than females in every age group, with the difference increasing with age and peaking for the 45-49 age group (49% gender pay gap).

Figure 27 shows the median earnings for each age group overall and by sex, for the miscellaneous business activities sector.

Figure 27 – Median earnings by age and sex, miscellaneous business activities; June 2023¹⁸

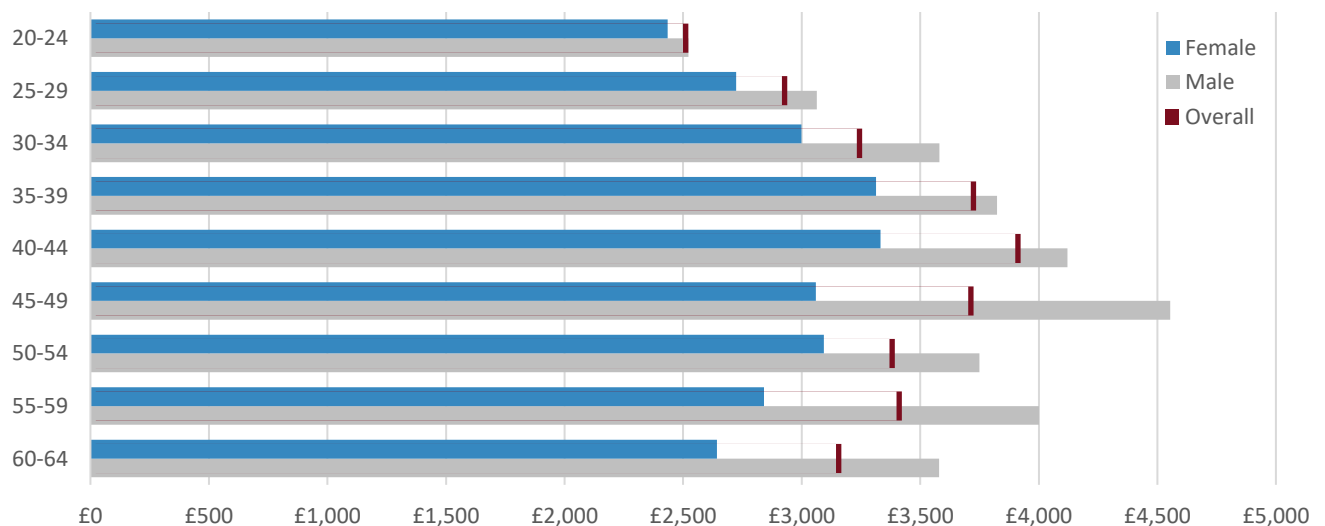


Table 18 shows median earnings for each age group overall and by sex, as well as the gender pay gap for the miscellaneous business activities sector.

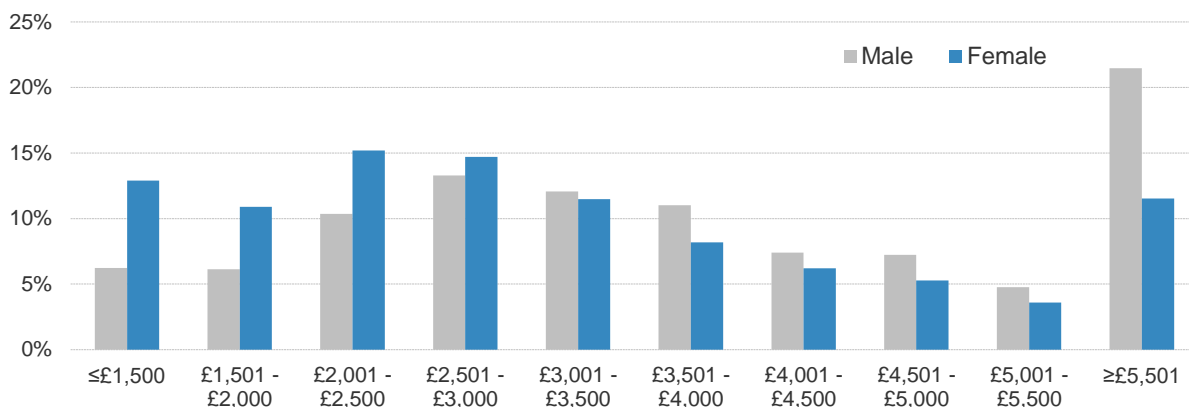
Table 18 – Median earnings by age group, overall, by sex, and the gender pay gap for the miscellaneous business activities sector; June 2023¹⁸

	Overall, £	Male, £	Female, £	Gender pay gap
20-24	2,500	2,520	2,430	4%
25-29	2,920	3,060	2,720	12%
30-34	3,230	3,580	3,000	19%
35-39	3,710	3,820	3,310	15%
40-44	3,900	4,120	3,330	24%
45-49	3,700	4,550	3,060	49%
50-54	3,370	3,750	3,090	21%
55-59	3,400	4,000	2,840	41%
60-64	3,150	3,580	2,640	36%
All	3,210	3,580	2,860	25%

¹⁹ Excluding legal activities and accounting and compliance activities, which are included in the financial and legal activities sector.

Figure 28 shows the distribution of earnings (on an FTE basis) for males and females in the miscellaneous business activities sector. Females were more likely to earn £3,000 per month or less when compared with males. This was particularly the case in the lowest two income brackets: 24% of females earned £2,000 per month or less, compared to 12% of males. In contrast, for each earnings bracket above £3,000 per month, the proportion of males was higher than the proportion of females. In particular, 21% of males earned over £5,500 per month, compared with 12% of females.

