Evidence Paper

Monitoring UK job quality – a feasibility study for developing a new approach

Aim of the feasibility study

Following the *Taylor Review of Modern Working Practices*[1], the UK Government now promotes both job creation and job quality, the latter expressed as 'Good Work'.[2] A UK Government Minister also now has responsibility for promoting and reporting on Good Work. In doing so, being able to measure the extent of Good Work and being able to identify points of strength and weakness in the UK's stock of Good Work is vital. The Taylor Review recommended that a set of standard measures of job quality be developed for the UK. Having the data to support this set of measures is required yet creating such data within large scale national data sources is problematic. This project seeks to ascertain the feasibility of a plan to use information already available within large-scale data sources to derive proxy measures of job quality for the UK.

Emerging out of the *Taylor Review*, the Measure Job Quality Working Group[3] was established to develop the measures of jobs quality. It recommended a set of dimensions or indicators of job quality encompassing aspects of pay, security, well-being, work/life balance, social support, job design, and voice. While these indicators have been operationalised via a set of questions to be posed to job holders, the application of these questions on sources such as the Annual Population Survey or Census of Population is not practical because of the additional cost and respondent burden. Instead, variables which are already available within these data sources will be investigated to determine whether they can provide proxy measures for the recommended dimensions of job quality.

This feasibility study has two objectives. First, whether an appropriate set of proxy variables for the dimensions of job quality in large scale data sources be identified. If so, this will facilitate comparative analysis of job quality across relatively small geographical areas and between ethnic groups. Second, whether the dimensions of job quality be aggregated into a single classification. While a single classification implies some loss of information about job quality, the generation of an aggregated indicator, such as the Index of Multiple Deprivation[4], shows how it can provide a readily accessible description of a multi-faceted concept.

If these objectives appear feasible, the study also assesses what additional steps will be required to further inform this approach and specify how might these steps be accomplished.

Background

In 2009 the Stiglitz Sen Fitoussi Commission published a landmark report, questioning the reliance that nations placed on GDP as a measure of wealth accumulation and social progress.[5] Subsequent work has sought to identify other measures that capture information on human

---

1   Taylor M, Marsh G, Nicole D, et al. (2017) Good Work: The Taylor Review of Modern Working Practices. Available at: https://www.gov.uk/government/publications/good-workthe-taylorreview-of-modern-working-practices

2   HM Government (2018) Good Work Plan: https://www.gov.uk/government/publications/good-work-plan

3   Irvine, G., D. White and M. Diffley (2018) *Measuring Good Work: the final report of the Measuring Job Quality Working Group*. Dunfermline: Carnegie UK Trust.

4   See, for example, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833970/File_1_-_IMD2019_Index_of_Multiple_Deprivation.xlsx

5   https://ec.europa.eu/eurostat/documents/8131721/8131772/Stiglitz-Sen-Fitoussi-Commission-report.pdf

health, well-being, and happiness. Among these measures has been research aimed at defining the quality of jobs.[6]

Work has now progressed to the stage where various dimensions of job quality have been agreed by several bodies, and questions that provide information along each of these dimensions have been formulated and tested. Seven dimensions of job quality are recognised, along with 18 sub-elements within these dimensions. These dimensions emerge out of a review of existing research undertaken for the UK's CIPD. They have the support in the UK of employers, trade unions and civil society organisations and were developed with the participation of the UK's Office for National Statistics (ONS).[7] The dimensions are presented below in Figure 1.

Figure 1: Recommended Job Quality Measures

Terms of employment
Job security
Minimum guaranteed hours
Underemployment

Pay and benefits
Pay (actual)
Satisfaction with pay

Health, safety, and psychosocial wellbeing
Physical injury
Mental health

Job design and nature of work
Use of skills
Control
Opportunities for progression
Sense of purpose

Social support and cohesion
Peer support
Line manager relationship

Voice and Representation
Trade union membership
Employee information
Employee involvement

Work-life balance
Over-employment
Overtime (paid and unpaid)

Source: Irvine, G., D. White and M. Diffley (2018) *Measuring Good Work: the final report of the measuring Job Quality Working group*, Dunfermline: Carnegie UK Trust.

The nature of the problem

Information on job quality serves several purposes. It can inform job seekers about aspects of jobs that may not be immediately evident from job adverts or job placement information. It can help inform policymakers about the likely impact on the quality of additional employment provided by inward investments. It can also form an important indicator of the need for spatially

---

6 For a review of research in this area, see: Warhurst, C., S. Wright, and C. Lyonette (2017) *Understanding and Measuring Job Quality.* Research Report Part 1 – Thematic Literature Review. CIPD, London. For details about the development and implementation of job quality measures, see: OECD (2017) OECD *Guidelines on Measuring the Quality of the Working Environment*, Paris: OECD. Also see Norris-Green, M. and Gifford, J. (2021) *CIPD Good Work Index 202*1. Chartered Institute of Personnel and Development, London and Felstead, A., D. Gallie, F. Green and G. Henseke (2019) 'Conceiving, designing and trailing a short-form measure of job quality: a proof-of-concept study' *Industrial Relations journal* 50:1, 2-19.

7 Irvine, G., D. White and M. Diffley (2018) Measuring Good Work: the final report of the Measuring Job Quality Working Group. Dunfermline: Carnegie UK Trust.

targeted measures designed to improve the quality of employment. At present, information of job quality has been generated via relatively small-scale survey sources. While such sources have been important in the development of indicators of job quality, their size limits their use for some of the above stated purposes.[8] In particular, job quality indicators for relatively small geographical areas or demographic groups cannot be derived from existing surveys simply because of sample size limitations.

