

Median earnings

June – 2022

Experimental statistics

Statistics Jersey: www.gov.je/statistics

Introduction

This report presents new experimental estimates of gross earnings 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.

These statistics were produced using data already held by Government for administrative purposes, specifically Social Security contributions and Manpower returns¹. They provide a greater level of detail and additional information than is currently available in our existing official statistics.

<u>Appendix A</u> contains a detailed methodology description and proposed future improvements. Any future improvements 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 Average Earnings Index (AEI) and additional analysis within the Labour Market report.

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

- industrial sector
- age
- sex²
- self-declared nationality
- "monthly 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

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

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

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 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.

² This field is from the data provided by Customer and Local Services within the Social Security contributions data.



Earnings Summary

For June 2022

- overall median earnings for the month were around £3,200³, this was an increase of 6.7% from June 2021
- median earnings were highest in the 45-49 age bracket (£3,790)
- the highest median earnings were in the financial and legal activities sector (£4,580)
- the lowest median earnings were in the hotels, restaurants and bars sector (£2,240)
- when analysing by self-declared nationality⁴:
 - o the highest median earnings were seen for South African employees (£4,810)
 - the lowest median earnings were seen for Portuguese employees (£2,600)
- median earnings for the highest monthly pay quarter (£6,290) were around three and a half times the median earnings for the lowest monthly pay quarter (£1,790)

Gender Pay Gap Summary

For June 2022

- median earnings for males were £3,350 whilst median earnings for females were £3,000 meaning an overall gender pay gap of 12%⁵
- all age groups 20-39 and 65+ had a lower gender pay gap than the overall average, while other age groups saw higher gender pay gaps than the overall average
- the highest gender pay gap of any sector was in the information and communication sector (33%)
- the lowest gender pay gap of any sector was in the education, health and other services sector (2%)
- 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 88% for those aged 60-64
- when analysing by self-declared nationality⁵:
 - Portuguese employees saw the largest gender pay gap (23%)
 - South African employees saw the smallest gender pay gap (1%)
- the two middle monthly pay quarters both essentially saw gender parity, but the lowest and highest monthly pay quarters saw 5% and 9% gender pay gaps respectively

For June 2021

Jersey's overall gender pay gap for full-time employees (8%) was lower than the OECD average (12%)⁶

³ Values are rounded to nearest £10 throughout the report.

⁴ Self-declared to Customer and Local Services. Only nationalities with over 100 males and over 100 females were included in the analysis.

⁵ A value greater than zero signifies males are paid more than females.

⁶ OECD data only currently available to 2021 or earlier depending on the country



Overall earnings

The median earnings of an employee, on a FTE basis have been calculated by linking Social Security and Manpower return datasets. 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. This analysis therefore does not include any jobs which are self-employed. Essentially all (97% in June 2022) 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 earnt 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 earnings overall for June 2016 to June 2022.

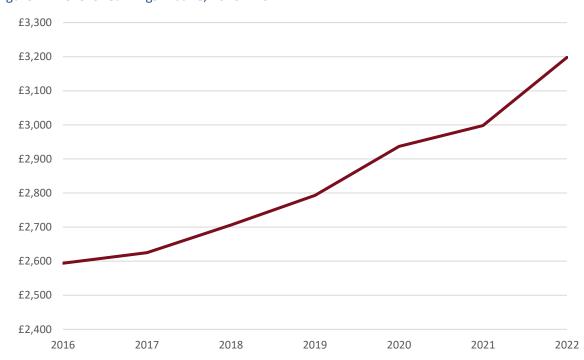


Figure 1 – Level of earnings in June; 2016 – 2022

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 2022

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

Theses earnings values and annual percentage changes see a slightly different pattern of changes to that of the average earnings index (AEI). With these experimental statistics seeing a higher percentage increase from June 2016 to June 2022 (23.6%) than the average earnings index (20.4%). However, the overall level for the median in June 2022 is similar for both methods. The median AEI value being £750 for the last week of June, equivalent to £3,220 for the month of June, £20 higher 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, 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 admin data approach. 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, particularly if jobs are predominately lost towards one end of the earnings distribution.

It is expected for there to be differences between the two methods. 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.

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 demographic groups in the population. This is useful when measuring inequalities, such as the gender pay gap. Improvements outlined in <u>Appendix A</u> should allow additional administrative data-based analysis which accounts for structural change, to produce figures more comparable with the AEI.

Figure 2 shows the overall distribution of earnings for June 2022

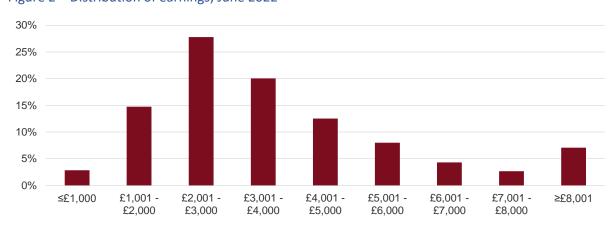


Figure 2 – Distribution of earnings; June 2022

The distribution of earnings seen in this analysis is similar to the distribution of employment income in the recent 2021-2022 Income Distribution Survey (preliminary results), although there are slight differences in the lowest and highest earnings brackets. Figure 3 shows the overall distribution of monthly earnings from the preliminary 2021-2022 Income Distribution Survey results⁷.

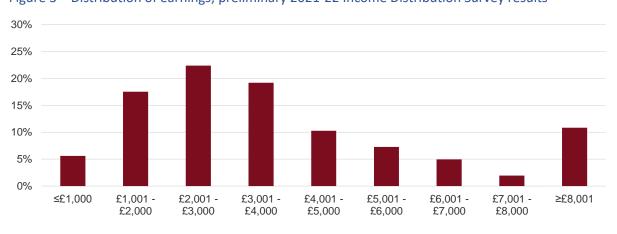


Figure 3 – Distribution of earnings; preliminary 2021-22 Income Distribution Survey results

⁷ 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.