Figure 28 – Distribution of earnings in the miscellaneous business activities sector for males and females; June 2023



Wholesale and retail sector

The wholesale and retail sector employs more males (54% of the sector’s employees) than females (47% of the sector’s employees). In the sector, all age groups see males earning more than females, with the difference increasing with age and peaking at the 55-59 age group (36%).

Figure 29 shows the median earnings for each age group overall and by sex, for the wholesale and retail sector.

Figure 29 – Median earnings by age and sex, wholesale and retail; June 2023

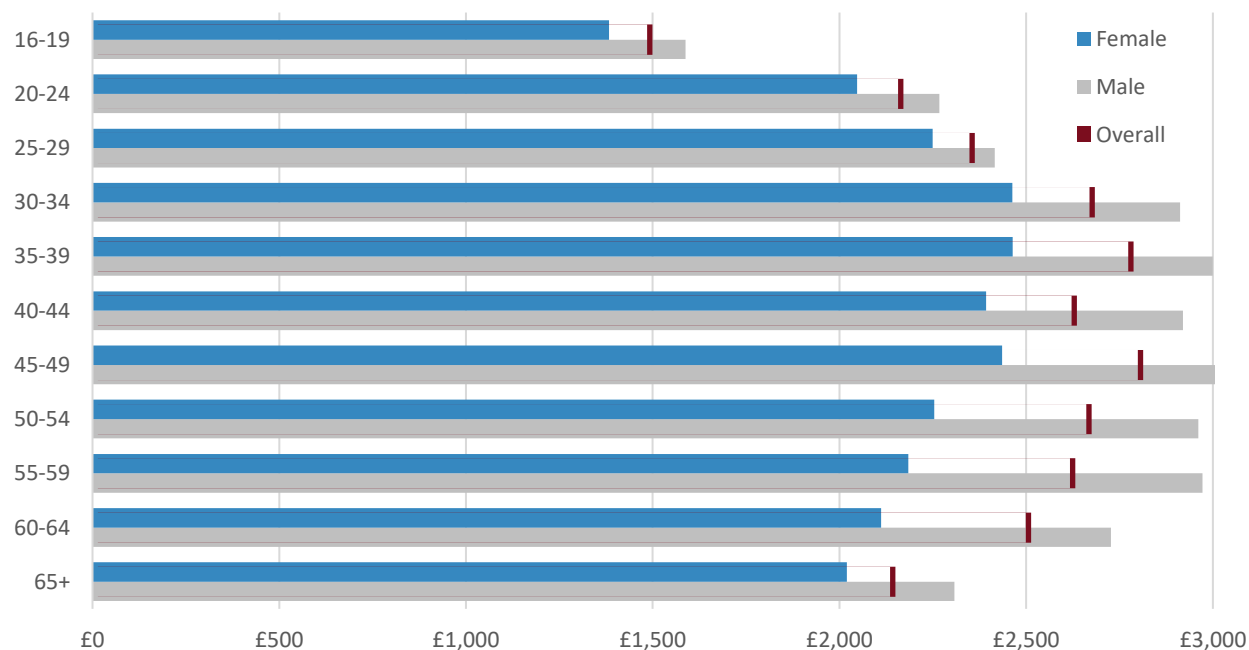


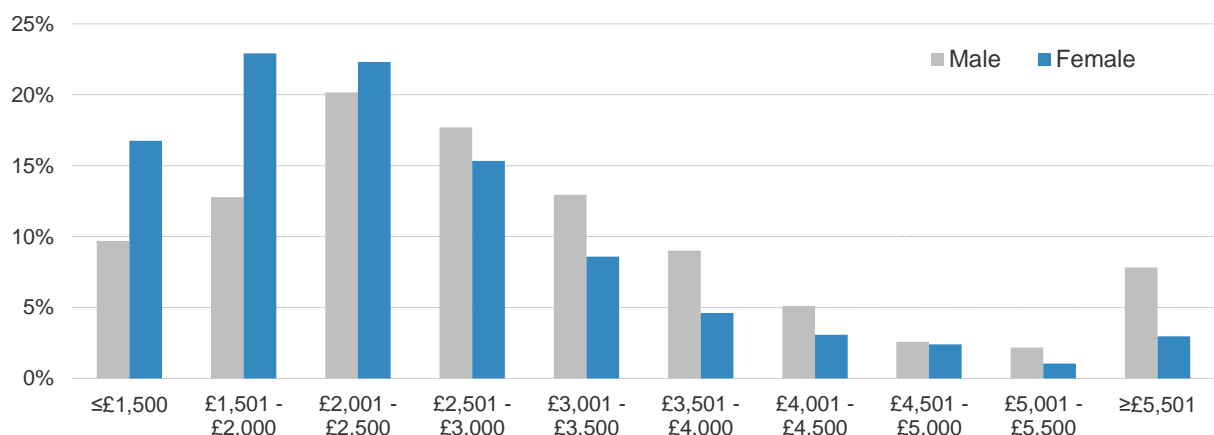
Table 19 shows median earnings for each age group overall and by sex, as well as the gender pay gap for the wholesale and retail sector.