There is a need for an indicator of the quality of work which satisfies the following conditions:

1. it should build upon and extend work that has developed the dimensions of job quality;
2. it should be capable of being operationalised across a variety of large-scale labour market data sources (census, survey and administrative datasets), thus providing information that would facilitate comparisons across labour markets, by detailed geography and for a variety of demographic groups, and would form a useful addition to some of the major new longitudinal data sources currently under development;
3. it should have good construct and face validity, reflecting the agreed dimensions of the quality of work;
4. it should be relatively inexpensive to implement.

One approach, advocated by the Carnegie UK Trust Job Quality Working Group, would be to replicate the production of job quality indicators within a large-scale data source such as the UK Labour Force Survey using the method adopted by the CIPD from its UK Working Lives Surveys. However, this requires a significant number of questions to be placed on the data source concerned.[9] For large scale data sources, this approach would be costly. It would also place a major burden on survey respondents with a potentially negative impact upon response rates.

An alternative approach is to identify a set of variables that are already in place on most major surveys and censuses. These variables, in different combinations, could then function as proxies for job quality.

What are the variables that could act as proxies for job quality?

Most of the large-scale UK data sources on employment provide information on occupation (SOC2010 or SOC2020) at the level of four digits (occupation unit groups), sector of employment (SIC2007), status in employment (employee, self-employed) and (for some sources) organisation size. Earlier studies have indicated relationships between these variables and aspects of job quality.[10] Large scale data sources that include most of these variables are the Labour Force Survey, the Annual Population Survey (APS), the Census of Population (CoP), and the Annual Survey of Hours and Earnings (ASHE). Many other survey data sources also collect such information, albeit with much smaller sample sizes.

Mapping from the proxy variables to a classification of job quality

The first step in this feasibility study consists of an investigation into possible relationships between the seven indicators of job quality and various proxy variables available in national large scale labour market data sources. The information used for this purpose is derived from

---

[8]   For a review of these sources, see Wright, S, Warhurst, C. and Sarkar, S. (2018) Understanding and Measuring Job Quality. Research Report Part 2 – Indicators of Job Quality, London: CIPD.

[9]   See for example, UK Working Lives Surveys, 2018 – 2021 and Skills and Employment Surveys Series Dataset, 1986, 1992, 1997, 2001, 2006, 2012 and 2017. In the UK Working Lives Surveys, over 90 questions were used to develop the seven indicators of job quality.

[10] See for example, Wagner (1997) on firm size and job quality; Holman and McClennan (2011) on job quality and sectoral growth/decline; Gevaert, De Moortel and Vanroelen (2018) on job quality and employment status; Handel (2005) on job quality and occupations.

the four annual UK Working Lives Surveys, conducted by the CIPD between 2018 and 2021. These surveys are quota surveys[11], administered by YouGov on behalf of the CIPD.

Statistical analysis is used to determine the feasibility of using proxy variables that correlate best with each of the seven indicators of job quality. Issues to be resolved include the level of detail required in each of the proxy variables, particularly for occupation and sector of activity, and the nature of the scales used to characterise the job quality measures.

The CIPD indicators of job quality and their interpretation

A total of 95 questions from the UK Working Lives Surveys were used to construct the seven indicators of job quality, via 18 sub-indices. The questions used to construct each sub-index, and the weightings applied to the sub-indices for the construction of the seven indicators are shown in Appendix table A1.

Given the empirical nature of the way the indicators of job quality have been constructed, a broad approach has been taken to their analysis. The aim is to find a distributional measure that can categorise aspects of the quality of jobs as low quality, average quality, and high quality. The approach followed is similar to that taken by the Index of Multiple Deprivation (IMD) 2019[12], identifying small geographical areas via the quintile or decile distributions of the seven composite indicators of the IMD2019.

Figure 2 gives a graphical presentation of the definition of the three broad categories proposed for each job quality indicator, with a low-quality score attached to the bottom 20% of the distribution, an 'average' score for the central 60 % of the distribution and high quality for the uppermost 20%.

Figure 2: A classification of job quality by quintiles

---
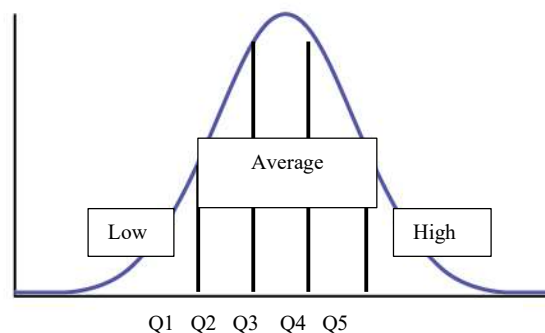
11 A quota survey is a type of survey which does not collect information from a randomly sample of people from a known population. Instead, the interviewer approaches people who fall within certain categories, defined possibly be age, gender and social background and continues to conduct interviews within each category until a specifies quota has been fulfilled. This survey type raises questions about the representativeness of the survey data compared to a random sample population survey. However, given that the interest here lies on the relationships between variables within the survey dataset, the issue of representativeness is not particularly problematic. For details about survey design and sampling, see CIPD (2021) CIPD Good Work Index 2021. Appendix 2: Methodology UK Working Lives Survey

12 See McLennan, D., S. Noble, M. Noble, E. Plunkett, G. Wright and N. Gutacker (2019) *The English Indices of Deprivation. Technical report*. London: Ministry of Housing, Communities and Local Government https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833951/IoD2019_Technical_Report.pdf

Analysis of UK Working Lives Survey job quality indicators

The information used for analysis consists of individual responses to the UK Working Lives Survey from four annual surveys (2018, 2019, 2020, and 2021), provided by the CIPD. This source yields almost 24,000 records, facilitating detailed statistical analysis. In the first stage of analysis all SOC2020 unit groups containing 100 or more individual records were selected for analysis.[13] Results from analysis of these data are shown at Appendix 1, tables A2 – A8. For each of the seven indicators of job quality, the lower and upper quintiles of responses are identified. The bar charts show for each of the seven indicators the proportion of responses in the lower and upper quintile by unit groups of SOC2020. The red vertical line on each chart shows the position of the lowest quintile or the uppermost quintile values for all respondents on each of the seven broad categories of job quality.[14]

These charts show that the scores on the seven broad categories of job quality vary significantly across occupation unit group. Where the deviation from the overall quintile position is 10% or more in a specific unit group, the bar representing the quintile position for that unit group is highlighted in red. Table 1 summarises the number of unit groups that fall significantly below the lowest quintile value or above the highest quintile value for each of the seven indicators of job quality.

