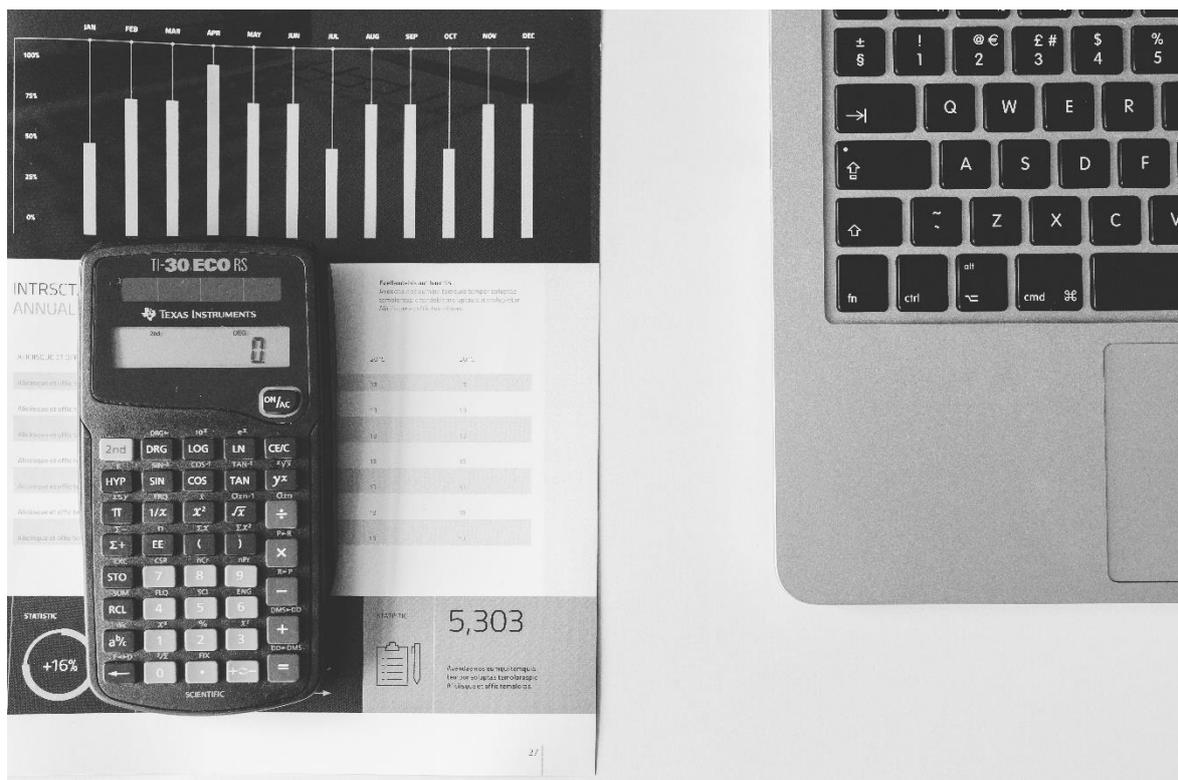


# Toolkit 1: Measuring your gender pay gap

## Gender pay gap reporting

February 2016



**Do you know how to calculate the gender pay gap? Which calculations should you choose? And how can you gain a true picture of gender pay inequality in your organisation?**

In 2016 the government will enact Section 78 of the Equality Act 2010, which will require employers with over 250 employees to publicly report their gender pay gap.

While the regulations are still under consultation, Business in the Community (BITC) is working with employers to prepare *now* for the potential reporting requirements. This includes practical support with analysing pay data and calculating gender pay gaps; understanding what the data is telling us and writing a comprehensive narrative; developing an action plan to tackle the causes behind any pay gaps; and communicating this information to your workforce and to the public.

Employers should use a range of methodologies to calculate the gender pay gap – it can be shown in different ways, and each version tells us something different about the reasons for the overall gender gap in an organisation. Whatever the reporting requirements of Section 78, BITC encourages employers of all sizes to be transparent with all gender pay data, making ourselves collectively, publicly accountable for closing the UK gender pay gap.

BITC is also encouraging leading employers to publish their gender pay data before legislation comes into force. We believe proactive, voluntary transparency will improve employee engagement and retention, increase employee trust, and enhance your reputation as a responsible employer.

**This paper provides guidance for employers on how to measure the gender pay gap using a variety of calculations. Once you have established a set of figures, read our next publication in this series, [Toolkit 2: Understanding your pay gap](#), to start exploring what the data is telling you.**

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## What is the gender pay gap?

The gender pay gap is the difference between women's and men's pay. This figure provides a high-level indicator of women's and men's relative earning power and reflects inequalities in the labour market. In 2015, the UK's gender pay gap for all employees – including part-time – was 19.2%. This is the official figure used by the Office for National Statistics (ONS), meaning that on average women earned around 19.2% *less than* men.