Table 19 – Median earnings by age group, overall, by sex, and the gender pay gap for the wholesale and retail sector; June 2023

	Overall, £	Male, £	Female, £	Gender pay gap
16-19	1,490	1,590	1,380	15%
20-24	2,160	2,270	2,050	11%
25-29	2,350	2,420	2,250	7%
30-34	2,670	2,910	2,460	18%
35-39	2,770	3,000	2,460	22%
40-44	2,620	2,920	2,390	22%
45-49	2,800	3,160	2,440	30%
50-54	2,660	2,960	2,250	31%
55-59	2,620	2,970	2,180	36%
60-64	2,500	2,730	2,110	29%
65+	2,140	2,310	2,020	14%
All	2,460	2,700	2,190	23%

Figure 30 shows the distribution of earnings (on an FTE basis) for males and females in the wholesale and retail sector. Females were more likely to earn £2,500 per month or less when compared with males. This was particularly the case in the lowest two income brackets: 40% of females earned £2,000 per month or less, compared to 22% of males. In contrast, for each earnings bracket above £2,500 per month, the proportion of males was higher than the proportion of females. In particular, 8% of males earned over £5,500 per month, compared with 3% of females.

Figure 30 – Distribution of earnings in the wholesale and retail sector for males and females; June 2023



Earnings and gender pay gap by nationality

Using self-reported nationality from administrative data, it is possible to calculate median earnings by the nationality²⁰ of the employee. To ensure estimates are robust, results are presented for nationalities with more than 100 males and 100 females. Those nationalities are British / Jersey, French, Irish, Polish, Portuguese / Madeiran, Romanian, Filipino, Kenyan, and South African.

Figure 31 shows the median earnings for each nationality overall and by sex.

Figure 31 – Median earnings by nationality, overall and by sex; June 2023

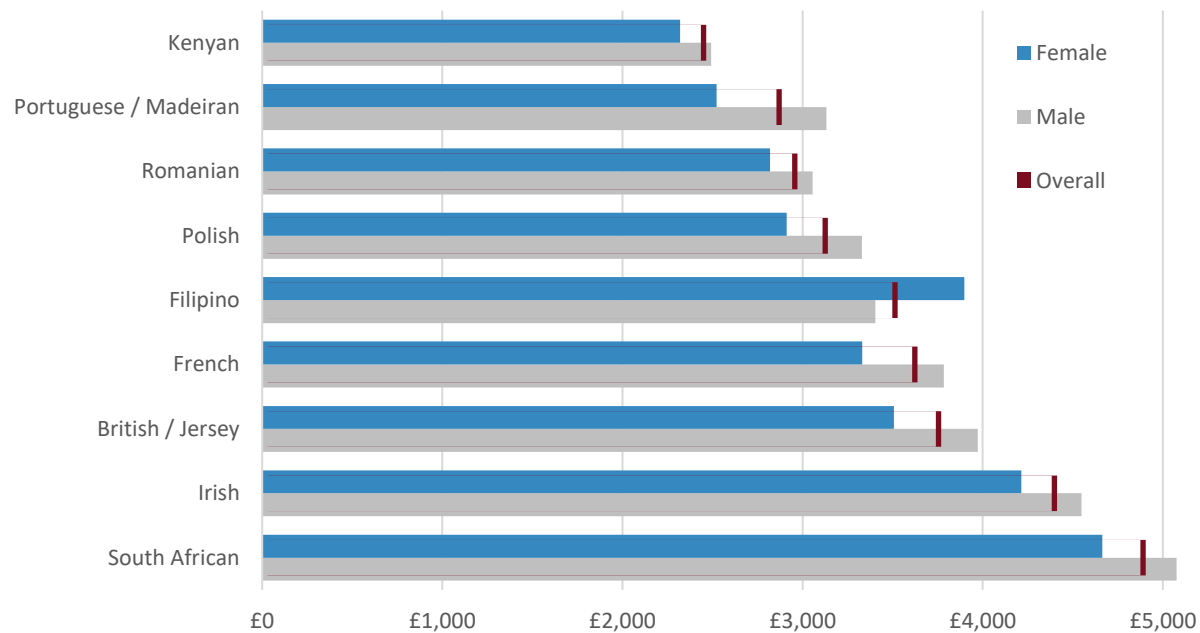


Table 20 shows the median earnings for each nationality overall and by sex, as well as the gender pay gap.

Table 20 – Median earnings by nationality, overall and by sex, and the gender pay gap by nationality; June 2023

	Overall, £	Male, £	Female, £	Gender pay gap
Kenyan	2,440	2,490	2,320	7%
Portuguese / Madeiran	2,850	3,130	2,520	24%
Romanian	2,940	3,060	2,820	8%
Polish	3,110	3,330	2,910	14%
Filipino	3,500	3,400	3,900	-13%
French	3,610	3,780	3,330	14%
British / Jersey	3,740	3,970	3,510	13%
Irish	4,380	4,550	4,220	8%
South African	4,880	5,080	4,660	9%

The only nationality with a negative pay gap was Filipino at -13%, indicating that median male earnings were 13% lower than median female earnings. Amongst the other nationalities, which all had positive gender pay gaps, the lowest gender pay gap (7%) and lowest earnings (£2,440) were seen by Kenyan employees. In general those nationalities with the lowest and highest overall earnings had the lowest pay gaps (7-9%). The exception to this is Portuguese / Madeiran employees, who had the largest gender pay gap (24%) and the second lowest overall earnings (£2,850).