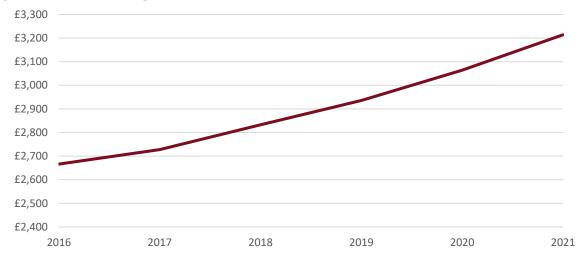


December earnings

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

Figure 4 shows the level of earnings overall and by sex for December 2016 to December 2021.

Figure 4 – Level of earnings in December; 2016 – 2021



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 earnings values for each year from 2016 to 2021

Table 2 – Median earnings; December 2016 – December 2021

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



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 employment.

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 Government of Jersey jobs.

Figure 5 shows the median earnings for each sector.

Figure 5 – Median earnings by sector, June 2022

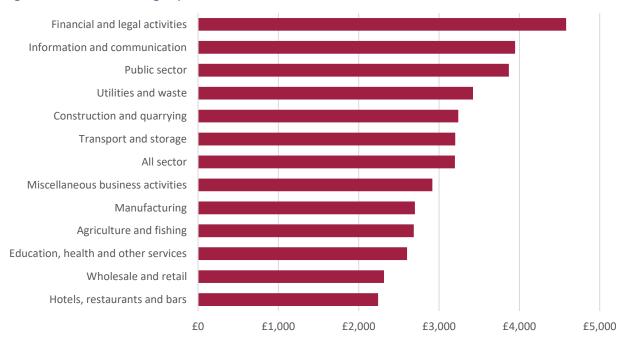


Table 3 shows the median earnings for each sector overall for June 2021 and June 2022 with the annual percentage change:

Table 3 – Median earnings by sector, June 2021- June 2022

	June 2021	June 2022	Annual % Change
Agriculture and fishing	2,380	2,690	13%
Construction and quarrying	2,980	3,240	9%
Education, health and other services	2,470	2,600	5%
Financial and legal activities	4,250	4,580	8%
Hotels, restaurants and bars	1,930	2,240	16%
Information and communication	3,770	3,950	5%
Manufacturing	2,610	2,700	4%
Miscellaneous business activities	2,750	2,920	6%
Public sector	3,760	3,870	3%
Transport and waste	2,990	3,200	7%
Utilities and waste	3,400	3,420	1%
Wholesale and retail	2,080	2,310	11%
All sectors	3,000	3,200	6.7%



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 increases in earnings being in the agriculture and fishing sector and the hotels, restaurants and bars sector for both methodologies. The lowest increases in earnings being in the utilities and waste, public, and manufacturing sectors 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.

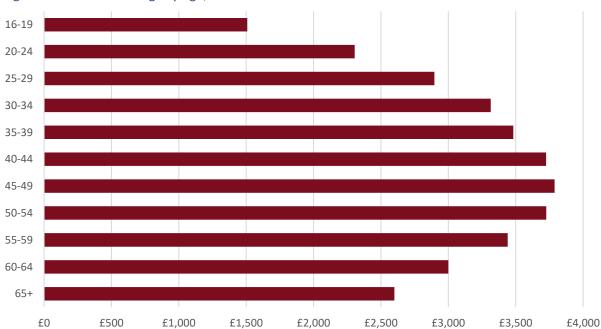


Figure 6- Median earnings by age, June 2022

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 and is largely impacted by the type of work. 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 (£3,790 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 2022

Age group	Overall, £
16-19	1,510
20-24	2,310
25-29	2,900
30-34	3,310
35-39	3,480
40-44	3,730
45-49	3,790
50-54	3,730
55-59	3,440
60-64	3,000
65+	2,600

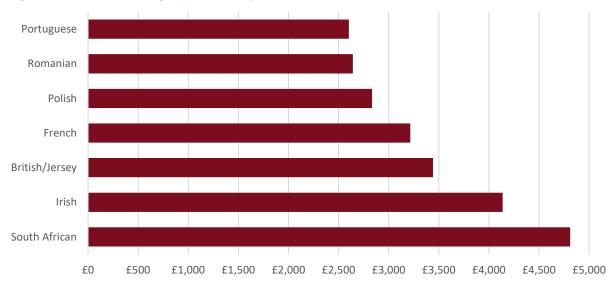


Earnings by nationality

Using self-reported nationality from administrative data, it is possible to calculate median earnings by the nationality⁸ 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, Romanian, and South African.

Figure 7 shows the median earnings for each nationality overall.





When analysing by nationality the highest median earnings were seen for South African employees (£4,810), while the lowest median earnings were seen for Portuguese employees (£2,600).

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⁸ Self-declared to Customer and Local Services.



Approximate cohort analysis

Looking at the change in earnings over a 5-year period (2017-2022) 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 2017 and the next age group in 2022, e.g. 20-24 in 2017 will be 25-29 in 2022.

The Retail Price Index increased by 20.5% from June 2017 to June 2022. Using this we can deflate current earnings values to 2017 to see the real-term change for a cohort from June 2017 to June 2022.

Table 5 shows the median earnings for each age group overall in 2017 and 2022, and the real-term change that a cohort has seen from 2017-2022.