A single figure pay gap, based on the same calculation, allows a comparison between different employers. It is also the most efficient figure to calculate. However, as a standalone figure it does not provide sufficient insight into the underlying causes of the gender pay gap. Gathering data and calculating pay gap figures using different methods is necessary for tackling the root causes of your gender pay gap.

More detail on the factors that contribute to the gender pay gap will follow in [Toolkit 2: Understanding your pay gap](#).

## Proactive reporting

A number of employers, including PwC, Deloitte and Business in the Community have already reported their gender pay gap in the public domain. Leading employers recognise that while [“what gets measured gets managed; what gets publicly reported gets managed even better.”](#) We are currently working with several member organisations that are preparing to publish their gender pay data before it becomes mandatory.

This drive towards greater transparency will positively impact on differences between men's and women's pay. [Public reporting](#) demonstrates to investors, employees, customers and public audiences that employers are taking responsibility for closing the gender pay gap and holding themselves publicly accountable. Greater transparency will also enable employers to develop fairer and more robust reward and remuneration processes in which employees can have greater confidence.



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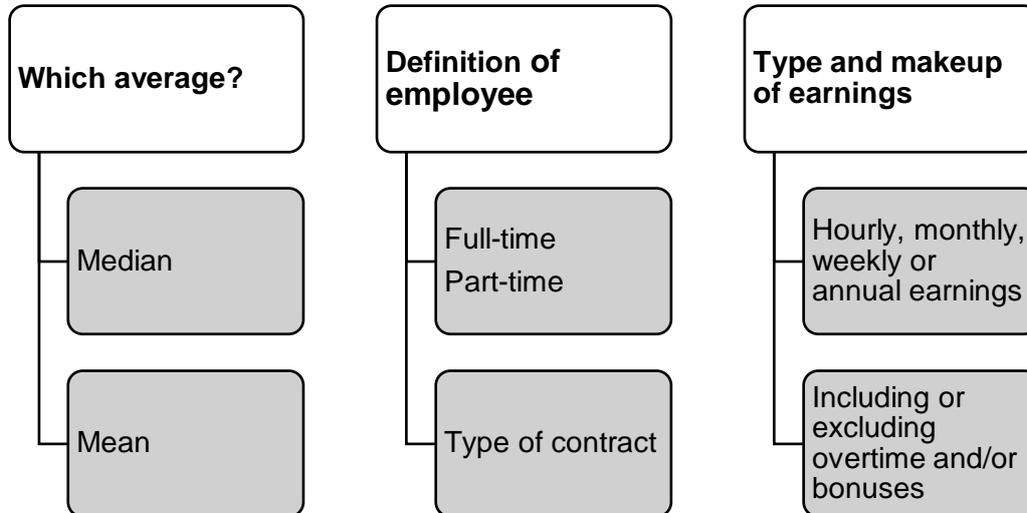
**“Over the next few months, you have a window of opportunity in which you can be amongst the first employers to be bold – to be the leaders in pay transparency. Be on the front foot, because when the regulations come into force, transparency will no longer be a unique selling point.”**

Kathryn Nawrockyi, Gender Equality Director,  
Business in the Community

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## Pay gap methodology

A gender pay gap figure can vary enormously depending on the method of measurement and on the data<sup>1</sup> used for calculation:



The combination of method and data may result in very different figures within the same organisation, even though each one could be used to describe the 'gender pay gap'.

## Calculating the gender pay gap

The gender pay gap is a relatively simple calculation:

$$\text{GENDER PAY GAP (GPG)} = \frac{\text{MALE EARNINGS} - \text{FEMALE EARNINGS}}{\text{MALE EARNINGS}} \times 100$$

However, it appears more complicated when the above factors are taken into account:

$$\text{GPG} = \frac{\begin{array}{l} \text{The [median/mean],} \\ \text{[hourly/weekly/monthly/annual]} \\ \text{earnings of [full-time/part-time/all] male} \\ \text{employees [including/excluding]} \\ \text{bonuses and [including/excluding]} \\ \text{overtime} \end{array} - \begin{array}{l} \text{Earnings of all} \\ \text{female} \\ \text{employees} \\ \text{with} \\ \text{corresponding} \\ \text{choices} \end{array}}{\begin{array}{l} \text{Earnings of all male employees with corresponding} \\ \text{choices} \end{array}} \times 100$$

