

The Good Life: The role of employers

Technical appendix

This technical appendix includes two sets of supporting material:

1. the methodology used to construct the CPP Good Employer Index
 - a. [The general principles applied in obtaining the data](#)
 - b. [The details of specific data used for the fourteen measures](#)
 - c. [The methodology used to combine the data source into the CPP Good Employer Index](#)
2. [A mapping of the fourteen measures to other major frameworks of good work](#)

We also separately provide a downloadable dataset (available on the CPP website) which contains the key data and calculations described in this document.

Methodology: general principles

Defining the employers

The report publishes CPP Good Employer Index results for the largest 25 employers in the UK. The largest 25 are defined by the number of full-time equivalent UK employees. We treated as single employers the following:

- **Corporate groups registered in the UK:** This means we treat subsidiaries as part of their UK registered parent company. For example, we treat RBS as the entire Royal Bank of Scotland plc group, which includes Natwest, not just RBS. We define subsidiaries as organisations that form part of the consolidated accounts submitted to Companies House.
- **Consolidated UK businesses that are subsidiaries of foreign corporate groups:** If a large UK employer is owned by a foreign multi-national, we consider just the UK business, including any subsidiaries that they may have. In some cases, this is a clearly defined business, e.g. Asda, for which consolidated accounts are produced. In other cases, e.g. DHL, consolidated accounts are not produced and so we focused on the UK company that provides employee services to other parts of the group.
- **Public sector legal entities:** In line with gender pay gap reporting requirements we treat organisations that are separate legal entities as separate employers. This means that executive agencies are included in departments (e.g. HM Prison and Probation Service within Ministry of Justice) but arm's length bodies such as Network Rail are treated separately.

Our list of the 25 largest employers is based on manual searches of parent companies of large employers listed on the Gender Pay Gap Reporting service and, in some cases, assumptions to convert from headcount to full-time equivalent (see below).

Treatment of subsidiaries

The way we define employers does not always match the format in which the data is published: often this is for individual companies or for brands rather than corporate groups. In

these cases we matched the data source to a list of subsidiaries taken from company accounts, or popular names for the organisation. For high volume data such as employment tribunals this was done with a matching algorithm (Excel's 'fuzzy match') combined with manual checks. For cumulative data, we use data for the current list of subsidiaries (as stated in company accounts) even if the subsidiary was not a part of the group at the time of the fine or tribunal.

Number of employees

The number of employees is used to define which 25 employees we consider and as a divisor to equalise other measures (e.g. the number of employment tribunals) across employers.

Where possible we use the average number of full-time equivalent (FTE) employees across the most recent reporting year. Some companies only report headcount, not FTE numbers. In this case it is we estimate FTE:

- If the percentage of workers on part time contracts (%pt) is provided, we assume that part time workers at that employer work the same hours as the UK average part time worker. This is 16 hours, 43% of a usual full-time week.¹
- In other cases, we used the average FTE : Headcount ratio we identified from similar employers that reported both:
 - For retailers, this was 0.68
 - For other employers, this was 0.97

Whilst companies are legally required to report employee numbers, they are not required to distinguish the number of UK employees. This means there will be some small inaccuracies in this data where, for example, an employer includes low numbers of Irish employees in their reported figures or, in a small number of cases, we had to indirectly infer employees from other publishes material.

The list of employee numbers we use, and whether this is reported or calculated, is available in the dataset.

Timeliness

The index, described as "2019" aims to capture the latest available data:

- Where we are reporting a status (e.g. the number of employees or LWF accreditation) we use the latest available data:
 - Where live status data is available (e.g. whether a company is LWF accredited), we extracted it in autumn 2019.
 - Where data is reported, e.g. gender pay gap or accounts data, this usually covers a slightly earlier time period. The exact time period depends on the

¹ Based on 37.5 hour full-time equivalent week and 16.3 hours average actual weekly hours for part-time workers from: ONS (2019) *Labour market statistics time series*. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/timeseries/ybvb>

organisations reporting calendar, but the accounts used cover a reporting year that ends between April 2018 and March 2019.²

- Where we are reporting cumulative data (e.g. the volume of tribunals or fines) we use data for the latest three years (October 2016 – October 2019). This is to balance the fact that this data can be ‘lumpy’ with the need to allow organisations to improve, rather than be burdened with historic offences.