Table 5 – Median earnings by age group, overall; June 2017 and 2022

2017 age group ⁹	2017 Overall, £	2022 age group	2022 Overall, £	Real-term change, £
20-24	1,900	25-29	2,900	500
25-29	2,310	30-34	3,310	440
30-34	2,630	35-39	3,480	260
35-39	2,940	40-44	3,730	150
40-44	3,090	45-49	3,790	50
45-49	3,210	50-54	3,730	-120
50-54	3,040	55-59	3,440	-190
55-59	2,870	60-64	3,000	-380

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 £500 in the month of June. The real-term change in earnings becomes progressively smaller for each age group, becoming negative for the cohort now aged 50-54, until it reaches -£380 in the month of June for the cohort now aged 60-64.

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⁹ 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

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 8 shows the level of earnings by sex for June, 2016 to 2022.

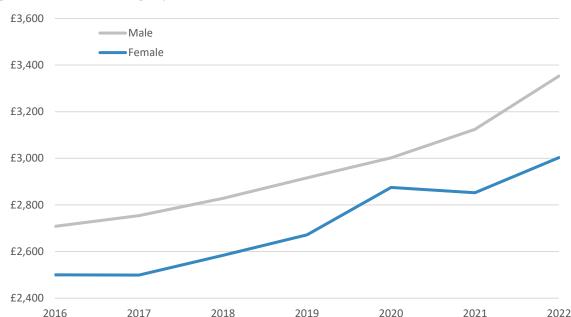


Figure 8 – Level of earnings by sex in June; 2016 – 2022

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 6.

Table 6 – Gender pay gap; June 2016 – June 2022

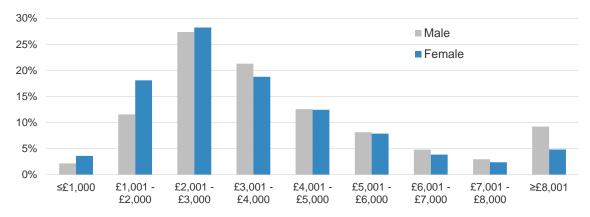
	June 2016	June 2017	June 2018	June 2019	June 2020	June 2021	June 2022
Overall, £	2,590	2,630	2,710	2,790	2,940	3,000	3,200
Males, £	2,710	2,750	2,830	2,920	3,000	3,120	3,350
Females, £	2,500	2,500	2,580	2,670	2,880	2,850	3,000
Gender pay gap	8%	10%	9%	9%	4%	10%	12%

The overall gender pay gap for the Island in June 2022 was 12%; this was the highest value seen from 2016 to date.



Figure 9 shows the overall distribution of earnings for males and females.

Figure 9 – Distribution of earnings for males and females; June 2022



Impact of COVID-19

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 lower value than surrounding years was caused by two major factors:

- Firstly, in June 2020 there were around 3,500 fewer total jobs than in June 2019. Over half, 1,800 of the net 3,500 jobs lost employed females. Around half (900) of the net reduction in female employees were in the lowest monthly pay quarter, while the number of male employees in the lowest monthly pay quarter was essentially unchanged between June 2019 and June 2020. These are not necessarily the same jobs between years, but this does suggest that lower paid female employees were more likely to lose their jobs due to COVID-19 than higher paid females. Male employees lost jobs more evenly across the income distribution.
- Secondly, industries were affected differently by the pandemic, with a lower impact seen on sectors
 which employ over half of females: financial and legal activities, public, and information and
 communication. These sectors are also the three sectors with the highest median incomes; this is
 discussed further in the later section on the effects of labour market composition.

December gender pay gap

It is also possible to calculate gender pay gap values for December. The effects of COVID-19 were seen to a lesser degree in December 2020.

Figure 10 shows the level of earnings by sex for December; 2016 to 2021.

Figure 10 – Level of earnings by sex in December; 2016 – 2021

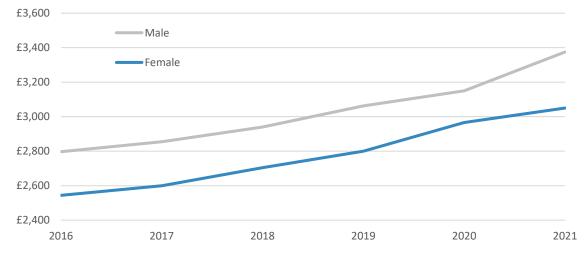




Table 7 – Gender pay gap; December 2016 – December 2021

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

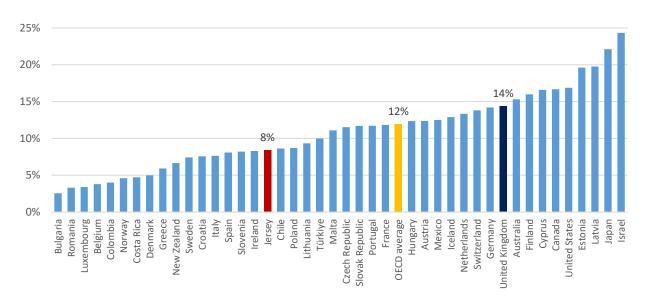
The overall gender pay gap for the Island in December 2021 was 11%; this was the highest December value seen from 2016 to date.

International comparison of the gender pay gap¹⁰

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.

The gender pay gap for **full-time** dependently employed individuals was 8% in June 2021 for Jersey. This ranked the Island 17th out of 44 OECD countries and partner countries. Figure 11 shows the comparison with OECD countries (2021 or latest available year) and Jersey (June 2021).

Figure 11 – Gender pay gap for full-time employees; OECD (2021 or latest available year) and Jersey (June 2021)



Statistics Jersey Experimental earnings, June - 2022

¹⁰ OECD data only currently available to 2021 or earlier depending on the country.