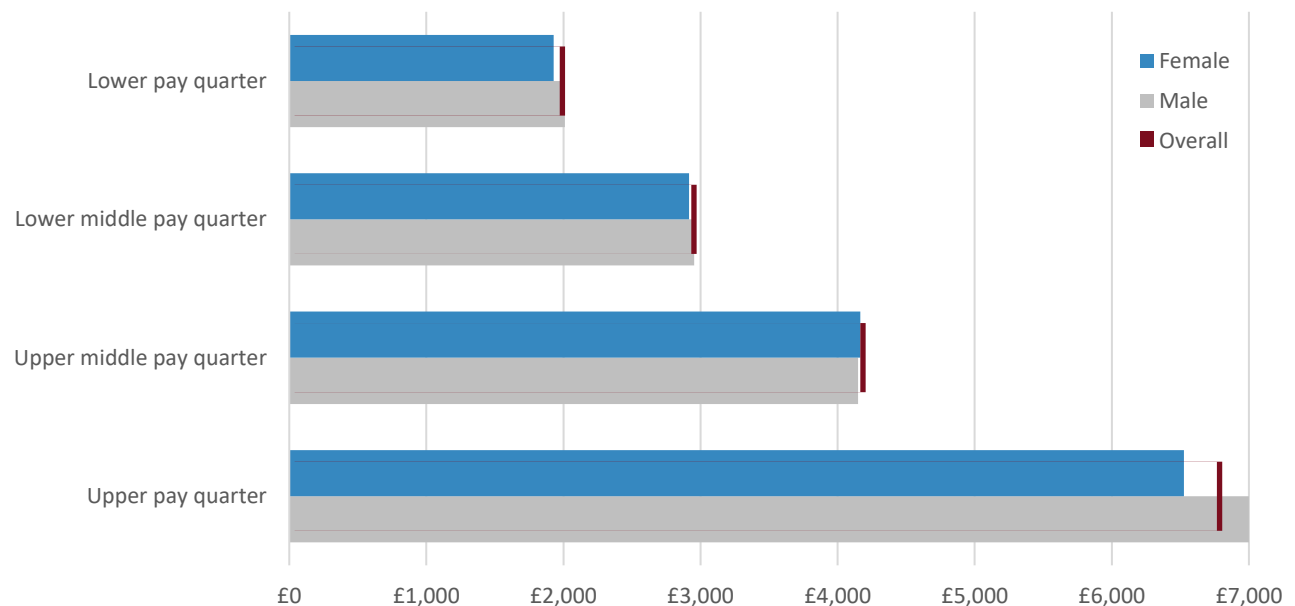
²⁰ Self-declared to Customer and Local Services.

Earnings and gender pay gap by pay quarter

When looking at the overall gender pay gap, a single measure is useful, but it does not show potential differences within the distribution of earnings. To provide a more complete picture the population can be separated into quarters based upon income. The population is split into four groups based on earnings level and the medians for each group are calculated separately, which provides measures for employees on upper, middle, and lower earnings²¹.

Figure 32 shows the median earnings for each pay quarter, overall and by sex.

Figure 32 – Median earnings by pay quarter, overall and by sex; June 2023



Overall median earnings for the highest pay quarter (£6,770) were around three and a half times greater than the median earnings from the lowest pay quarter (£1,970).

Table 21 shows the earnings, overall and for males and females, as well as the gender pay gap for each pay quarter and the proportion of males and females that made up each quarter.

Table 21 – Median earnings by pay quarter, overall and by sex, and the gender pay gap by pay quarter; June 2023

	Overall, £	Male, £	Female, £	Gender pay gap	Proportion male	Proportion female
Lower pay quarter	1,970	2,010	1,930	4%	42%	58%
Lower middle pay quarter	2,930	2,950	2,920	1%	51%	49%
Upper middle pay quarter	4,170	4,150	4,170	0%	53%	47%
Upper pay quarter	6,770	7,000	6,530	7%	57%	43%

The middle quarters saw near parity between males and females, but the lowest and highest quarters had gender pay gaps of 4% and 7% respectively. The gender pay gap for each quarter was below the overall gender pay gap (12%). This was due to the distribution across the income quarters of males and females; those in the lowest quarter were more likely to be female, in all other quarters they were more likely to be male. See the [effects of labour market composition](#) section for a similar explanation regarding most sectors seeing greater gender pay gap measures than the overall pay gap.

The proportion of the income quarter that was female progressively decreased from 58% in the lowest income quarter to 43% in the highest income quarter.

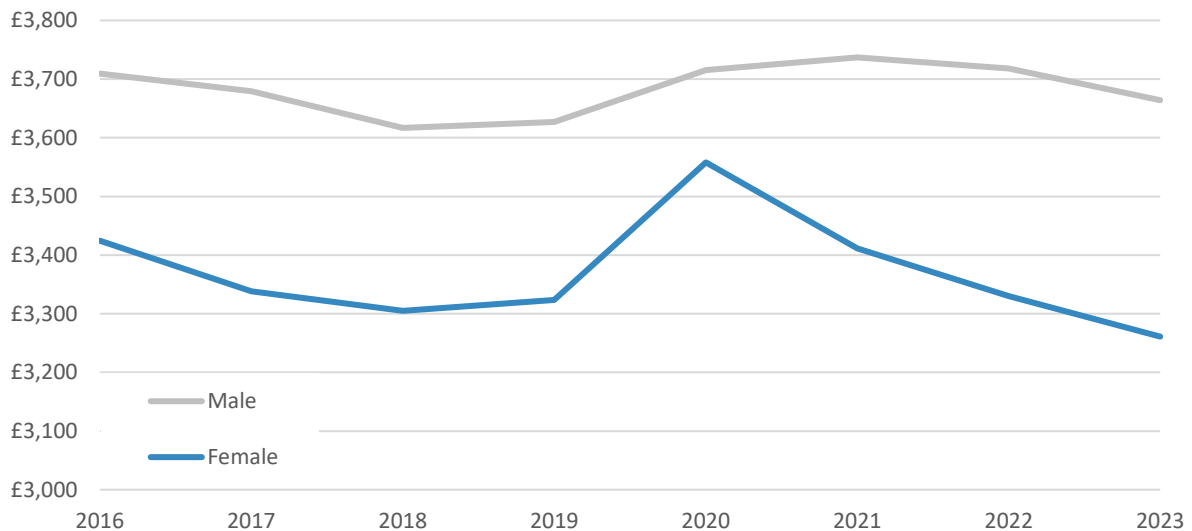
²¹ This follows UK Government guidelines: <https://www.gov.uk/guidance/making-your-gender-pay-gap-calculations>