This process means that the index gives an up-to-date reflection of the company, whilst not excluding data that is available only in a less timely manner. All data can be updated annually – dependent.

Methodology: obtaining the measures

LWF Living Wage accredited

Source: Living Wage Foundation website, October 2019

Available at: <https://www.livingwage.org.uk/accredited-living-wage-employers>

NMW violation fines

Source: Department of Business and Industrial Strategy and others. Press releases the ‘naming and shaming’ scheme.

There have been five releases in the three-year period covered: October 2016 to October 2019, although the latest of these is from July 2018 with the scheme currently indefinitely suspended pending review.

Press release	Available at:
February 2017	https://www.gov.uk/government/news/record-number-of-employers-named-and-shamed-for-underpaying
August 2017	https://www.gov.uk/government/news/record-2-million-back-pay-identified-for-13000-of-the-uks-lowest-paid-workers
December 2017	https://www.gov.uk/government/news/17m-back-pay-identified-for-a-record-16000-workers-as-260-employers-are-named-and-shamed-for-underpaying-minimum-wage-rates
March 2018	https://www.gov.uk/government/news/nearly-200-employers-named-and-shamed-for-underpaying-thousands-of-minimum-wage-workers
July 2018	https://www.gov.uk/government/news/record-22400-minimum-wage-workers-to-receive-millions-in-backpay

These five separate releases are compiled into one in our downloadable dataset.

Method: We use the ‘arrear’ amount the employer has been found to underpay its employees, relative to the legal minimum. This is summed for each organisation and divided by the total number of employees.

² The one exception to this is Asda, whose accounts for year ending December 2017 were the latest available when results were prepared. We have subsequently tested the impact of using the December 2018 accounts and found this would not change their ranking or score to 1dp.

Notes: More recent breaches will be omitted as the naming and shaming scheme has been paused since July 2018. The published list does not necessarily represent all breaches committed.

Industry relative pay rating

Source: Glassdoor. Rating for ‘Compensation and benefits’

Available at: <https://www.glassdoor.co.uk/Reviews/index.htm>

Method: Where different sections or subsidiaries of an employer are listed separately, we take the average, weighted by the number of reviews. We include sections or subsidiaries we could identify that have at least 200 reviews or at least 10% of the employer’s total. Scores were retrieved in autumn 2019.

Notes: The index uses three measures from crowdsourced employer review site Glassdoor. These are based on ‘out of five stars’ that employees or ex-employees can leave on the website. The questions asked of reviewers are general, meaning that ratings are likely to be relative to the employees’ expectations, rather than an objective standard. For example, John Lewis scores highest of the 25 employers on ‘compensation and benefits’, despite a median wage below many of the other organisations.³

Employment tribunals

Source: HM Courts & Tribunals Service, *Employment tribunal decisions* webpage

Available at: <https://www.gov.uk/employment-tribunal-decisions>

Method: All decisions from February 2017, when the online service starts, to October 2019 were retrieved from the HMCTS website to form a single dataset using an automated process. A small number of decisions (1%) were not successfully retrieved and so are excluded. The list we retrieved is available in our downloadable dataset.

The listed ‘defendant’ was matched against the list of an employer’s subsidiaries using an automated matching process with manual checks. This process is hindered by numerous discrepancies in how company names were used. Therefore, whilst we have captured the vast majority of these, we may be slightly understating the number of decisions. If an employer was a joint defendant that was counted as one in-scope decision.

The number of decisions is presented in our dataset as per 100,000 employees.

Notes: We count the number of listed decisions an employer was the defendant in. This is not necessarily the same as the number of cases that were upheld – decisions include struck down or withdrawn cases – nor the same as the number of cases that were brought (as they may not reach decision). However, we believe the number of decisions is a good, available

³We estimate John Lewis median total pay as £26k (back calculating from pay ratio and CEO pay) whereas RBS, who have a middling crowdsourced score, have a median pay of £37k and are accredited as paying the real Living Wage.

proxy for employees' contentment with their employer, even if it does not completely represent breaches of employment law.

Career opportunities rating

Source: Glassdoor. Rating for 'Career opportunities'.