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 12 shows the median level of earnings by age bracket for males and females.

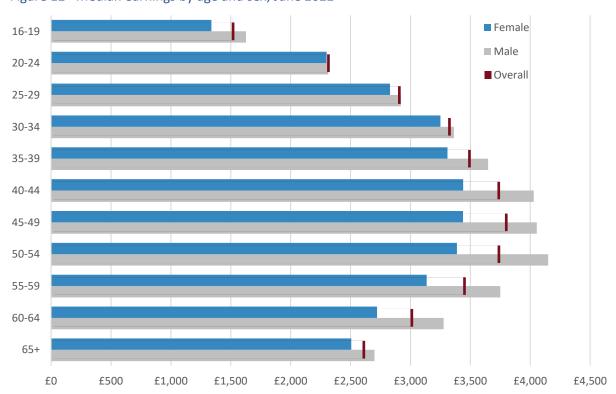


Figure 12- Median earnings by age and sex; June 2022

Table 10 shows the median earnings for each age group overall and by sex, as well as the gender pay.

Table 10 – Median earnings by age group, overall and by sex, and the gender pay gap; June 2022

	Overall, £	Male, £	Female, £	Gender pay gap
16-19	1,510	1,630	1,340	22%
20-24	2,310	2,310	2,300	1%
25-29	2,900	2,920	2,830	3%
30-34	3,310	3,360	3,250	3%
35-39	3,480	3,650	3,310	10%
40-44	3,730	4,030	3,440	17%
45-49	3,790	4,060	3,440	18%
50-54	3,730	4,150	3,390	22%
55-59	3,440	3,750	3,140	20%
60-64	3,000	3,280	2,720	20%
65+	2,600	2,700	2,510	8%

Median earnings for both males and females were similar for workers aged 20-34 years. However, age groups 16-19 years and 40-64 years saw higher gender pay gaps than the overall average (12%). The 50-54 age group saw the highest gender pay gap at 22%, while the lowest was the 20-24 age group, which saw near pay parity (1%).



Gender pay gap by sector

The sector of employment being worked in 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 13 shows the median earnings for each sector overall and by sex.



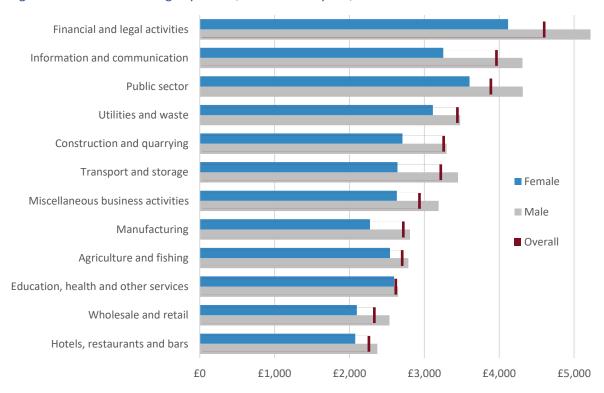


Table 8 shows the median earnings for each sector overall and by sex, as well as the gender pay gap for each sector.

Table 8 – Median earnings by sector, overall and by sex, and the gender pay gap by sector; June 2022

	Overall, £	Male, £	Female, £	Gender pay gap
Agriculture and fishing	2,690	2,790	2,540	10%
Construction and quarrying	3,240	3,300	2,710	22%
Education, health and other services	2,600	2,650	2,600	2%
Financial and legal activities	4,580	5,260	4,120	28%
Hotels, restaurants and bars	2,240	2,370	2,080	14%
Information and communication	3,950	4,310	3,250	33%
Manufacturing	2,700	2,810	2,270	23%
Miscellaneous business activities	2,920	3,190	2,630	21%
Public sector	3,870	4,310	3,600	20%
Transport and waste	3,200	3,450	2,640	31%
Utilities and waste	3,420	3,480	3,110	12%
Wholesale and retail	2,310	2,540	2,100	21%
All sectors	3,200	3,350	3,000	12%

In June 2022 the sector with the highest gender pay gap was the information and communication sector (33%). Conversely the education, health and other services sector saw a difference of only 2% 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 and agriculture and fishing 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 (51%) of female employees work in the 3 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 14 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 the sector, but they are higher than the median earnings of males in almost all other sectors. This narrows the overall gender pay gap.

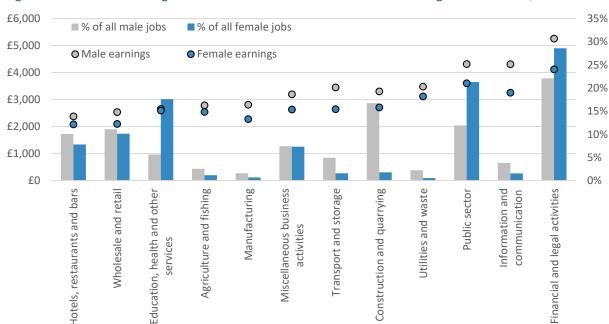


Figure 14 – Median earnings and likelihood of females and males working in each sector; June 2022

Table 9 shows the employee counts included in the analysis overall and by sex for each sector. See <u>Appendix B</u> for a comparison with the June 2022 Labour Market employee totals.