Table 1:   Numbers of SOC2020 unit groups significantly exceeding the lower or upper quintile values for the seven indicators of job quality

Indicator of job quality	Number of SOC2020 unit groups significantly below the lowest quintile	Number of SOC2020 unit groups significantly above the highest quintile
Work-life balance	8	12
Pay and benefits	10	13
Terms of employment	11	7
Job design and nature of work	11	9
Social support and cohesion	8	6
Voice and representation	13	12
Health, safety, and psychosocial wellbeing	3	5

Note: these counts relate to the bar charts shown in Appendix 1, representing the number of SOC2020 unit groups for which the specified quintile value is at least 2 standard deviations above the overall quintile value for each job quality indicator. The analysis is restricted to occupation unit groups with 100 or more observations.

Across these distributions, the indicator of Voice and representation shows the most variation, while Health, safety and psychosocial well-being display the least. This finding is consistent with the view that voice and representation arrangements in the UK tend to be voluntary, whereas Health, safety and psychosocial wellbeing are governed by statute.

---

[13] This cut off was selected given that the difference between two sample proportions from a simple random sample of 100 must exceed 10% to be statistically significant. The 2020 version of the Standard Occupational Classification has 412 unit groups. Of these unit groups, 406 are populated in the UKWLS. 69 unit groups in the UKWLS combined file have 100 or more observations, accounting for 66% of all observations in the survey.

[14] The demarcations are not always positioned at exactly 20% and 80% due to the nature of the distributions of scores on each job quality measure.

Do other variables affect these rankings by occupation?

To answer this question, the analysis turns to multivariate techniques, investigating the possibility that it may be that an occupation unit group is reflecting the preponderance of a more dominant set of influences on job quality within a unit group. For example, the observation that nearly one half of all authors, writers and journalists recorded in the UK Working Lives Survey are positioned above the highest quintile for the indicator of work-life balance may be concealing a sharp distinction between those who are self-employed and those working as employees.

Analysis was undertaken by defining a complete set of binary (zero or one) indicators as described below in Table 2. For each indicator two binary dependent variables were also created representing the position of each survey respondent in the quintile rankings as below the bottom quintile or above the uppermost quintile.

Table 2: **Specification of independent variables used in multivariate analysis of rankings on job quality indicators**

Independent variable	Number of binary variables
Occupation unit groups	178 (SOC2020 occupation unit groups with more than 30 observations)
Industry sectors	34 (sections of SIC 2007)
Organisation size	6 (1, 2-9, 10-99, 100-999, 1000+, not known)
Work sectors	4 (private, public, 3rd voluntary sector, not known)
Employment status	2 (employee, self-employed)

Note: organisation size was recorded from answers to the question 'Approximately how many people are employed by your company/employer in the country you live in?'

Logistic regression was used for each job quality indicator and for each limited dependent variable. With seven job quality measures and two binary variables constructed from the quintiles (lowest quintile or above in one case, and highest quintile or below in the other), this provides 14 dependent variables. For each of these dependent variables, the independent variables were analysed in the following manner:

Occupation unit groups
Industry sectors
Organisation size
Work sectors
Employment status
Occupation unit groups and Industry sectors
Occupation unit groups, Industry sectors and organisation size
Occupation unit groups, Industry sectors, organisation size and work sectors
Occupation unit groups, Industry sectors, organisation size, work sectors and employment status

A total of 126 logistic regressions were performed.[15] The results are summarised below.

- Occupation unit groups – the number of unit groups which have a statistically significant correlation with a position in the lowest or the uppermost quintile includes not only those

---

[15] Full details are available on request.

indicated in Tables A2 to A8 but includes others. This increase is a consequence of broadening the analysis to include all occupation unit groups with 30 or more observations.

- Sectors – in the presence of a large set of variables representing 175 occupation unit groups, a significant number of sectors of activity (often referred to as industries) correlate with the indicators of job quality, particularly for the identification of high-quality jobs.

- Organisation size – smaller organisations score better in terms of Work-life balance and Social support and cohesion, but fare less well on Terms of employment, and Health and wellbeing. Larger organisations score more highly on Pay and benefits.

- Work sectors – public sector workers report higher quality scores on the dimensions of Pay and benefits, Terms of employment and Voice and representation.

- Employment status – those workers classified as self-employed report higher quality work in terms of Work-life balance, Job design, and Health and wellbeing. Unsurprisingly they score low on indicators of Terms of employment, Social support and cohesion, and Voice and representation.

In the presence of these four additional variables, the number of occupation unit groups which are significantly below or above the lowest and highest quintile values, as was shown in Table 1, are recorded in Table 3 below. Statistical significance (5%) is calculated from the standard errors of the coefficients in the logistic regressions.

Table 3: **Numbers of SOC2020 unit groups significantly exceeding the lower or upper quintile values for the seven indicators of job quality, with controls for sectors, organisation size, work sectors and employment status**

Indicator of job quality	Number of SOC2020 unit groups significantly below the lowest quintile	Number of SOC2020 unit groups significantly above the highest quintile
Work-life balance	18	14
Pay and benefits	17	35
Terms of employment	11	16
Job design and nature of work	11	36
Social support and cohesion	10	20
Voice and representation	10	21
Health, safety, and psychosocial wellbeing	14	7

Note: these counts represent the number of SOC2020 unit groups for which the specified quintile value is significantly different above the overall quintile value for each job quality indicator. The analysis is restricted to occupation unit groups with 30 or more observations.