Using the official UK gender pay gap figure of 19.2% as our worked example, this is calculated using the following equation:

$$\text{GPG} = \frac{\text{The median, hourly earnings of all male employees excluding bonuses and excluding overtime} - \text{The median, hourly earnings of all female employees excluding bonuses and excluding overtime}}{\text{The median, hourly earnings of all male employees excluding bonuses and excluding overtime}} \times 100$$

$$\text{GPG} = \frac{13 - 10.51}{13} \times 100$$

$$\text{GPG} = \frac{2.49}{13} \times 100$$

$$\text{GPG} = 0.19153 \times 100$$

**GPG = 19.2%**

**Method of measurement**

**The median pay gap**

The **median** is the numerical value which splits the top 50% of the population from the bottom 50%. It shows the midpoint in all employees' hourly rates of pay. Therefore, half of employees will earn a rate above the midpoint and half will earn a rate below the midpoint. In the example below, the median hourly pay is £17 per hour:

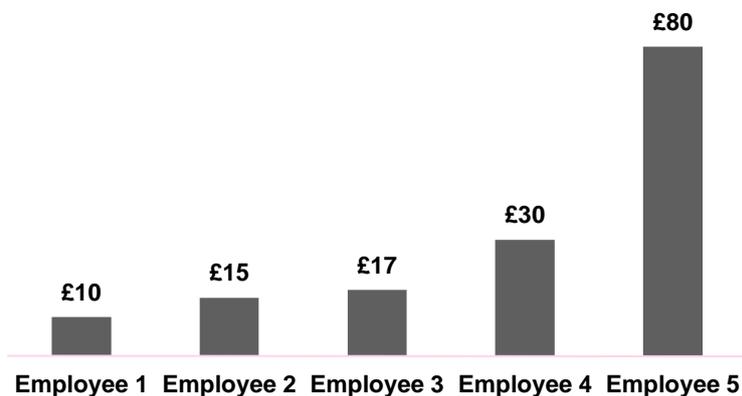
## Median of employees' hourly pay



## The mean pay gap

The mean (arithmetic average) is calculated by adding all employees' rates of pay together and dividing by the total number of employees. The mean includes the lowest and highest rates of pay. Using the same example below, the mean (or average) hourly pay is £30.40 per hour:

## Mean calculation of employees' hourly pay



$$\text{Mean} = \frac{\text{Sum of all employees' rates of pay}}{\text{Number of employees}} = \frac{10 + 15 + 17 + 30 + 80}{5} = \text{£30.40}$$

## Comparing mean and median averages

Just like our worked example, single figure mean and median gender pay gap calculations can vary significantly, even though they are derived from the same sets of data. There are advantages and disadvantages to both calculations, and each one has the potential to tell a different story about the gender gap in an organisation.

	Median	Mean
Type of figure	Middle point of a population	Arithmetic average of a population
Used by	<ul style="list-style-type: none"> <li>Office of National Statistics</li> </ul>	<ul style="list-style-type: none"> <li>Equality and Human Rights Commission</li> <li>Organisation for Economic Co-operation and Development</li> </ul>
Advantages	<ul style="list-style-type: none"> <li>Compares typical values and is less affected by extreme values, such as a relatively small number of very high earners.</li> <li>Gives a better indication of typical pay and inequalities experienced by the majority of women.</li> </ul>	<ul style="list-style-type: none"> <li>Captures differences across the distribution.</li> <li>Where those on very high earnings are predominantly male, and those on very low earnings predominantly female, the mean gives a clearer understanding of gender disparities in income.</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>May not be a true reflection of workforce income distribution.</li> <li>Risk of obscuring gender differences and understating the extent of pay disparity within an organisation.</li> </ul>	<ul style="list-style-type: none"> <li>Evidence of earnings distribution may be skewed by very high earners.</li> </ul>

Employers should calculate the gender pay gap using the mean and the median, since both are useful indicators of gender inequalities in pay.

Until mandatory gender pay reporting comes into force under Section 78, employers who choose to proactively publish their gender pay gap are free to present this data in any form they choose. This means that some employers may choose to publish only the mean or median figure, depending on which number tells a more positive story. However, it is possible that Section 78 regulations will require employers to publish **both the mean and median** gender pay gap. Therefore it is important to prepare this data fully, consider the possible factors influencing each figure and identify actions required to close the gaps.



Employers wanting to be fully transparent should publish both mean and median figures, since both tell an important story about the workforce gender gap.

## Definition of employee

### Type of contract



The official definition of an employee is ‘someone who works under an [employment contract](#).’ A contract is an agreement that sets out an employee’s employment conditions, rights, responsibilities and duties. The Section 78 regulations will set out how partnerships and organisations employing large numbers of contingency workers should define ‘employee’ for the purposes of gender pay gap reporting.

### Working pattern (full-time or part-time)

It is particularly important to calculate separate pay gap figures for full-time and part-time employees, as well as both groups together.

The gender pay gap for full-time employees, [defined by the ONS](#) as working for 30+ paid hours per week/25+ for the teaching professions, will not include the skewing effect of (often lower) paid part-time work. It is representative insofar as full-time employees account for approximately three-quarters of all employees<sup>2</sup>.