Real-term earnings by sex

As previously discussed, nominal earnings levels can be adjusted using the Retail Prices Index (RPI) to provide real-term values. Figure 32 and Table 24 demonstrate how earnings have changed in real terms between 2016 and 2023. All values are in June 2023 constant prices.

Figure 33 shows the level of earnings in real terms overall for June 2016 to June 2023 by sex.

Figure 33 – Level of earnings in real terms June by sex; 2016-2023



The pre-pandemic period June 2016 to June 2019 saw a 2% decrease in real terms for males and a 3% decrease in real terms for females. From June 2019 to June 2020, an increase of 2% was seen in real-term median earnings for males and 7% for females. In 2020 there was a decrease in total jobs due to COVID-19, particularly lower paid jobs worked by female employees¹⁴. Additionally, 2020 saw low levels of inflation, with RPI between 0.5% and 2.7%. Overall, between June 2016 and June 2023, earnings have decreased by 1% in real terms for male employees and levels in 2023 are similar to those in 2018 and 2019. Females saw a real-term decrease of 5% over the same period, with the value in June 2023 being the lowest in real terms since June 2016.

These earnings values together with the annual percentage change are shown in Table 22 below:

Table 22 – Real-term median earnings and annual percentage changes by sex; June 2016 - June 2023

	Real-term	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023
Males, £		3,710	3,680	3,620	3,630	3,720	3,740	3,720	3,660
Annual percentage change		-	-0.8%	-1.6%	0.3%	2.5%	0.5%	-0.5%	-1.6%
Females, £		3,420	3,340	3,300	3,320	3,560	3,410	3,330	3,260
Annual percentage change		-	-2.3%	-1.2%	0.6%	7.2%	-4.2%	-2.3%	-2.1%

Real-term earnings by sex and sector saw similar patterns for males and females for the majority of sectors (± 2 percentage points); see [Figure 34](#). There were some notable exceptions to this, the largest being in the Agriculture and fishing sector where females saw a much smaller real-term increase (11%) compared with males (27%). Similarly, in the Information and communication sector females saw a larger real-term decrease (10%) than males (4%).

Conversely in the Transport and waste sector males saw a real-term decrease (8%) while females saw essentially no real-term change (0%), and in Financial and legal activities sector males saw a larger real-term decrease (10%) compared with females (4%).

Table 23 and Table 24 show the median earnings for each sector in real-term 2023 constant prices overall and the real-term percentage change from 2016 for males and females respectively. Real-term earnings by sector are presented above in [Table 13](#).

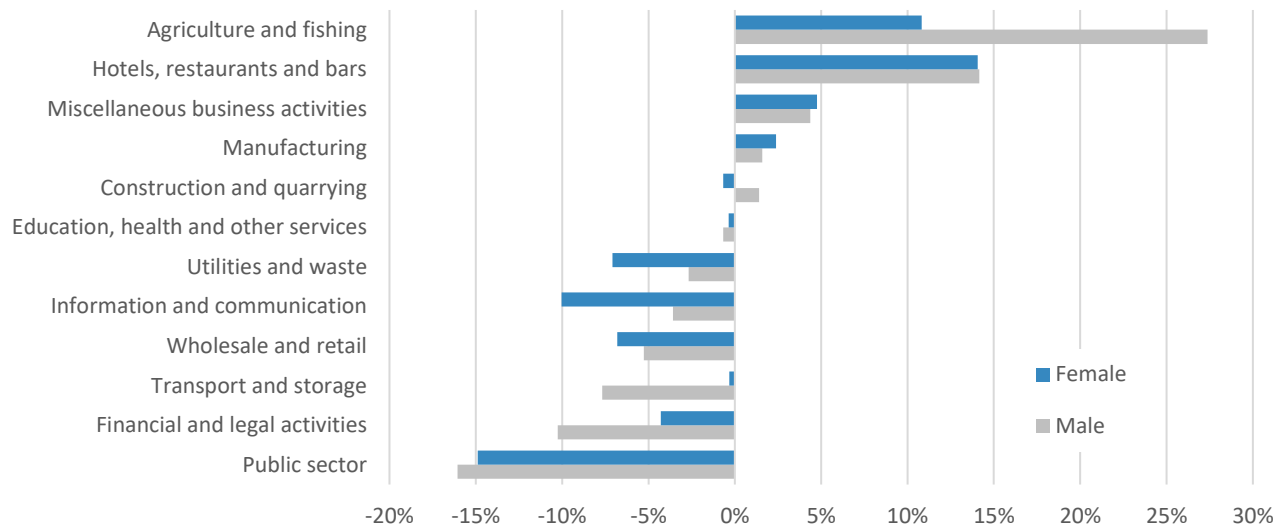
Table 23 – Real-term median earnings by sector for males, June 2016 - June 2023