Can a single measure of job quality be constructed?

The use of single measure of job quality is a controversial issue, given that what constitutes Good Work depends upon the relative importance an individual places upon each of the seven indicators of job quality.[16]

---

[16] For an overview of debates about the use of objective and subjective measures of job quality, see Knox, A. and Wright, S. (2022) 'Understanding job quality using qualitative research' in C. Warhurst, C. Mathieu and R.E Dwyer (eds) The Oxford Handbook of Job Quality, Oxford: Oxford University Press.

Notwithstanding this problem the indicators can be amalgamated to provide an overall summary indicator of job quality i.e., a single number that 'scores' job quality overall. While this amalgamation may mask some of the variability of the component job quality indicators, it does provide a yardstick for the overall monitoring of job quality in a manner which many statistical users might find helpful.

The intricacies of weighting to produce a single composite measure are outlined succinctly by the OECD/JRC (2008)[17] and have been employed successfully in the construction of the UK Index of Multiple Deprivation. Weighting schemes can vary from a simple majority count across the seven indicators to systems that employ weights derived from user enquiries about the relative importance of each indicator. This issue deserves further exploration.

Review and recommendations

This analysis of information from the UK Working Lives Surveys from 2018 to 2021 indicates that it is feasible to use proxy measures for the various dimensions of job quality. The proxy measures tested include occupation, sector of activity, organisation size, work sector, and employment status. Of these, the predominant proxy measures are the occupation unit groups of the 2020 Standard Occupational Classification, sector of activity (SIC2007 sections), and employment status (employee, self-employed).

It is recognised that this approach has several limitations. First the categories within the classifications that constitute each of these proxy variables cover a number of jobs. The use of these categories as indicators of job quality means that all jobs falling within a single category will be labelled as sharing the same value on a specific quality indicator. For example, the SOC2020 unit group 4215 'Personal assistants and other secretaries' covers jobs such as 'secretary-typist' and 'personal assistant'. These jobs may differ significantly across some of the dimensions of job quality but such variation would be masked due to their common classification to a single unit group. Secondly, while the composite data files from the UK Working Lives surveys provided almost 24,000 observations, this did not yield sufficient information for statistical analysis of many of the smaller occupation unit groups. A data source with a sample size that could provide information from 50-60,000 jobs would be required for this purpose. Thirdly, the job quality indicators that have been analysed within this feasibility study were constructed from many questions and with a variety of weighting procedures. Simply transferring this approach to another large data source is not a practical proposition. Finally, the proposed approach anchors job quality to specific proxy variables. Changes in job quality through time within the jobs categorised by the proxy variables will not be recorded. Adaption might be expected in the future should the seven dimensions be augmented.

Against these limitations, the proposed approach could be implemented easily across several data sources, including the Annual Population Survey and the 2021 Census of Population. This approach would yield detailed information on job quality for small areas such as Census Super Output Areas[18], for specific groups of workers, and for the quality of new jobs created by inward investment.

With these considerations in mind, the following recommendations are made:

Recommendation 1
The number of questions used to produce each of the seven indicators of job quality needs to be reduced to create a manageable set that could be implemented on another data source.

---

[17] OECD and JRC (2008) Handbook on Constructing Composite Indicators: methodology and user guide. Paris: OECD.
[18] https://www.ons.gov.uk/methodology/geography/ukgeographies/censusgeography#super-output-area-soa

Recommendation 2
This smaller set of questions should be implemented within a data source that could provide responses from approximately 50 to 60,000 jobholders. Implementation within one quarter of the UK Labour Force Survey appears to be the most efficient approach for this purpose.[19] This module would provide a sample representative of the working population and would facilitate replication of the provisional results presented in this feasibility study.

Recommendation 3
Detailed statistical analysis of the responses obtained from this larger data source should be used to create a mapping matrix from the selected proxy variables to the seven dimensions of job quality.

Recommendation 4
The resulting job quality indicators should be used to give a broad indication of job quality as being 'below average', 'average' or 'above average'. The lower and upper quintiles of the distributions of these indicators could be equated with 'below average' and 'above-average'.

Recommendation 5
Weighting the indicators of job quality to provide a single indicator of job quality for reporting purposes should be investigated.

These recommendations would provide the basis for indicators of job quality to be mapped on to individual records of job holders recorded in the 2021 Census of Population, as well as the potential to add such indicators to some of the major longitudinal studies currently available or under development. Their implementation would provide for the monitoring, evaluation and reporting of Good Work for the UK that would help support policy development and further research.

Next steps

The next steps required to take forward these recommendations are as follows:

Stage 1: Validation
The aim of this stage is to develop a preliminary mapping matrix based upon the job quality indicators in the UK Working Lives Survey and the proxy variables. It would then to examine the variation between the two approaches for various demographic groups and geographical areas. Application of the mapping matrix to the combined survey data from the UK Working Lives Surveys 2018-2021 (with the possible addition of survey results for 2022) could then be used to examine the correspondence between the predicted indicators of job quality obtained from the use of proxy variables with those derived from specific questions about job quality included in these surveys. Although appearing somewhat tautological, in that the mapping matrix will have been derived from these same survey responses, the aim would be to provide information about the variance between the proxy variable mapping approach and that obtained from direct questions.

Stage 2: Making use of the Labour Force Survey
The next stage would be to implement these procedures using information from the Labour Force Survey. This will require further investigation of the proposed changes to the Labour Force Survey, in terms of available questions relating to job quality[20] and sample size. As with the analysis of the UK Working Lives Survey, the aim would be to test how well the indicators of job

---

[19] The Office for National Statistics is currently reviewing plans for an increase in the quarterly sample size of the LFS and for streamlining the questionnaire. For details see https://blog.ons.gov.uk/2022/03/29/making-everybody-count-how-were-transforming-the-labour-force-survey/

[20] Appendix table A9 lists current questions available in the UK Labour Force Survey that are related to dimensions of job quality.

quality obtained by mapping from proxy variables match with the responses to relevant questions included in the Labour Force Survey.