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Table 9 – Employee	counts by sector.	overall and by sex:	:June 2022

	Overall	Male	Female	Proportion	Proportion
				male	female
Agriculture and fishing	930	650	280	70%	30%
Construction and quarrying	4,720	4,290	430	91%	9%
Education, health and other services	5,760	1,440	4,320	25%	75%
Financial and legal activities	12,680	5,670	7,010	45%	55%
Hotels, restaurants and bars	4,500	2,590	1,910	58%	42%
Information and communication	1,360	980	380	72%	28%
Manufacturing	570	410	170	72%	30%
Miscellaneous business activities	3,700	1,900	1,800	51%	49%
Public sector	8,280	3,060	5,220	37%	63%
Transport and waste	1,650	1,270	380	77%	23%
Utilities and waste	700	570	130	81%	19%
Wholesale and retail	5,330	2,850	2,480	53%	47%
All sectors	50,180	25,670	24,510	51%	49%



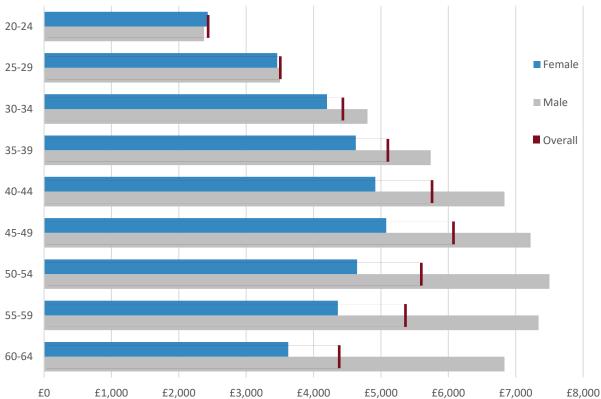
For certain sectors that have large numbers of employees it is possible to look at the median earnings and gender pay gap by age within the sector. This is only possible for 6 of the 12 sectors, although certain age groups cannot be analysed in specific sectors. This is due to either fewer than 100 males or fewer than 100 females being employed in the sector for that age bracket¹¹.

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 widens with age, with males earning almost double females on average (88% higher) in the 60-64 age group.

Figure 15 shows the median earnings for each age group overall and by sex, for the financial and legal activities sector.





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¹¹ 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

¹² Some age groups had fewer than 100 males or fewer than 100 females so are excluded.



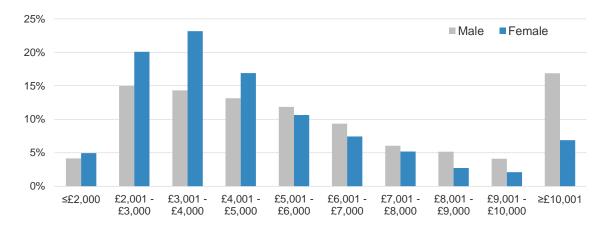
Table 11 shows the median earnings for each age group overall and by sex, as well as the gender pay gap for the financial and legal activities sector.

Table 11 – Median earnings by age group, overall, by sex, and the gender pay gap for the financial and legal activities sector; June 2022¹¹

	Overall, £	Male, £	Female, £	Gender pay gap
20-24	2,420	2,380	2,430	-2%
25-29	3,490	3,500	3,460	1%
30-34	4,420	4,800	4,200	14%
35-39	5,080	5,740	4,630	24%
40-44	5,740	6,830	4,920	39%
45-49	6,060	7,220	5,080	42%
50-54	5,580	7,500	4,650	61%
55-59	5,340	7,340	4,360	68%
60-64	4,360	6,830	3,630	88%
All	4,580	5,260	4,120	28%

Figure 16 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 are more likely to earn greater than £10,000 a month compared with females; 17% of male employees earn more than £10,000, compared with 7% of female employees.

Figure 16 – Distribution of earnings in the financial and legal activities sector for males and females; June 2022



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 (63% of the sector's employees) than males (37% of the sector's employees). Females aged 25-29 years in the public sector are paid 3% more than males on average. In the older age groups males are paid more than females, with the 60-64 age group seeing the largest pay gap (39%).



Figure 17 shows the median earnings for each age group overall and by sex, for the public sector.

Figure 17 – Median earnings by age and sex, public sector; June 2022¹¹

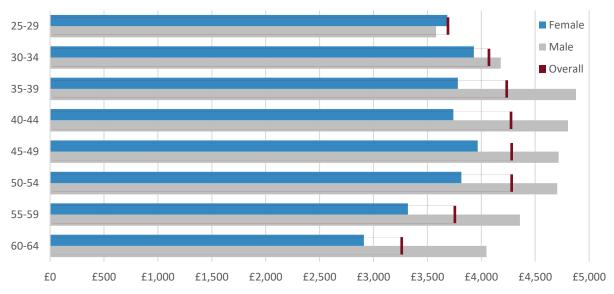


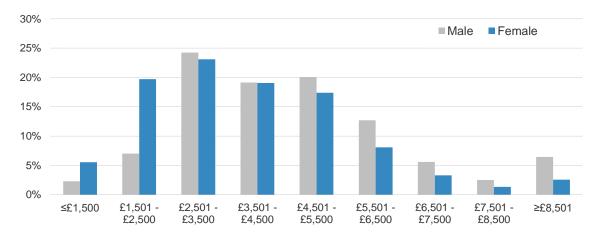
Table 12 shows median earnings for each age group overall and by sex, as well as the gender pay gap for the public sector.

Table 12 – Median earnings by age group, overall, by sex, and the gender pay gap for the public sector; June 2022¹¹

	Overall, £	Male, £	Female, £	Gender pay gap
25-29	3,680	3,580	3,680	-3%
30-34	4,060	4,180	3,930	6%
35-39	4,220	4,880	3,780	29%
40-44	4,260	4,800	3,740	28%
45-49	4,270	4,720	3,970	19%
50-54	4,270	4,710	3,820	23%
55-59	3,740	4,360	3,320	31%
60-64	3,250	4,050	2,910	39%
All	3,870	4,310	3,600	20%

Figure 18 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 two earnings brackets, particularly the £1,501 - £2,500 a month bracket, compared with males.