Part-time work tends to be female-dominated; therefore the part-time only gender pay gap is likely to be in favour of women in most organisations. While this sounds positive, it usually demonstrates the unequal distribution of part-time work, which is often lower paid, between women and men. Indeed, significantly more women in employment work part-time (43%) compared to men (12%).<sup>3</sup>

To illuminate the realities of part-time work and pay more accurately:

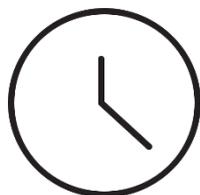


**Calculate the mean and median pay gaps for full-time and part-time employees, then compare the hourly earnings of male full-time employees with the hourly earnings of female part-time employees.**

If the gender pay gap is biased towards men, it is possible that part-time work is not a fair pro-rata rate of pay. See [Appendix 2](#) for more information.

## Type and makeup of earnings

### Hourly, weekly monthly or annual earnings?



The gender pay gap is generally calculated as the difference between **hourly** earnings for men and for women expressed as a percentage of men's hourly earnings. Weekly, monthly and annual earnings often give larger gaps since they incorporate differences in hours worked, in addition to differences in hourly rates. On average full-time women work fewer hours than full-time men, but part-time women work more hours than part-time men<sup>4</sup>.

Calculating the gender pay gap using the average **hourly** rate of pay negates the effect of part-time salaries. A gender pay gap based on hourly pay cannot be justified by the fact that most part-time workers are women – there must be other factors at play. These are addressed in [Toolkit 2: Understanding your gender pay gap](#).



Calculate the gender pay gap using the hourly earnings of male and female employees.

### Base pay and bonuses



Employers will be legally required to publish information on the bonuses of their female and male staff. Since total earnings are often increased greatly by bonus pay, particularly at the senior levels and in certain sectors, it is crucial to include bonuses in gender pay gap calculations. Furthermore, it prevents employers reallocating a portion of male employees' base pay into discretionary pay in order to portray a smaller gender pay gap.

The bonus pay gap is one of the biggest drivers of pay discrepancy. According to Ann Francke, Chief Executive of the Chartered Management Institute, bonuses are amongst 'the least transparent forms of pay'<sup>5</sup> which means that bias can creep into pay and reward processes more easily. For instance, a recent Women in Financial Institutions (WiFI) report, which examined pay packages of 300,000 back-office financial services staff, found that [women's bonuses add up to 16% of their basic salary](#), compared to 23% for men.

Calculating the following gender pay gap figures will enable employers to explore inequalities in pay and reward systems:



- The gender base pay gap
- The gender pay gap including bonuses (and equity, where applicable<sup>6</sup>)

## Single figure and breakdown by levels, grades and quartiles

### The single figure pay gap



The single figure pay gap is the difference between the remuneration of men and women across a whole organisation. Even though it is the simplest figure to calculate, it is not sufficiently informative when used in isolation from other information and data:

- 1) It makes it harder for employers to expose where pay inequalities lie, put the data into context and communicate a relevant narrative;
- 2) It oversimplifies gender inequality within organisations, since it combines multiple causal factors, which are individually complex;
- 3) It can fluctuate more sharply, for example as a result of mergers or acquisitions, or significant changes in business plans.

### Breakdown by job level/grade

A more granular pay gap figure for **each pay grade** is essential to drive actions that tackle disparity in remuneration. This enables employers to identify gaps between women and men doing work at the same level in an organisational hierarchy, thereby mitigating the risk of any potential unlawful pay inequality.

Another option is to calculate the gender pay gap by **job evaluation levels**, clustering together jobs by skills and level of responsibility. This has the advantage of providing a fair, like-for-like comparison of men and women.

If you do not have any grading system in place, you can use the breakdown below. We also have further guidance for the Civil Service, Investment Banks, Law Firms and the Armed Forces (see [Appendix 3](#)).

<b>Senior managers</b>	<ul style="list-style-type: none"> <li>▪ Divisional Head</li> <li>▪ Regional Director</li> <li>▪ C-Suite</li> <li>▪ Executive Director</li> <li>▪ Head of Department</li> </ul>
<b>Managers</b>	<ul style="list-style-type: none"> <li>▪ Line Manager</li> <li>▪ Operational Supervisor</li> <li>▪ Process Manager</li> </ul>
<b>Other</b>	Professionals and non-professional workers without management responsibility (of people or processes)

Source: Benchmark Guidance, Business in the Community (2014)

Pay grade gaps tend to be smaller than the single figure pay gap, because the effects of vertical occupational segregation – that is, women and men concentrated at different ends of the hierarchy – are removed. Calculating the gender pay gap within narrow grades or pay brackets allows a granular analysis that can more easily identify instances of unlawful unequal pay and other causal factors of the pay gap, such as experience or tenure.