See 'Industry relative pay' for method and interpretation.

HSE violation fines

Source: Health and Safety Executive. *Public register of prosecutions*.

Available at⁴: <http://www.hse.gov.uk/ProsecutionsHistory/>

Method: We sum the total value of fines issued to the employer including subsidiaries in the three years to October 2019 recorded on the public register. This total is presented per employee.

Workplace wellbeing award

Source: Mind *Workplace wellbeing awards 2018/19*

Available at: <https://www.mind.org.uk/workplace/workplace-wellbeing-index/index-awards-201819/>

Method: We scored 3,2 and 1 points respectively for organisations that achieved gold, silver and bronze awards, and 0 points otherwise. Where only part of an organisation was recognised (e.g. "HMRC, Customer Services Group") we took the average of the score for that part and a zero score for the rest of the organisation.

Work life balance rating

Source: Glassdoor. Rating for 'Work/Life balance'.

See 'Industry relative pay' for method and interpretation.

Employee owned

Source: Employee Ownership Association and manual checks.

Method: We follow Employee Ownership Association's definition which requires 25% ownership by employees or trusts representing them.⁵ Public sector employers are not treated as employee owned. We interpreted these organisations as equally owned by all citizens: this means that employees only own a small fraction which is not enough to give them the influence that we are trying to capture.

⁴ This website is 'temporarily unavailable' at the time of writing. A downloaded copy as of October 2019 is available in our dataset.

⁵ This precise definition was not relevant for the published index: John Lewis, the only organisation scored as employee owned, is 100% owned. For full definition and list of largest employee owned firms, see: Employee Ownership Association (2019) *The employee ownership top 50 2018*. Available at: <https://employeeownership.co.uk/wp-content/uploads/Employee-Ownership-Top-50-2018.pdf>

Gender pay gap

Source: Gender pay gap reporting service (2018–19 data)

Available at: <https://gender-pay-gap.service.gov.uk/>

Method: We use the difference in median hourly percent figure. Where this is negative (i.e. women are paid more) we treat this as a zero gap. Where possible, we use the consolidated figure for the group, which is often available in published gender pay gap reports but not in the main dataset. If this is not available, we used the figure from the largest constituent company.

Disability Confident signatory score

Source: *Disability Confident: employers that have signed up*; October 2019 list. Department of Work and Pensions.

Available at: <https://www.gov.uk/government/publications/disability-confident-employers-that-have-signed-up>

Method: There are three levels of commitment to this scheme: committed, employer, or leader. We assigned scores of 1, 2 and 3 points respectively for these, and 0 points for employers not signed up at all. If different parts of an employer are signed up at different levels, we take the average points from the best and worst parts of the employer.

CEO pay ratio

Source: Employer annual reports or High Pay Centre

Method: This measure aims to capture the ratio of the total remuneration of the highest paid director to the median worker. We used three methods, in order of preference:

1. Use a self-reported ratio in annual report. We accepted a reported figure whether it used one of the official methodologies that will be accepted from next year, or an employers' pre-existing methodology
2. Using data from the High Pay Centre.⁶ They estimate top to mean (not median) pay, cover only FTSE100 companies and cover the reporting year ending in 2017.
3. Replicating the High Pay Centre methodology using the latest accounts data. This involved calculating average (mean) worker remuneration by dividing total staff costs (excluding social security) by staff numbers. This was compared to the total remuneration of the highest paid director, which employers are obliged to report.

Notes: The ratios will not be exactly comparable where different methodologies are used. However, there is very large variation in the underlying ratios which it is important to capture with the available data.

Self-reports CEO pay ratio

Source: Employer annual reports

⁶ CIPD & High Pay Centre (2018) *Executive pay: review of FTSE 100 executive pay*. Available at: http://highpaycentre.org/files/CEO_pay_report.pdf

Method: We searched company annual reports for any form of top to average pay ratio reporting, and supported this with additional online searches to check if it was reported elsewhere. We accepted any form of reporting, whether it followed one of the methodologies that will be accepted from next year, or an employers' pre-existing methodology.