Figure 18 – Distribution of earnings in the public sector for males and females; June 2022





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 earn more than males in the younger age groups (20-34). Whilst for the older age groups males earn more than females, with the greatest difference seen for employees aged 45-49 years and 55-59 years (both 15%).

Figure 19 shows the median earnings for each age group overall and by sex, for the education, health and other services sector.

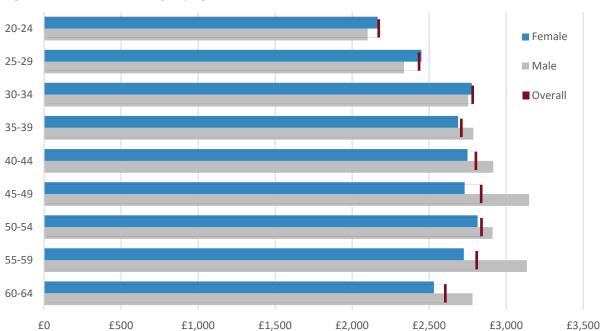


Figure 19 – Median earnings by age and sex, education, health and other services sector; June 2022¹¹

Table 13 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.

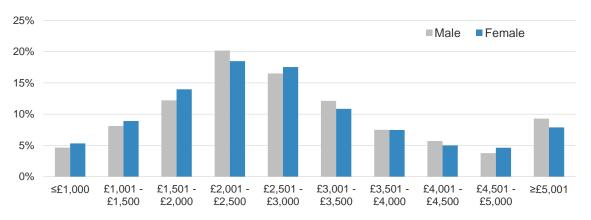
Table 13 – Median earnings by age group, overall, by sex, and the gender pay gap for the education, health and other services sector; June 2022¹¹

	Overall, £	Male, £	Female, £	Gender pay gap
20-24	2,160	2,100	2,170	-3%
25-29	2,430	2,340	2,450	-5%
30-34	2,770	2,750	2,780	-1%
35-39	2,700	2,790	2,690	4%
40-44	2,800	2,920	2,750	6%
45-49	2,830	3,150	2,730	15%
50-54	2,830	2,910	2,820	3%
55-59	2,800	3,140	2,730	15%
60-64	2,600	2,780	2,530	10%
All	2,600	2,650	2,600	2%



Figure 20 shows the distribution of earnings (on an FTE basis) for males and females in the education, health and other services sector. The distribution is similar for both males and females.

Figure 20 – Distribution of earnings in the education, health and other services sector for males and females; June 2022



Hotels, restaurants and bars sector

The hotels, restaurants and bars sector employs more males (58% of the sector's employees) than females (42% 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 (31%).

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

16-19 Female 20-24 ■ Male 25-29 Overall 30-34 35-39 40-44 45-49 50-54 55-59 60-64 £0 £500 £1,000 £1,500 £2,000 £2,500 £3,000

Figure 21 – Median earnings by age and sex, hotels, restaurants and bars; June 2022¹¹



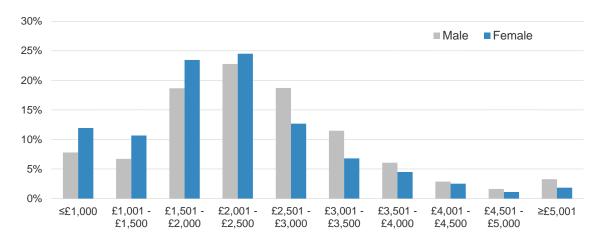
Table 14 shows median earnings for each age group overall and by sex, as well as the gender pay for the hotels, restaurants and bars sector.

Table 14 - Median earnings by age group, overall, by sex, and the gender pay gap for the hotels, restaurants and bars sector; June 2022^{11}

	Overall, £	Male, £	Female, £	Gender pay gap
16-19	1,240	1,400	1,070	31%
20-24	2,080	2,140	2,050	4%
25-29	2,280	2,350	2,140	10%
30-34	2,300	2,380	2,180	9%
35-39	2,410	2,590	2,180	19%
40-44	2,440	2,580	2,170	19%
45-49	2,310	2,490	2,100	18%
50-54	2,310	2,500	2,150	16%
55-59	2,430	2,550	2,050	24%
60-64	2,240	2,340	2,000	17%
All	2,240	2,370	2,080	14%

Figure 22 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.

Figure 22 – Distribution of earnings in the hotels, restaurants and bars sector for males and females; June 2022





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 aren't classified elsewhere. These include:

- Real estate activities
- Professional, scientific and technical activities¹³
- 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 being largest for the 60-64 age group (53% gender pay gap).

Figure 23 shows the median earnings for each age group overall and by sex, for the miscellaneous business activities sector.



Figure 23 – Median earnings by age and sex, miscellaneous business activities; June 2022¹¹

Table 15 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 15 – Median earnings by age group, overall, by sex, and the gender pay gap for the miscellaneous business activities sector; June 2022¹¹

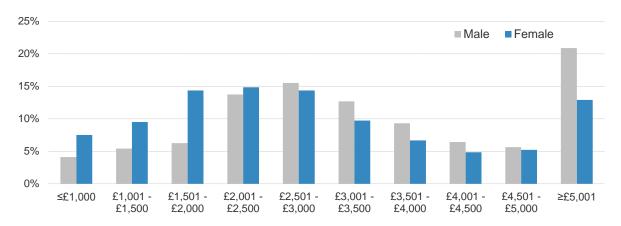
	Overall, £	Male, £	Female, £	Gender pay gap
20-24	2,240	2,250	2,210	2%
25-29	2,760	2,860	2,750	4%
30-34	2,920	2,980	2,810	6%
35-39	3,280	3,410	3,090	10%
40-44	3,440	3,750	3,000	25%
45-49	3,310	3,810	2,750	39%
50-54	3,050	3,710	2,580	43%
55-59	3,020	3,390	2,580	31%
60-64	2,680	3,160	2,070	53%
All	2,920	3,190	2,630	21%

Figure 24 shows the distribution of earnings (on an FTE basis) for males and females in the miscellaneous business activities sector. Females are more likely to earn less than £2,500 a month when compared with males. Males are more likely to earn more than £5,000 a month when compared with females.