	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023	2016-2023 change
Agriculture and fishing	2,740	2,930	3,310	2,900	3,190	3,060	3,090	3,490	27%
Construction and quarrying	3,550	3,620	3,560	3,480	3,510	3,590	3,660	3,600	1%
Education, health and other services	2,980	2,900	2,880	3,010	3,030	3,080	2,940	2,960	-1%
Financial and legal activities	6,240	6,130	5,990	6,110	6,190	5,980	5,830	5,600	-10%
Hotels, restaurants and bars	2,190	2,260	2,270	2,390	2,160	2,420	2,630	2,500	14%
Information and communication	4,750	4,820	4,740	4,650	4,840	4,810	4,780	4,580	-4%
Manufacturing	3,130	3,280	3,190	3,180	3,060	3,230	3,110	3,180	2%
Miscellaneous business activities	3,430	3,500	3,330	3,420	3,450	3,580	3,540	3,580	4%
Public sector	5,540	5,240	5,000	5,080	5,260	4,960	4,780	4,650	-16%
Transport and waste	3,910	3,990	3,720	3,620	3,500	3,690	3,820	3,610	-8%
Utilities and waste	4,100	4,260	4,150	3,980	4,040	4,110	3,860	3,990	-3%
Wholesale and retail	2,850	2,750	2,920	2,770	2,670	2,690	2,810	2,700	-5%
All sectors	3,710	3,680	3,620	3,630	3,720	3,740	3,720	3,660	-2%

Table 24 – Real-term median earnings by sector for females, June 2016 - June 2023

	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022	June 2023	2016-2023 change
Agriculture and fishing	2,590	2,690	2,880	2,600	2,970	2,690	2,820	2,870	11%
Construction and quarrying	2,940	2,940	2,870	2,910	3,170	3,160	3,000	2,920	-1%
Education, health and other services	2,840	2,790	2,710	2,880	2,980	2,920	2,880	2,830	0%
Financial and legal activities	4,660	4,590	4,460	4,540	4,640	4,580	4,570	4,460	-4%
Hotels, restaurants and bars	1,990	2,020	2,030	2,060	1,980	2,120	2,300	2,270	14%
Information and communication	3,990	4,010	4,000	3,770	3,880	3,890	3,610	3,590	-10%
Manufacturing	2,510	2,540	2,440	2,490	2,430	2,630	2,520	2,570	2%
Miscellaneous business activities	2,730	2,840	2,800	2,800	2,890	2,990	2,920	2,860	5%
Public sector	4,430	4,210	4,280	4,210	4,500	4,280	3,990	3,770	-15%
Transport and waste	3,170	3,150	3,130	3,110	2,930	3,100	2,930	3,160	0%
Utilities and waste	4,090	4,100	4,160	3,940	3,720	3,760	3,450	3,800	-7%
Wholesale and retail	2,350	2,230	2,350	2,330	2,350	2,280	2,330	2,190	-7%
All sectors	3,420	3,340	3,300	3,320	3,560	3,410	3,330	3,260	-5%

Figure 34 – Real-term change in median earnings by sector and sex, June 2016 - June 2023



Approximate cohort analysis by sex

Looking at the change in earnings over a 5-year period (2018-2023) allows the change in earnings as people age to be observed. While the same jobs will not be being worked, the majority of the people working will be the same when looking at the 5-year change between an age group in 2018 and the next age group in 2023, e.g. 20-24 in 2018 will be 25-29 in 2023.

The Retail Prices Index (RPI) increased by 27.9% from June 2018 to June 2023. Using this we can deflate current earnings values to 2018 to see the real-term change for a cohort from June 2018 to June 2023.

Table 25 shows the median earnings for each age group, for males in 2018 and 2023, and the change that a cohort has seen from 2018-2023.

Table 25 – Median earnings by age group, males; June 2018 and 2023

2018 age group ⁸	2018 Male, £	2023 age group	2023 Male, £	Real-term change, £	Real-term change, %
20-24	1,970	25-29	3,180	520	26%
25-29	2,500	30-34	3,660	360	14%
30-34	2,840	35-39	4,000	290	10%
35-39	3,160	40-44	4,330	230	7%
40-44	3,330	45-49	4,460	160	5%
45-49	3,520	50-54	4,370	-100	-3%
50-54	3,370	55-59	4,130	-150	-4%
55-59	3,170	60-64	3,620	-340	-11%

The cohort now aged 25-29 has seen the largest real-term increase in earnings, £520, over the 5 year period. The real-term change in earnings becomes progressively smaller for each age group, becoming negative for the cohort now aged 50-54, and progressively more negative until it reaches -£340 for the cohort now aged 60-64. All male cohorts now aged 50-64 saw real-term falls in earnings.