It is anticipated that completion of both stages would take approximately one year and would require a research budget in the region of £30-40,000. It would be advisable to form a partnership with the Office for National Statistics in any approach for research funding.

Appendix

The seven dimensions of the CIPD Good Work Index were calculated from 18 sub-indices, which in turn are derived from a total of 95 survey items. The relationships between the seven Good Work dimensions, their corresponding sub-indices and the survey items are summarised in Table A1. Also indicated are the weightings attached to each of the sub-indices. Further technical details of the construction of the CIPD Good Work Index can be found in Appendix 2 of the 2019 UK Working Lives survey report.

Table A1: CIPD Good Work Index

Index	Sub-index (% weighting)*		Survey item
Pay and benefits (subjective)	Subjective pay (75%)		Considering my responsibilities and achievements in my job, I feel I get paid appropriately
	Pension (15%)		Employer pension contribution as a proportion of salary
	Benefits (10%)		Career development benefits in last 12 months
			Financial assistance benefits in last 12 months
			Food benefits in last 12 months
			Health care and insurance benefits in last 12 months
			Wellbeing benefits in last 12 months
			Enhanced leave benefits in last 12 months
			Social benefits in last 12 months
			Technology benefits in last 12 months
			Transport benefits in last 12 months
Contracts	Security (50%)		How likely to lose job
			How often work at short notice
			Permanent in main job
	Underwork (50%)		Hours usually worked per week
			Hours would like to work per week
Job design	Demand and resources (25%)	Workload (8.3%)	Workload in a normal week
		Autonomy (8.3%)	Amount of autonomy in job tasks
			Amount of autonomy in work pace
			Amount of autonomy in how work is done
			Amount of autonomy in start or finish time
		Resources (8.3%)	I usually have enough time to get my work done within my allocated hours
			I have the right equipment to do my job effectively
			I have a suitable space to do my job effectively
	Skills (25%)		How well qualified for current job
			Person–job skills match
	Development (25%)		Opportunities to develop skills
			Prospects for career advancement
	Meaning (25%)		I have the feeling of doing useful work for my organisation
			I have the feeling of doing useful work for my client(s)
			I have the feeling of doing useful work for society
			I am highly motivated by my organisation's core purpose
			I am highly motivated by the core purpose of my clients(s)

Work–life balance	Balance (33.3%)	I find it difficult to fulfil my commitments outside of work because of the amount of time I spend on my job
		I find it difficult to do my job properly because of mycommitments outside of work
		I find it difficult to relax in my personal time because of my job
	HR practice (33.3%)	Taking time out of the day for personal or family matters
		Flexi-time in last 12 months
		Job-sharing in last 12 months
		The chance to reduce your working hours in last 12 months
		Compressed hours in last 12 months
		Working from home in last 12 months
		Working only during school term times in last 12 months
	Hours (33.3%)	Hours usually worked per week including overtime
		Hours would like to work per week
		Daily commute time
Relationshipsat work	Relationships (33.3%)	Line manager or supervisor
		Other managers
		Colleagues in your team
		Other colleagues
		Staff who you manage
		Customers, clients or service users
		Suppliers
	Psychologicalsafety (33.3%)	If I make a mistake, my manager or supervisor will hold it against me
		People in my team sometimes reject others for being different
		No one in my team would deliberately act in a way that undermines my efforts
	Line management (33.3%)	My boss respects me as a person
		My boss recognises when I have done a good job
		My boss is successful in getting people to work together
		My boss helps me in my job
		My boss provides useful feedback on my work
		My boss supports my learning and development
		My boss can be relied upon to keep their promise
		My boss is supportive if I have a problem
		My boss treats me fairly

Voice and representation	Direct channels (25%)	Employee survey
		Online forum or chat room for employees
		Employee focus groups
		One-to-one meetings with your line manager
		Team meetings
		All-department or all-organisation meetings
	Indirect channels (25%)	Trade union
		Non-union staff association or consultation committee
		How good employee representatives are at seekingthe views of employees
		How good employee representatives are at representing employee views to senior management
		How good employee representatives are at keeping employees informed of management discussions or decisions
	Management (50%)	How good managers are at seeking the views of employees or employee representatives
		How good managers are at responding to suggestions from employees or employee representatives
		How good managers are at allowing employees or employee representatives to influence final decisions

Health and wellbeing	Physical health (50%)	Impact of work on physical health
		Backache or other bone, joint or muscle problems(work-related, in last year)
		Breathing problems (work-related, in last year)
		Heart problems (work-related, in last year)
		Hearing problems (work-related, in last year)
		Road traffic accidents while commuting to or fromwork (work-related, in last year)
		Injury due to an accident while at work (work-related,in last year)
		Repetitive strain injury (RSI) (work-related, in last year)
		Skin problems (work-related, in last year)
		At my work I feel full of energy
		At my work I feel exhausted
	Mental health (50%)	Impact of work on mental health
		At my work I feel miserable
		At my work I feel under excessive pressure
		Anxiety (work-related, in last year)
		Depression (work-related, in last year)

Note: * Information about the derivation of the weights shown in this table can be found in *CIPD Good Work Index 2021 UK Working Lives Survey Appendix 2: Methodology.*

Tables A2 – A8

The following charts display the proportions of the most frequently occurring SOC2020 unit groups[21] that lie within the lowest quintile and the highest quintile of each of the seven indicators of job quality. The vertical red line in each shows the lower and upper quintile values of each indicator for all occupations in the UK Working Lives Surveys 2018-2021. Those unit groups which are statistically significantly different[22] from these values are highlighted in red.

---

[21] Defined as all unit groups with more than 100 observations in the composite data file.
[22] A statistically significant difference is computed as a difference from the quintile value exceeding two standard deviations. The standard deviation is calculated on the assumption that the sample drawn is a simple random sample. Given that this is not the case, the indications of statistical significance must be interpreted cautiously.