This will enable employers to build a more sophisticated narrative about the gender pay gap which cannot be explained away as sex discrimination. Employers can then focus their efforts on structural changes, improving gender balance at every level of the organisation and attracting women and men into non-traditional work, e.g. women in technology or men in nursing. See our case study on [Friends Life](#) to learn more about publishing the pay gap by grade.

## Breakdown by quartiles

Employers should also break down their workforce earnings distribution by **quartiles**. This is especially helpful for employers that do not have official pay scales or a grading system.

Quartiles are the values that divide a list of numbers into quarters. Each employee's hourly pay should be ordered from lowest to highest, then divided into four equal groups. For example, a company with 240 employees would have 60 individual rates of pay in each quartile. Quartile 1 should contain the 60 lowest rates of pay; quartile 4 should include the 60 highest rates of pay. It is then possible to calculate the gender pay gap within each quartile.

Quartiles enable a clear overview of the earnings distribution between men and women in an organisation.

## Recommendations

To gain a clear picture of gender pay inequities in your organisation, employers should calculate both the **mean and median hourly pay gaps** of the following:



- ✓ **Single figure pay gap**
- ✓ **Pay gap for full-time employees only**
- ✓ **Pay gap for male full-time employees and female part-time employees**
- ✓ **Pay gap including bonuses**
- ✓ **Pay gaps at each pay grade and level**
- ✓ **Earnings distribution of men and women by quartile**
- ✓ **Single figure bonus pay gap**

BITC is encouraging leading employers to publish their gender pay data before legislation comes into force. We believe proactive, voluntary transparency will serve to improve employee engagement and retention, increase employee trust and enhance an employer's reputation as a responsible business.

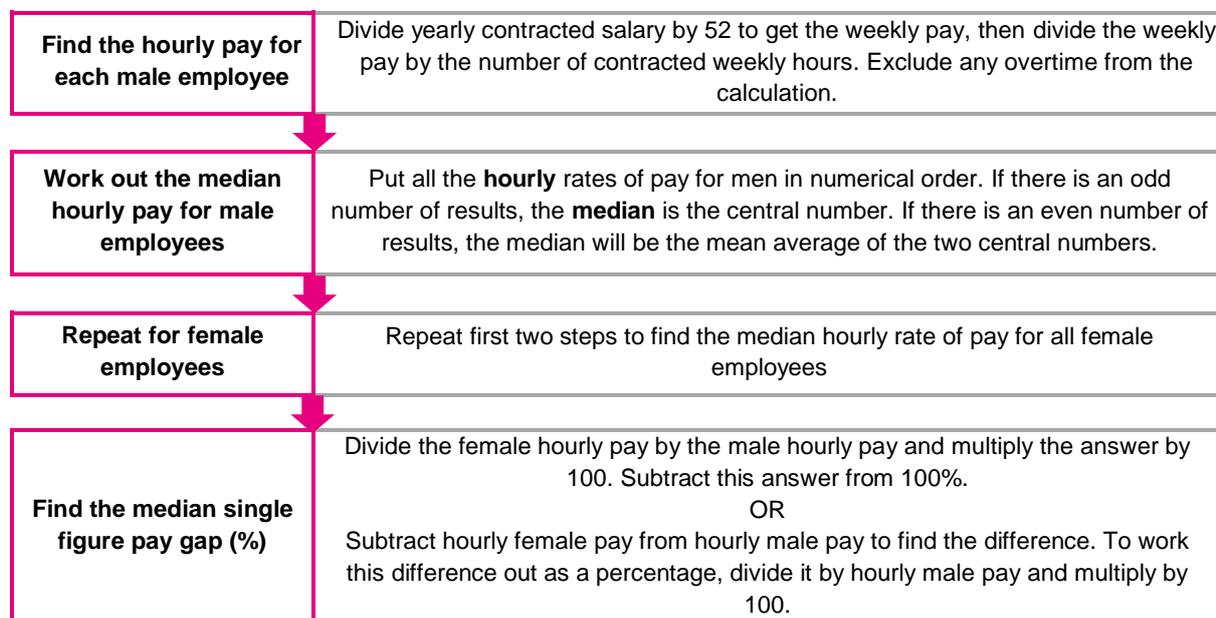
Whatever the reporting requirements of Section 78, BITC encourages employers of all sizes to be transparent with all gender pay data. The gender pay gap will only close through collective action from government and all businesses, working together for societal change.

Now that you have collected and calculated all relevant data, go to [Toolkit 2: Understanding your pay gap](#) to explore the possible causes of any gender pay gaps in your organisation. [Toolkit 3: Communicating your gender pay gap](#) is a useful guide to help employers preparing to publish their gender pay data, both internally and externally.