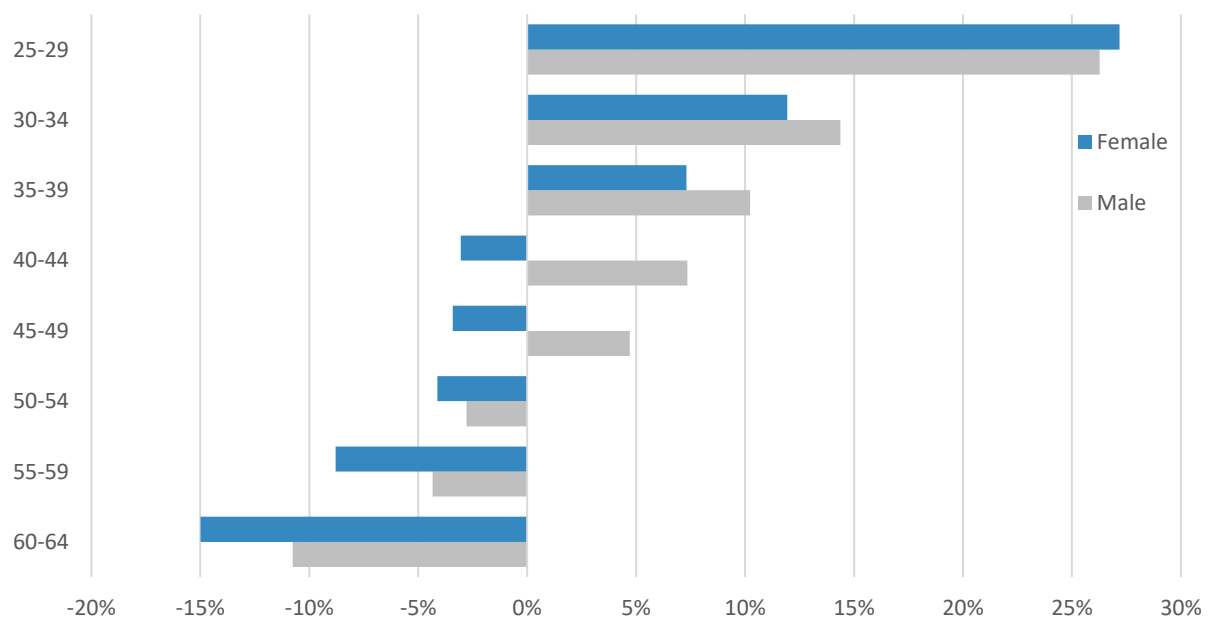
Table 26 shows the median earnings for each age group, for females in 2018 and 2023, and the real-term change that a cohort has seen from 2018-2023. The real-term changes are illustrated in Figure 35.

Table 26 – Median earnings by age group, females; June 2018 and 2023

2018 age group ⁸	2018 Female, £	2023 age group	2023 Female, £	Real-term change, £	Real-term change, %
20-24	1,910	25-29	3,100	520	27%
25-29	2,420	30-34	3,460	290	12%
30-34	2,600	35-39	3,570	190	7%
35-39	2,920	40-44	3,630	-90	-3%
40-44	3,040	45-49	3,750	-100	-3%
45-49	3,060	50-54	3,750	-130	-4%
50-54	2,880	55-59	3,360	-250	-9%
55-59	2,730	60-64	2,960	-410	-15%

The cohort now aged 25-29 have seen the largest real-term increase in earnings, £520, over the 5 year period. The real-term change in earnings becomes progressively smaller for each age group, becoming negative for the cohort now aged 40-44, and progressively more negative until it reaches -£410 for the cohort now aged 60-64. All female cohorts now aged 40-64 saw real-term falls in earnings.

For all age cohorts of those now aged 30-64, males saw larger real-term increases or lower real-term decreases in earnings over the last 5 years than females.

Figure 35 – Real-term change in median earnings by age cohort and sex, June 2018 - June 2023


Appendix A

Methodology summary and notes

This report represents the results of an experimental methodology. The method of calculation involves creating a linked dataset for the Social Security contributions and Manpower returns information, both of which are supplied by the Customer and Local Services Department. Records are joined at an individual job level. The data necessary for this report is available for 2016 onwards.

Data Sources

Manpower returns are a return to Government, from employers and sole traders, providing information on all people employed and details such as their contract type; full-time, part-time, or zero-hour. Prior to January 2022, Manpower returns were only completed in June and December. Social Security contribution datasets include all jobs where a person is dependently employed and has earnings subject to Social Security. It includes a number of demographic fields, such as age and sex, as well as company information and employee earnings for each month.

Data cleansing and linking:

As part of data cleansing, individual jobs that received less than one hour's pay in June are excluded, as well as Social Security returns where there has never been a matching Manpower return by that company. Remaining jobs in the Social Security contributions data are then matched with relevant information from that June or December's Manpower return, depending on which month's earnings are being analysed. This is done by using the individual's Social Security number and the Manpower code for the company they are working for as a combined unique identifier. Individuals are then verified as correct matches if the names in both returns are the same (when accounting for past surnames and minor spelling differences). Matches that are not automatically validated are then manually reviewed to allocate the corresponding match from within the Manpower return, if it exists. Combined unique identifiers will appear only once within the Social Security contributions data but may appear multiple times in the Manpower return, e.g. where someone has a full-time and zero hour contract with the same company. In such cases the combined unique identifier is manually allocated a match number to determine which job in the Manpower data it should match with.

The data cleansing exercise provides accurate links between the Social Security data and Manpower return data, so the company level SIC 2007 sector of employment and the contract type for each job can be linked to the Social Security contributions data. Jobs where there is strong evidence that the individual only worked for part of the month are then removed by using multiple indicators including job end dates, large earnings fluctuations, and impossible earnings values, e.g. where a full-time employee has earned less than would be possible if they were paid the minimum wage and worked the full month. Inconsistencies with job end date fields and potential leaving bonuses or similar adjustments in final pay mean that it is not possible to adjust these jobs to cover a full month. In June 2023 around 96% of all dependently employed jobs were included.