Social mobility signatory

Source: Social Mobility Foundation *Top 75 employers* and Social Mobility Pledge

Available at: <https://www.socialmobility.org.uk/wp-content/uploads/2019/10/TOP-75.png> and <https://www.socialmobilitypledge.org/supporters>

Method: We scored employers for this binary measure if they are *either* in the Social Mobility Foundations *Top 75 employers* in 2019 *or* a supporter or founder listed on the Social Mobility Pledge website as of October 2019.

Methodology: combining the measures

The CPP Good Employer Index uses a simple structure to combine the fourteen measures used into a single index score and rank. This involves first normalising the measures and then giving equal weight to each of the seven aspects of good employment described in the main report. The objectives of this approach were simplicity and stability (i.e. minimising the impact of new or changed measures on the index). The weighting structure used is designed to consistently give equal weight to the seven aspects of good employment. The choice of this combination methodology is subjective and so we test the sensitivity of the Index to this choice.

A description of the process is provided below and the calculations used can be seen in the accompanying dataset.

Normalisation

To allow all measures to be compared on an equivalent scale, we use a simple normalisation process: for each measure, we assign a score of 1 to the 'best value', a score of 0 to the 'worst value', and linearly interpolate between these points. The best and worst values used in the normalisation are the best and worst actually achieved by the 25 employers included in our 2019 index.⁷ For example, if the best of our 25 companies had no employment tribunals, the worst company had 100 tribunals per worker, and Company A had 20, then Company A will be assigned a score of 0.8.

As we do not wish index scores to be sensitive to the inclusion of extra employers, and wish comparability over time, we recommend continuing to use the existing 'best' and 'worst' values from the published index. These are listed in the dataset. This means that, going forward, new companies the index is calculated for could potentially score >1 or <0 on a measure. We recommend capping individual measure scores at -1 or 2 so that exceptional

⁷ There is one exception to this: The 'best' value for the Workplace Wellbeing Award measure. In this case we define a Gold Award as 'best' (i.e. scoring 1) even though none of the 25 employers actually achieve this level.

individual measures do not come to dominate an employer's overall score. This functionality is built into the online tool and calculator in the downloadable dataset.

Weightings

The index is constructed using a simple structure – each of the seven overarching aspects of good employment are given equal weighting. Within each aspect, all measures are given equal weighting. This means that measures in aspects with more measures effectively have a lower weighting in driving the overall index.

Table 1: Weighting of measures

Aspect	Aspect weight	Measure	'Within aspect' weight	Effective overall weight
Pay and benefits	100	LWF Living Wage accredited	100	33
		NMW violation fines	100	33
		Industry relative pay rating	100	33
Terms of employment	100	Employment tribunals	100	100
Training and progression	100	Career opportunities rating	100	100
Working conditions	100	HSE violation fines	100	50
		Workplace wellbeing award	100	50
Work life balance	100	Work life balance rating	100	100
Voice and representation	100	Employee owned	100	100
Diversity and recruitment	100	Gender pay gap	100	20
		Disability Confident signatory score	100	20
		CEO pay ratio	100	20
		Self-reports CEO pay ratio	100	20
		LWF Living Wage accredited	100	20

We acknowledge that the importance of some factors will vary across sectors, for example, working conditions may be more important for those working in manufacturing. However, we have prioritised making our methodology as consistent and straightforward as possible.

Stakeholders interested in varying the weights themselves, can use our dataset, downloadable on our website, to do so.

Sensitivity testing

The choice of weights is ultimately subjective. We therefore undertook sensitivity testing to understand the importance of this choice which suggested that it will affect the exact

ranking of individual employers, but that their broad positioning, and the conclusions of the report were robust to this.⁸

The simple normalisation methodology we use will tend to give greater weight to binary (Yes/no) measures, as these will always have the maximum or minimum score. We therefore tested an alternative methodology where the normalisation process included scaling to equalise the standard deviation across all measures. This made almost no difference to scores.⁹

⁸ Specifically, we used an alternative simple weighting: giving each of the measures, rather than aspects of good employment, the same weight. This alternative weighting produced similar results: the top four companies remained exactly the same and the overall the correlation between the scores using the two weighting methods was 0.89.

⁹ The correlation of scores to those published was 0.99

Mapping of measures to frameworks

In the report we develop a framework of seven aspects of a good employer and map our fourteen measures against these. This framework is based on, but slightly different from, other leading frameworks of good work.