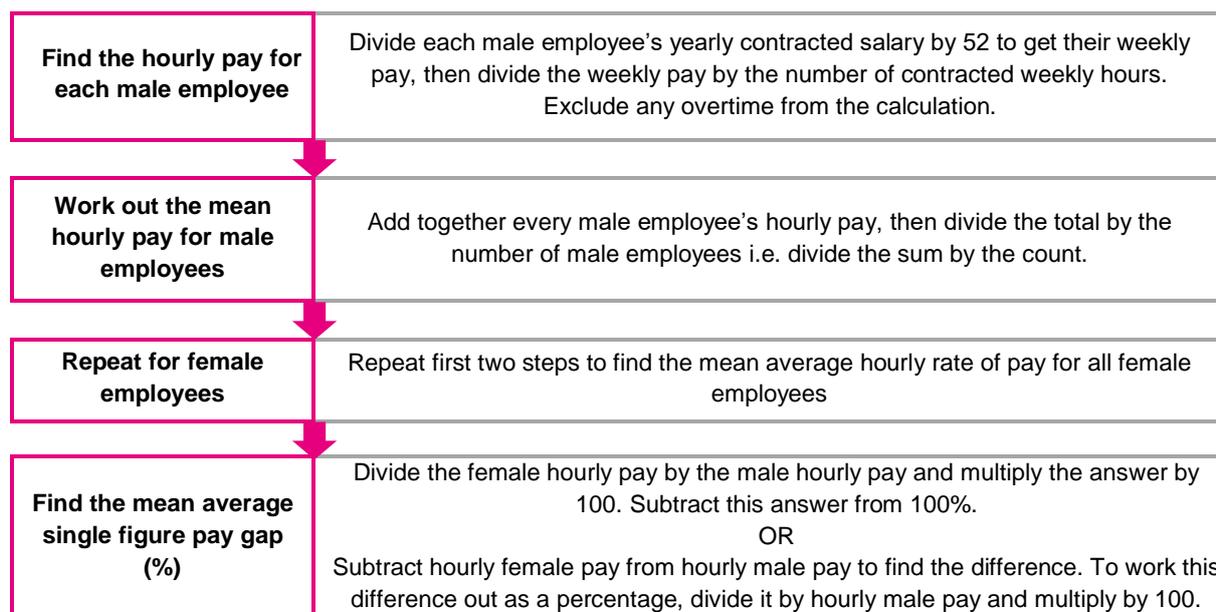
Business in the Community gender campaign members have full access to our [Gender Pay Gap Toolkits](#), as well as advice and guidance on publication from our expert team. To find out more about membership please [visit our website](#).

## Appendix 1 Step-by-step instructions for median and mean calculations

### Calculating the median single figure pay gap



### Calculating the mean single figure pay gap



## Appendix 2 Comparing FT male employees and PT female employees

STEP	MEDIAN	MEAN
1	<p><b>Find the hourly pay for each <u>full-time male</u> employee.</b> Divide each yearly contracted salary by 52 to find weekly pay, then divide the weekly pay by the number of contracted weekly hours e.g. 37.5 hours. Exclude any overtime from the calculation. <math>(\text{Salary} / 52) / 37.5 \text{ hrs}</math></p>	
2	<p><b>Work out the median hourly pay for full-time male employees.</b> Put all the hourly rates of pay for men in numerical order. If there is an odd number of results, the <b>median</b> is the central number. If there is an even number of results, the median will be the mean average of the two central numbers.</p>	<p><b>Work out the mean hourly pay for full-time male employees.</b> Add together every full-time male employee's hourly pay, then divide the total by the number of full-time male employees i.e. divide the sum by the count. <math>(\text{sum of every } \text{£/hr}) / \text{count of full-time males}</math></p>
3	<p><b>Repeat steps 1 and 2 for <u>part-time female</u> employees.</b> Repeat first two steps to find the median hourly rate of pay for all part-time female employees.</p>	
4	<p><b>Find the median single figure pay gap (%)</b> Divide the median <u>part-time female</u> hourly pay by the median <u>full-time male</u> hourly pay and multiply the answer by 100. Subtract this answer from 100%. OR Subtract median hourly <u>part-time female</u> pay from median hourly <u>full-time male</u> pay to find the difference. To work this difference out as a percentage, divide it by hourly <u>full-time male</u> pay and multiply by 100. <math>(\text{full-time male} - \text{part-time female}) / \text{full-time male} \times 100</math></p>	

## Appendix 3 Sector role mapping

The following terms are used in the BITC Diversity Benchmark Guidance (2014).