Imputation:

Some of the Social Security jobs do not appear in the Manpower returns, despite their company having submitted a return. For these jobs and those which are zero-hours, a contract type of either full-time or part-time is imputed. The imputation is done using a logistic regression model. The model uses a combination of several demographic and industry parameters to determine which contract type is the most likely for a given job. Applying the model to the complete matched data has provided around 80% overall accuracy, sensitivity, and specificity in all years.

Earnings calculations:

Earnings information is then adjusted for part-time employees to bring them in line with what would be earned if that job was being worked full-time. Additional adjustments are made for weekly-paid staff to represent similar pay to those paid monthly in the month of June (4.29 weeks). This is determined using prior average earnings survey data and information contained with the Social Security return (some companies have separate returns for those paid weekly and monthly). This does not currently identify all weekly paid employees, with Average Earnings Index survey data being used to supplement what is available from Social Security returns. The inclusion in the methodology of Income Tax Instalment Scheme (ITIS) return data would allow identification of any unknown weekly paid jobs and the further verification of those already identified.

Median earnings are then calculated both overall and for any disaggregation needed, such as age or sector. Means are not possible due to the cap on earnings on which Social Security is paid. While some jobs which earn above the Upper Earnings Limit have their earnings reported in full, a large number do not in prior years: e.g., half (50%) of those at or above the limit in June 2022 are reported to have earned exactly the upper earnings limit. This is unlikely to be the true total earnings for the majority of those jobs exactly at the limit. This issue is also more pronounced in prior years where the Upper Earnings Limit was lower and has decreased to 12% in June 2023. To produce means would require more robust data for the highest earners, particularly for past years. Linking to ITIS return data would allow this.

Gender pay gap calculations:

From the median earnings values, **gender pay gap** values are calculated. They are calculated as the percentage by which median male earnings are greater than median female earnings. This means that a positive value signifies males earn more and a negative value signifies females earn more. Results are presented where there are more than 100 males and 100 females included in that group. Values calculated involving fewer males or females are likely to see large uncertainties and it is recommended by the Royal Statistical Society to flag such values as uncertain when they have to legally be reported in the UK²². As these are highly uncertain and potentially misleading figures, they are not presented in this report.

New content and improvements in this report:

This earnings statistics and gender pay gap report is the first to include real-term earnings statistics, which allow earnings to be compared after adjusting for inflation. It is also the first to include an improved methodology for international comparisons of the gender pay gap.

Future aims:

The production of these statistics is part of a wider program of work by Statistics Jersey to produce or improve official statistics using administrative data, on a more frequent basis than the current Average Earnings Index (AEI) and Labour Market report. The Statistics and Census (Jersey) 2018 law requires Statistics Jersey to avoid collecting data where it is possible to produce the necessary statistics from administrative data sources. As outlined previously these statistics and those presented in the Average Earnings are using different methodologies. By undertaking the below listed improvements, we aim to create a linked administrative dataset allows for the continued publication of the earnings statistics in this report, as well as earnings statistics which account for structural change. Work on this new methodology is ongoing, with an aim to publish a report using the new methodology around Q4 2024. This work has also enabled new person-focused employment statistics, including employment statistics by demographics such as age, sex, and self-declared nationality. A report on these experimental employment statistics is scheduled to be published for the first time in Q1 2024.

Potential future improvements:

We are exploring several potential steps to improve the quality of these statistics in the future, including:

- matching ITIS returns data with the combined dataset to provide the ability to produce means, and increasing earnings accuracy for jobs that are only worked for part of a month or that are paid weekly
- using the new contractual hours field in the Combined Employer Return to more accurately adjust earnings to full-time equivalent earnings
- earnings statistics about individuals with multiple jobs
- additional modelling by contract type (full-time, part-time, or zero-hour) and residential status
- additional modelling using new fields contained within the Combined Employer Return and ITIS data
- quarterly results using new Combined Employer Return data
- exploring potential data sources for additional demographic breakdowns, e.g. marital status and parental status
- exploring the use of admin data on State pensions, Income Support and other benefits and grants to form a more complete picture of total earned income

²² Recommendation 8: <https://rss.org.uk/RSS/media/News-and-publications/Publications/Reports%20and%20guides/RSS-s-10-Proposed-Reforms-for-Gender-Pay-Gap-Reporting.pdf>

Appendix B

Comparison with the labour market report June 2023

Self-employed individuals are not required to submit social security returns, so it is not possible to include them in this analysis. If a self-employed individual has an additional dependently employed job, then that job will be included. The below shows the proportion of each sector that is included in the analysis.

Table B1 – Comparison with the number of employees in the Labour Market report, by sector

	Employees in analysis	Labour Market report employees	Proportion in analysis
Agriculture and fishing	840	1,090	77%
Construction and quarrying	4,630	6,550	71%
Education, health and other services	5,790	8,940	65%
Financial and legal activities	12,910	13,660	95%
Hotels, restaurants and bars	4,580	6,510	70%
Information and communication	1,400	1,830	77%
Manufacturing	570	920	62%
Miscellaneous business activities	3,900	6,270	62%
Public sector	8,700	9,270	94%
Transport and waste	1,650	2,130	77%
Utilities and waste	720	770	94%
Wholesale and retail	5,300	7,070	75%
All sectors	50,980	65,010	78%

The distribution between sectors is similar to that seen in the labour market report, with all sectors having a high level of coverage within the analysis. The differences seen are due to self-employed jobs not being included in the social security contributions data and the removal of some dependently employed individuals who did not work the full month. Additionally, only 96% of dependently employed jobs are included due to the previously described process in [appendix A](#).