¹³ excluding legal activities and accounting and compliance activities, which are included in the financial sector



Figure 24 – Distribution of earnings in the miscellaneous business activities sector for males and females; June 2022



Wholesale and retail sector

The wholesale and retail sector employs more males (53% 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 (32%).

Figure 25 shows the median earnings for each age group overall and by sex, for the wholesale and retail sector.

Figure 25 – Median earnings by age and sex, wholesale and retail; June 2022

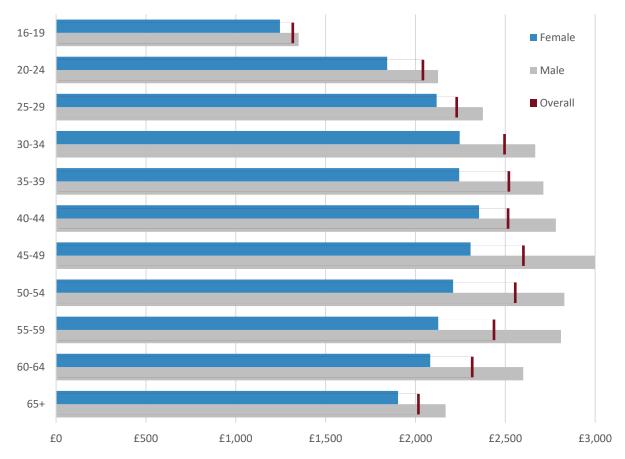




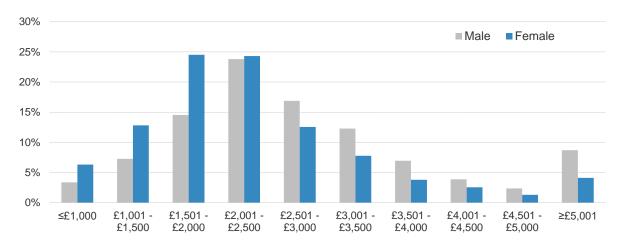
Table 16 shows median earnings for each age group overall and by sex, as well as the gender pay gap for the wholesale and retail sector.

Table 16 – Median earnings by age group, overall, by sex, and the gender pay gap for the wholesale and retail sector; June 2022

	Overall, £	Male, £	Female, £	Gender pay gap
16-19	1,310	1,350	1,250	8%
20-24	2,030	2,130	1,840	15%
25-29	2,220	2,380	2,120	12%
30-34	2,490	2,670	2,250	19%
35-39	2,510	2,710	2,240	21%
40-44	2,510	2,780	2,350	18%
45-49	2,590	3,000	2,310	30%
50-54	2,550	2,830	2,210	28%
55-59	2,430	2,810	2,130	32%
60-64	2,310	2,600	2,080	25%
65+	2,010	2,170	1,900	14%
All	2,310	2,540	2,100	21%

Figure 26 shows the distribution of earnings (on an FTE basis) for males and females in the wholesale and retail sector. Females are more likely to earn less than £2,000 a month when compared with males.

Figure 26 – Distribution of earnings in the wholesale and retail sector for males and females; June 2022





Earnings and gender pay gap by nationality

Using self-reported nationality from administrative data, it is possible to calculate median earnings by the nationality¹⁴ 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, Romanian and South African.

Figure 27 shows the median earnings for each nationality overall and by sex.

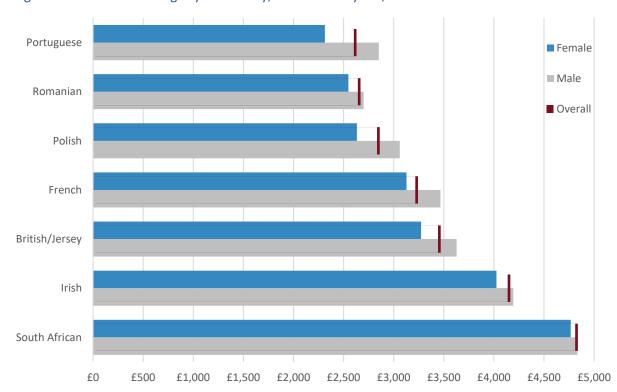


Figure 27 – Median earnings by nationality, overall and by sex; June 2022

The highest median earnings were seen for South African employees (£4,810), while the lowest median earnings were seen for Portuguese employees (£2,600).

Table 17 shows the median earnings for each nationality overall and by sex, as well as the gender pay gap.

Table 17 – Median earnings by nationality, overall and by sex, and the gender pay gap by nationality; June 2022

	Overall, £	Male, £	Female, £	Gender pay gap
Portuguese	2,600	2,850	2,310	23%
Romanian	2,640	2,700	2,550	6%
Polish	2,830	3,060	2,630	16%
French	3,220	3,470	3,130	11%
British/Jersey	3,440	3,630	3,270	11%
Irish	4,140	4,190	4,030	4%
South African	4,810	4,830	4,770	1%

Portuguese employees had the largest gender pay gap (23%) and the lowest overall earnings (£2,600). The lowest gender pay gap (1%) and highest earnings (£4,810) were seen by South African employees.

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¹⁴ Self-declared to Customer and Local Services.