### UK Armed Forces

BENCHMARK TERM	ORGANISATION		
	Army	RAF	Navy
<b>Board (Executive directors)</b>	Any member of the Army board	Any member of the Air Force Board	Any member of the Navy Board
<b>Board (Non-executive directors)</b>	Non-executive Army Board Members	Non-executive Air Force Board Members	Non-executive Navy Board Members
<b>Senior Managers</b>	General Lieutenant-General Major-General Brigadier Colonel	Air Chief Marshal Air Marshal Air Vice-Marshal Air Commodore Group Captain	Admiral Vice-Admiral Rear-Admiral Commodore Captain
<b>Managers</b>	Lieutenant-Colonel Major Captain Lieutenant Second Lieutenant Warrant Officer Staff/Colour Sergeants	Wing Commander Squadron Leader Flight Lieutenant Flying Officer Pilot Officer Warrant Officer Flight Sergeant	Commander Lieutenant-Commander Lieutenant Sub-Lieutenant Midshipman Warrant Officer Chief Petty Officer
<b>Others</b>	All non-commissioned ranks below Staff/Colour Sergeants	All non-commissioned ranks below Flight Sergeant	All non-commissioned ranks below Chief Petty Officer

### Investment Banking, Legal, Civil Service

BENCHMARK TERM	SECTOR		
	Investment Banking	Legal	Civil Service
<b>Board (Executive directors)</b>	CEO, Managing Directors	Partners on the management board, Executive Directors who are not lawyers, QCs	Executive board, not including Ministers, which manages the Governance of the organisation

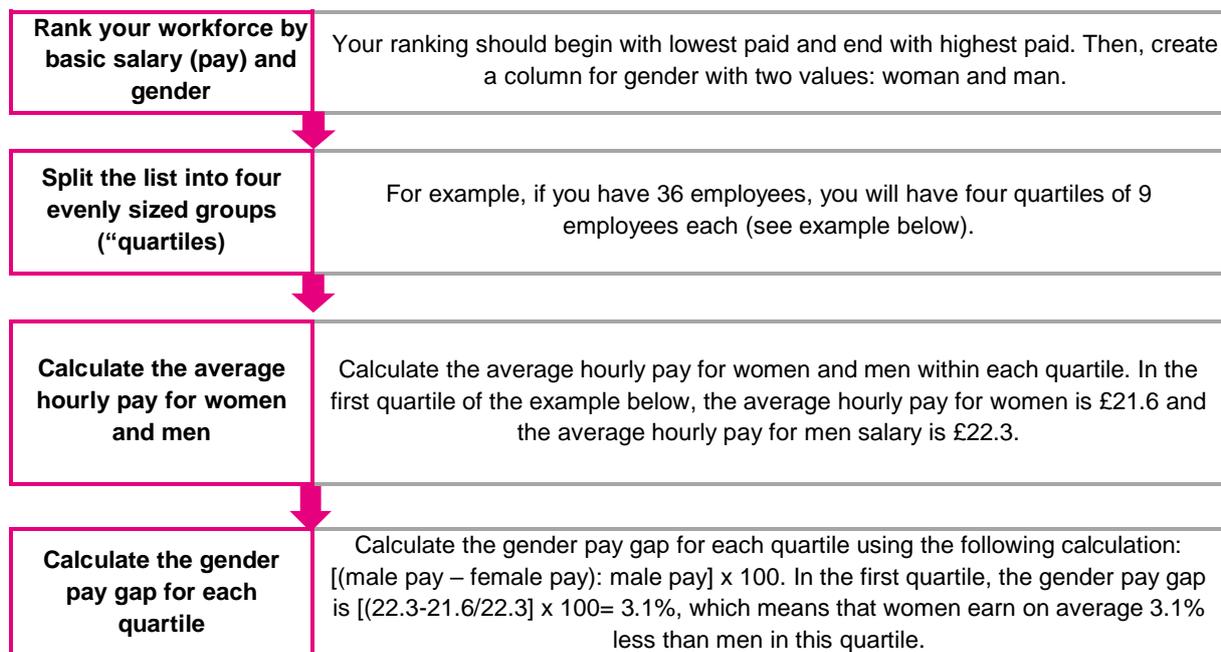
<b>Board (Non-executive directors)</b>	Non-Exec Directors (if applicable)	Non-Executive Directors	Any executive advisors to the Boards responsible for governance who do not hold any decision making powers within the department
<b>Senior Managers</b>	Directors / VP	Partners, Directors, senior managers who are not lawyers, QCs	Senior Civil Service Grades (SCS)
<b>Managers</b>	Assistant VP	Associates, Support staff managers, Barristers in Practice	All other Managers
<b>Others</b>	Analysts/Associates, Other staff	Trainees, Paralegals, Pupils, Others	Administrative Grades (formerly AA and AO)

## Higher Education

BENCHMARK TERM	HIGHER EDUCATION
<b>Board (Executive directors)</b>	Board of Governors + Academic Board (if separate). Any non-executives who sit on the Board of Governors or Academic Board would be counted as “non-executive directors”.
<b>Senior Managers</b>	Staff above the national framework agreement pay scale. Includes staff such as Vice Chancellor, Deans of Faculties, Directors, Heads of Departments etc.
<b>Managers</b>	Staff on the national framework agreement pay scale grades 7-10 (excluding associate lecturers). Includes lecturers, senior lecturers, principal lecturers, subject group leaders and senior admin staff
<b>Others</b>	Staff on the national framework agreement pay scale on grades 2-6; support staff, administrators etc.