ReWAGE

Work-life balance: % in lowest quintile of index by SOC2020 Unit group

Work-life balance: % in highest quintile of index by SOC2020 Unit group

Pay and benefits: % in lowest quintile of index by SOC2020 Unit group

Chief executives and senior officials
Production managers and directors in…
Marketing, sales and advertising directors
Human resource managers and directors
Functional managers and directors n.e.c.
Managers and directors in retail and wholesale
Property, housing and estate managers
Managers and directors in the creative…
Natural and social science professionals n.e.c.
Engineering professionals n.e.c.
IT managers
IT business analysts, architects and systems…
Programmers and software development…
Information technology professionals n.e.c.
Graphic and multimedia designers
Therapy professionals n.e.c.
Other nursing professionals
Higher education teaching professionals
Further education teaching professionals
Secondary education teaching professionals
Education advisers and school inspectors
Solicitors and lawyers
Legal professionals n.e.c.
Chartered and certified accountants
Finance and investment analysts and advisers
Management consultants and business analysts
Business and financial project management…
Quality assurance and regulatory professionals
Newspaper and periodical journalists and…
Engineering technicians
IT operations technicians
IT user support technicians
Welfare and housing associate professionals…
Protective service associate professionals n.e.c.
Authors, writers and translators
Financial accounts managers
Business associate professionals n.e.c.
Buyers and procurement officers
Business sales executives
Marketing associate professionals
Sales accounts and business development…
Human resources and industrial relations…
Other vocational and industrial trainers
National government administrative…
Local government administrative occupations
Book-keepers, payroll managers and wages…
Bank and post office clerks
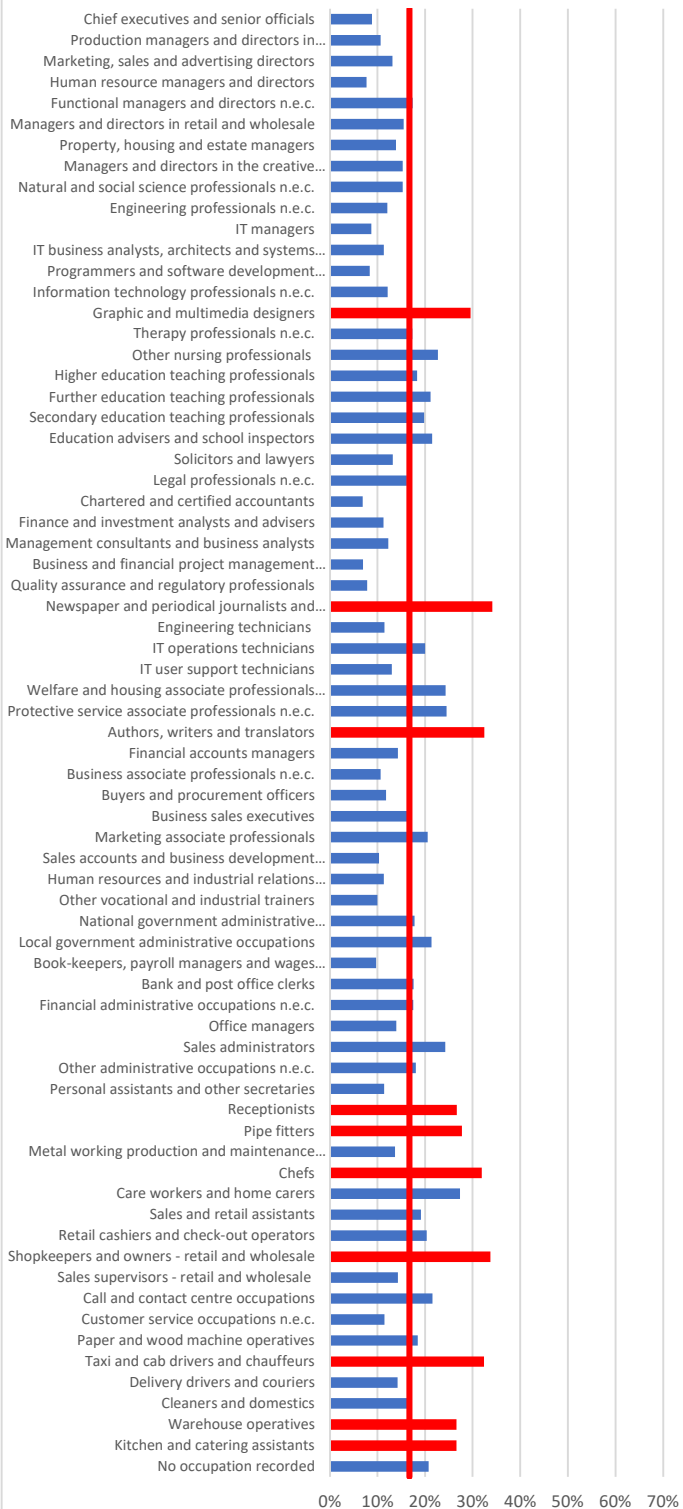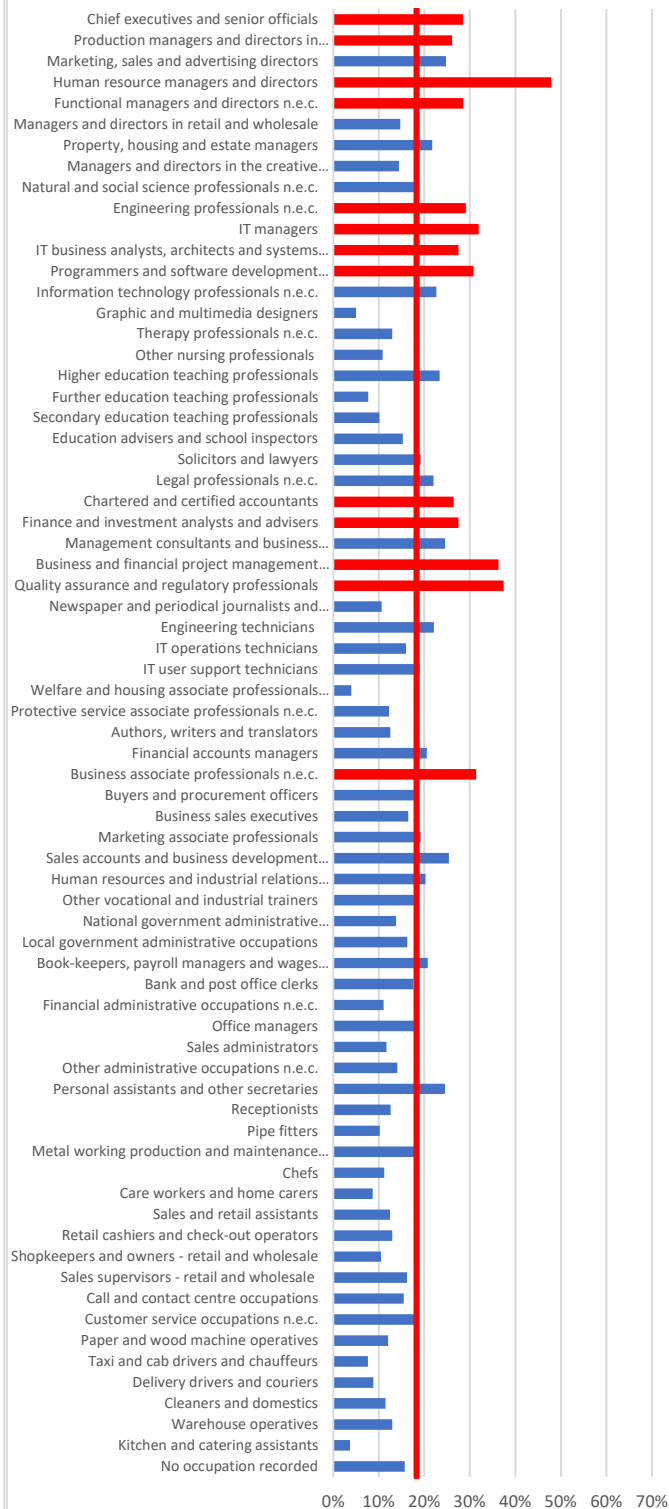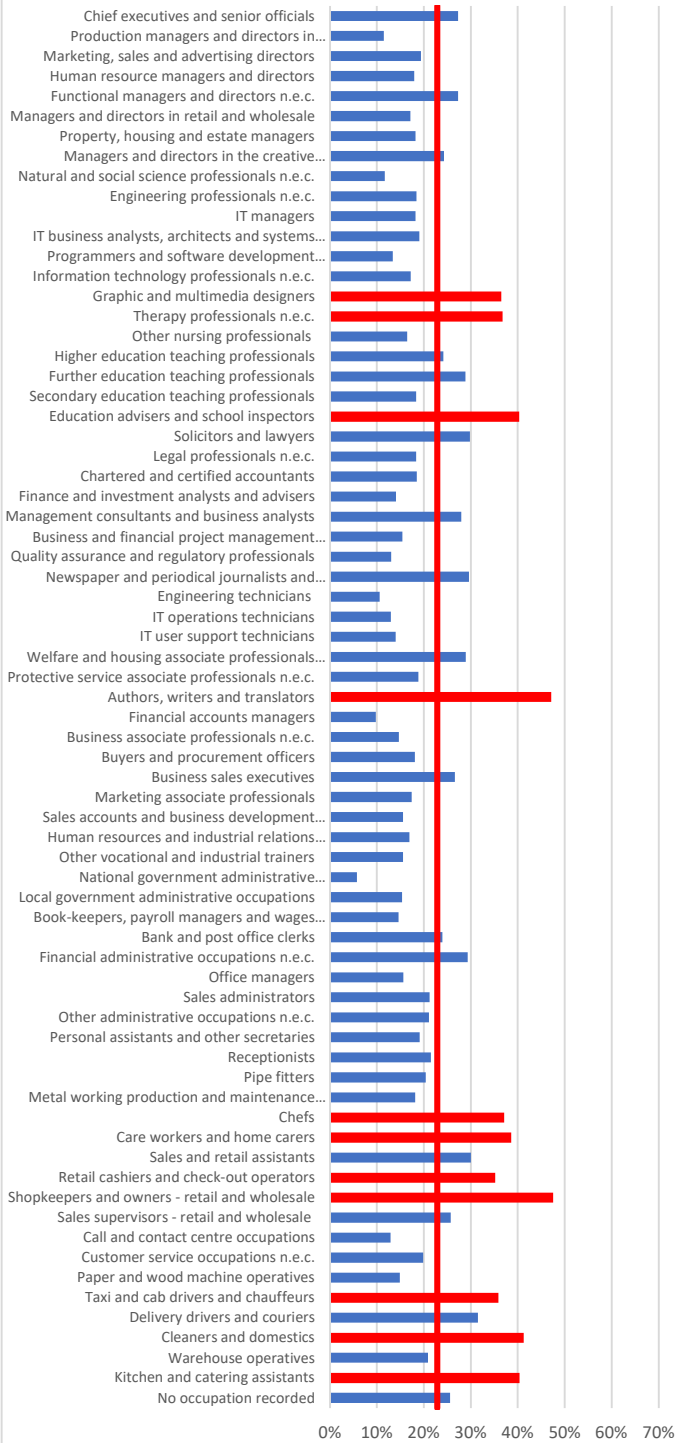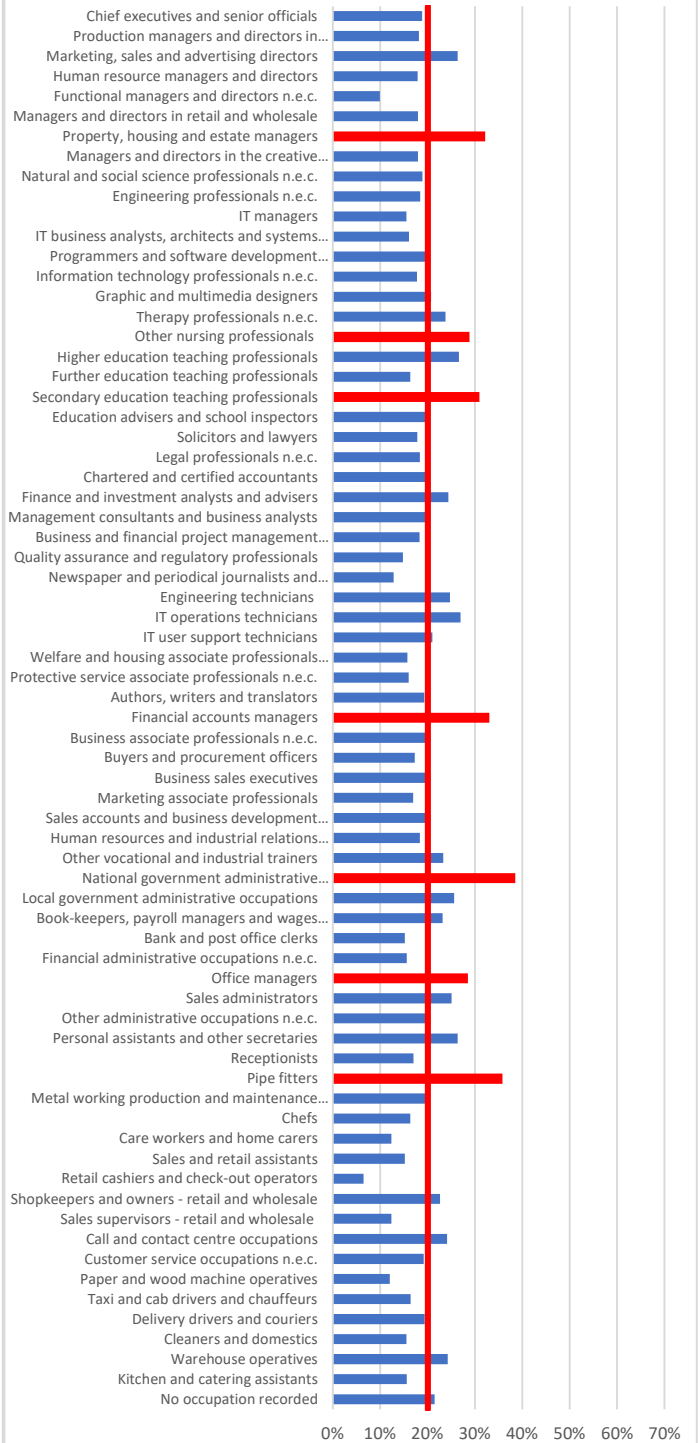Financial administrative occupations n.e.c.
Office managers
Sales administrators
Other administrative occupations n.e.c.
Personal assistants and other secretaries
Receptionists
Pipe fitters
Metal working production and maintenance…
Chefs
Care workers and home carers
Sales and retail assistants
Retail cashiers and check-out operators
Shopkeepers and owners - retail and wholesale
Sales supervisors - retail and wholesale
Call and contact centre occupations
Customer service occupations n.e.c.
Paper and wood machine operatives
Taxi and cab drivers and chauffeurs
Delivery drivers and couriers
Cleaners and domestics
Warehouse operatives
Kitchen and catering assistants
No occupation recorded