Earnings and gender pay gap by monthly 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 of each group is calculated separately, which provides measures for employees on upper, middle, and low earnings¹⁵.

Figure 28 shows the median earnings for each monthly pay quarter, overall and by sex.



Figure 28 – Median earnings by monthly pay quarter, overall and by sex; June 2022

Overall median earnings for the highest monthly pay quarter (£6,290) were around three and a half times greater than the median earnings from the lowest monthly pay quarter (£1,790).

Table 18 shows the earnings, overall and for males and females, as well as the gender pay gap for each monthly pay quarter and the proportion of males and females that made up each quarter.

Table 18 – Median earnings by monthly pay quarter, overall and by sex, and the gender pay gap by mo	nthly
pay quarter; June 2022	

	Overall, £	Male, £	Female, £	Gender pay gap	Proportion male	Proportion female
Lower pay quarter	1,790	1,840	1,750	5%	42%	58%
Lower middle pay quarter	2,700	2,720	2,690	1%	52%	48%
Upper middle pay quarter	3,820	3,800	3,840	-1%	53%	47%
Upper pay quarter	6,290	6,600	6,030	9%	57%	43%

The middle quarters have near parity between males and females, but the lowest and highest quarters have gender pay gaps of 5% and 9% respectively. These values are both below the overall gender pay gap. This is due to the distribution across the income quarters of males and females; those in the lowest quarter are more likely to be female, in all other quarters they are 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 decreased from 58% in the lowest income quarter to 43% in the highest income quarter.

¹⁵ This follows UK Government guidelines: https://www.gov.uk/guidance/making-your-gender-pay-gap-calculations



Approximate cohort analysis by sex

Looking at the change in earnings over a 5-year period (2017-2022) 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 are will be the same when looking at the 5-year change between an age group in 2017 and the next age group in 2022, e.g. 20-24 in 2017 will be 25-29 in 2022.

The Retail Price Index increased by 20.5% from June 2017 to June 2022. Using this we can deflate current earnings values to 2017 to see the real-term change for a cohort from June 2017 to June 2022.

Table 19 shows the median earnings for each age group, for males in 2017 and 2022, and the change that a cohort has seen from 2017-2022.

Table 19 – Median earnings by age group, males; June 2017 and 2022

2017 age group ⁸	2017 Male, £	2022 age group	2022 Male, £	Real-term change, £
20-24	1,940	25-29	2,920	490
25-29	2,340	30-34	3,360	450
30-34	2,720	35-39	3,650	310
35-39	3,100	40-44	4,030	240
40-44	3,230	45-49	4,060	140
45-49	3,500	50-54	4,150	-60
50-54	3,290	55-59	3,750	-180
55-59	3,180	60-64	3,280	-460

The cohort now aged 25-29 has seen the largest real-term increase in earnings, £490, 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, until it reaches -£460 for the cohort now aged 60-64. With all male cohorts now aged 50-64 seeing real-term falls in earnings.

Table 20 shows the median earnings for each age group, for females in 2017 and 2022, and the change that a cohort has seen from 2017-2022.

Table 20 – Median earnings by age group, females; June 2017 and 2022

2017 age group ⁸	2017 Female, £	2022 age group	2022 Female, £	Real-term change, £
20-24	1,830	25-29	2,830	520
25-29	2,260	30-34	3,250	430
30-34	2,540	35-39	3,310	210
35-39	2,760	40-44	3,440	90
40-44	2,970	45-49	3,440	-110
45-49	2,930	50-54	3,390	-120
50-54	2,830	55-59	3,140	-230
55-59	2,620	60-64	2,720	-360

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 45-49, until it reaches -£360 for the cohort now aged 60-64. With all female cohorts now aged 45-64 seeing real-term falls in earnings.

For all age cohorts of those now aged 30-59, males have seen larger real-term increases or lower real-term decreases in earnings over the last 5 years than females.



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.

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 fewer than one hours 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 months' 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 2022 around 97% of all dependently employed jobs were included in the analysis.

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 (£21,724 a month in 2022) have their earnings reported in full, a large number do not: half (50%) of those at or above this limit in 2022 are reported to have earnt 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. To produce means would require more robust data for the highest earners. Linking to ITIS return data would allow this, as ITIS return data does not have a cap on earnings that are required to be reported.

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 UK¹⁶. As we are not required to report these highly uncertain and potentially misleading figures, they are not presented in this report.

Future aims:

The production of these statistics is part of a wider program of work by Statistics Jersey which is looking at producing or improving official statistics measures, using administrative data, on a more frequent basis than the Average Earnings Index (AEI) and Labour Market Report do currently. 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. But by undertaking the below listed improvements, we hope to be able to create an administrative dataset that would allow for the continued publication of the earnings statistics in this report. As well as earnings statistics which account for structural change and more detailed labour market figures. We hope to be able to produce these initially on a six-monthly basis.

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
- comparing individuals' total earnings across all 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

Statistics Jersey 22 February 2023

¹⁶ Recommendation 8: https://rss.org.uk/RSS/media/News-and-



Comparison with the labour market report June 2022

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	930	1,160	80%
Construction and quarrying	4,720	6,480	73%
Education, health and other services	5,760	8,580	67%
Financial and legal activities	12,680	13,590	93%
Hotels, restaurants and bars	4,500	6,120	74%
Information and communication	1,360	1,790	76%
Manufacturing	570	910	63%
Miscellaneous business activities	3,700	6,130	60%
Public sector	8,280	8,440	98%
Transport and waste	1,650	2,160	76%
Utilities and waste	700	750	93%
Wholesale and retail	5,330	7,210	74%
All sectors	50,180	63,720	79%

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 which did not work the full month.