## Appendix 4

### Calculating the gender pay gap by quartiles



#### **Quartiles are not pay bands and require a different calculation.**

Sometimes, your quartile boundaries will cut through pay bands. If this happens, do not change boundaries (Q1, Q2 and Q3) to accommodate everyone on a single pay scale because this will skew your results. Employees who are on the same pay band *can* be in different quartiles. For instance, in the example below, the quartile boundary between Q1 and Q2 cuts through at £22.67 with 6 employees in the first quartile and 4 employees in the second quartile.

#### **If this happens, you should ensure that the proportion of women and men paid £22.67 is evenly split on either side of the quartile boundary.**

In our example, 40% of employees earning £22.67 are women and 60% of employees earning £22.67 are men. However, they are unevenly split in the table where we find:

- 50% of women and 50% of men in the first quartile
- 25% of women and 75% of men in the second quartile.

The same ratio (40% of women and 60% of men) needs to be kept for both quartiles, above the Q1 line and below it. This means that among the 6 employees in the first quartile and among the 4 employees in the second quartile, 40% need to be women and 60% need to be men. This is equivalent to 3.6 men and 2.4 women in the first quartile and 2.4 men and 1.6 women in the second quartile.

Rank by pay (lowest)

Hourly pay (£)	Pay by rank	Quartile	Gender
20.06	1		Woman
20.09	2		Woman
20.10	3		Man
22.67	4	1	Man
22.67	5		Woman
22.67	6		Woman
22.67	7		Woman
22.67	8		Man
22.67	9		Man
22.67	10		
22.67	11		Man
22.67	12		Man
22.67	13		Man
24.31	14	2	Man
24.44	15		Man
24.48	16		Man
24.81	17		Man
24.87	18		Man
24.87	18		Man
25.09	19	3	Woman
25.25	20		Man
26.46	21		Man
26.70	22		Woman
27.84	23		Man
28.25	24		Man
28.51	25		Woman
28.67	26		Woman
28.82	27	Woman	
30.46	28	4	Man
30.57	29		Man
30.91	30		Woman
31.00	31		Man
31.58	32		Man
31.61	33		Woman
31.90	34		Woman
31.93	35		Woman
31.97	36		Woman

Q1

Ensure that the proportion of women and men paid the same is evenly split on either side of the quartile.

Q2

Divide into 4 equally sized groups

Q3

## References

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Image cover page: <https://stocksnap.io/photo/Y2GUBQIPXD>

Icons: <https://www.iconfinder.com/>

<sup>1</sup> New JNCHES Equality Working Group, *The Gender Pay Gap - A Literature Review*, 22 February 2011

<sup>2</sup> UK Statistics Authority, *Monitoring and Assessment Notes. Gender Pay Gap.*, 11 June 2009

<sup>3</sup> Office for National Statistics, *Full Report - Women in the Labour Market*, 25 September 2013

<http://www.ons.gov.uk/ons/rel/lmac/women-in-the-labour-market/2013/rpt--women-in-the-labour-market.html> [accessed 11 February 2016]

<sup>4</sup> [http://www.ons.gov.uk/ons/data/dataset-finder/-/q/datasetView/Economic/ASHE07H?p\\_auth=mubWi9fS&p\\_p\\_auth=VLSGk05s&p\\_p\\_lifecycle=1&FOFlow1\\_WAR\\_FOFlow1portlet\\_geoTypeId=2013WARDH&FOFlow1\\_WAR\\_FOFlow1portlet\\_diff=2015&FOFlow1\\_WAR\\_FOFlow1portlet\\_UUID=0](http://www.ons.gov.uk/ons/data/dataset-finder/-/q/datasetView/Economic/ASHE07H?p_auth=mubWi9fS&p_p_auth=VLSGk05s&p_p_lifecycle=1&FOFlow1_WAR_FOFlow1portlet_geoTypeId=2013WARDH&FOFlow1_WAR_FOFlow1portlet_diff=2015&FOFlow1_WAR_FOFlow1portlet_UUID=0)

<sup>5</sup> Tim Ross, 'Gender Pay Gap: Firms Forced to Reveal Bonuses', 2015

<http://www.telegraph.co.uk/news/politics/conservative/11953182/Gender-pay-gap-firms-forced-to-reveal-bonuses.html>

[accessed 11 January 2016]

<sup>6</sup> By equity, we mean any stocks and shares the employee receives as part of their employment contract