In this section, we show how our measures could be mapped against two existing frameworks. Our measures mostly cover some parts of the major areas but not all of the sub areas. This reflects that there are many areas of good work on which there is little data at a company level. Some of our measures which relate to diversity and recruitment do not fit in these frameworks.

QulnnE / Taylor Review

The government commissioned *Taylor Review of Modern Working Practices* used the framework from the European QulnnE project to define good work.¹⁰ This has six areas each with several sub-areas. In the table below, we show which sub-area ten of the fourteen CPP Good Employer Index measures could apply to (in some cases, they do not match a specific sub-area but are applied to the area generally). The remaining four measures included in the CPP Good Employer Index relate to diversity or recruitment issues, not the quality of work for individuals, and are not covered by QulnnE.

QulnnE area	QulnnE subarea	CPP Measure
Wages	Pay level relative to national minimum pay and average for required qualifications	1. LWF Living Wage accredited 2. NMW violations 3. Industry relative pay rating
	Pay variability	Gender pay gap
Employment quality	Permanent/Temporary Status	-
	Job Security	-
	Internal Progression Opportunities	Career opportunities rating
	Predictability of Weekly Hours (Overtime - Zero Hours)	-
	Presence/Absence Involuntary Long Hour Work (40 +)	-
	Presence/Absence Involuntary Part-Time Work (<30)	-
	<i>General</i>	Employment tribunals

¹⁰ Department for Business, Energy & Industrial Strategy (2017) *Good Work: The Taylor Review of Modern Working Practices*. Available at: <https://www.gov.uk/government/publications/good-work-the-taylor-review-of-modern-working-practices>

Education & training	Learning Opportunities on the Job	-
	Training Incidence	-
	Training Quality	-
	Opportunities for General vs Specific Skill Acquisition (Transferability)	-
Working conditions	Individual Task Discretion/ Autonomy	-
	Semi-Autonomous Teamwork	-
	Job Variety	-
	Work Intensity	-
	Health and Safety (Physical and Psychosocial)	HSE violation fines
	Supervisory Social Support	-
	Peer Group Social Support	-
	<i>General</i>	Workplace wellbeing award
Work Life balance	Work Time Scheduling (Unsocial Hours)	-
	Hours of Work (Duration)	-
	Working Time Flexibility - Personal Control of Work Hours	-
	Working Time Flexibility - Provisions for Time Off for Personal Needs	-
	<i>General</i>	Work life balance rating
Consultative Participation & Collective Representation	Direct Participation in Organisational Decisions	-
	Consultative Committees- Works Councils	-
	Union Presence	-
	Union Decision-Making Involvement	-
	<i>General</i>	Employee owned

CIPD framework

The Carnegie/RSA's *Measuring Good Work* uses a framework for good work taken from CIPD.¹¹ This has seven dimensions each with subareas. In the table below we match nine of the included in the CPP Good Employer Index to this framework. The remaining

¹¹ Irvine, G., White, D. and Diffley, M. (2018) *Measuring Good Work: The final report of the Measuring Job Quality Working Group*. Available at <https://www.thersa.org/globalassets/pdfs/reports/measuring-good-work.pdf>

five measures relate to diversity or recruitment issues, not the quality of work for individuals, and are not covered by the CIPD framework

CIPD dimension	CIPD subarea	CPP Measure
Terms of employment	Job security	-
	Minimum guaranteed hours	-
	Underemployment	-
	<i>General</i>	Employment tribunals
Pay and benefits	Pay (actual)	1. LWF Living Wage accredited 2. NMW violations
	Satisfaction with pay	Industry relative pay rating
Health, safety and psychosocial wellbeing	Physical injury	HSE violation fines
	Mental health	Workplace wellbeing award
Job design and nature of work	Use of skills	-
	Control	-
	Opportunities for progression	Career opportunities rating
	Sense of purpose	-
Social support and cohesion	Peer support	-
	Line manager relationship	-
Voice and Representation	Trade union membership	-
	Employee information	-
	Employee involvement	-
	<i>General</i>	Employee owned
Work-life balance	Over-employment	-
	Overtime (paid and unpaid)	-
	<i>General</i>	Work life balance rating