Pay and benefits: % in highest quintile of index by SOC2020 Unit group

Chief executives and senior officials
Production managers and directors in…
Marketing, sales and advertising directors
Human resource managers and directors
Functional managers and directors n.e.c.
Managers and directors in retail and wholesale
Property, housing and estate managers
Managers and directors in the creative…
Natural and social science professionals n.e.c.
Engineering professionals n.e.c.
IT managers
IT business analysts, architects and systems…
Programmers and software development…
Information technology professionals n.e.c.
Graphic and multimedia designers
Therapy professionals n.e.c.
Other nursing professionals
Higher education teaching professionals
Further education teaching professionals
Secondary education teaching professionals
Education advisers and school inspectors
Solicitors and lawyers
Legal professionals n.e.c.
Chartered and certified accountants
Finance and investment analysts and advisers
Management consultants and business…
Business and financial project management…
Quality assurance and regulatory professionals
Newspaper and periodical journalists and…
Engineering technicians
IT operations technicians
IT user support technicians
Welfare and housing associate professionals…
Protective service associate professionals n.e.c.
Authors, writers and translators
Financial accounts managers
Business associate professionals n.e.c.
Buyers and procurement officers
Business sales executives
Marketing associate professionals
Sales accounts and business development…
Human resources and industrial relations…
Other vocational and industrial trainers
National government administrative…
Local government administrative occupations
Book-keepers, payroll managers and wages…
Bank and post office clerks
Financial administrative occupations n.e.c.
Office managers
Sales administrators
Other administrative occupations n.e.c.
Personal assistants and other secretaries
Receptionists
Pipe fitters
Metal working production and maintenance…
Chefs
Care workers and home carers
Sales and retail assistants
Retail cashiers and check-out operators
Shopkeepers and owners - retail and wholesale
Sales supervisors - retail and wholesale
Call and contact centre occupations
Customer service occupations n.e.c.
Paper and wood machine operatives
Taxi and cab drivers and chauffeurs
Delivery drivers and couriers
Cleaners and domestics
Warehouse operatives
Kitchen and catering assistants
No occupation recorded

16
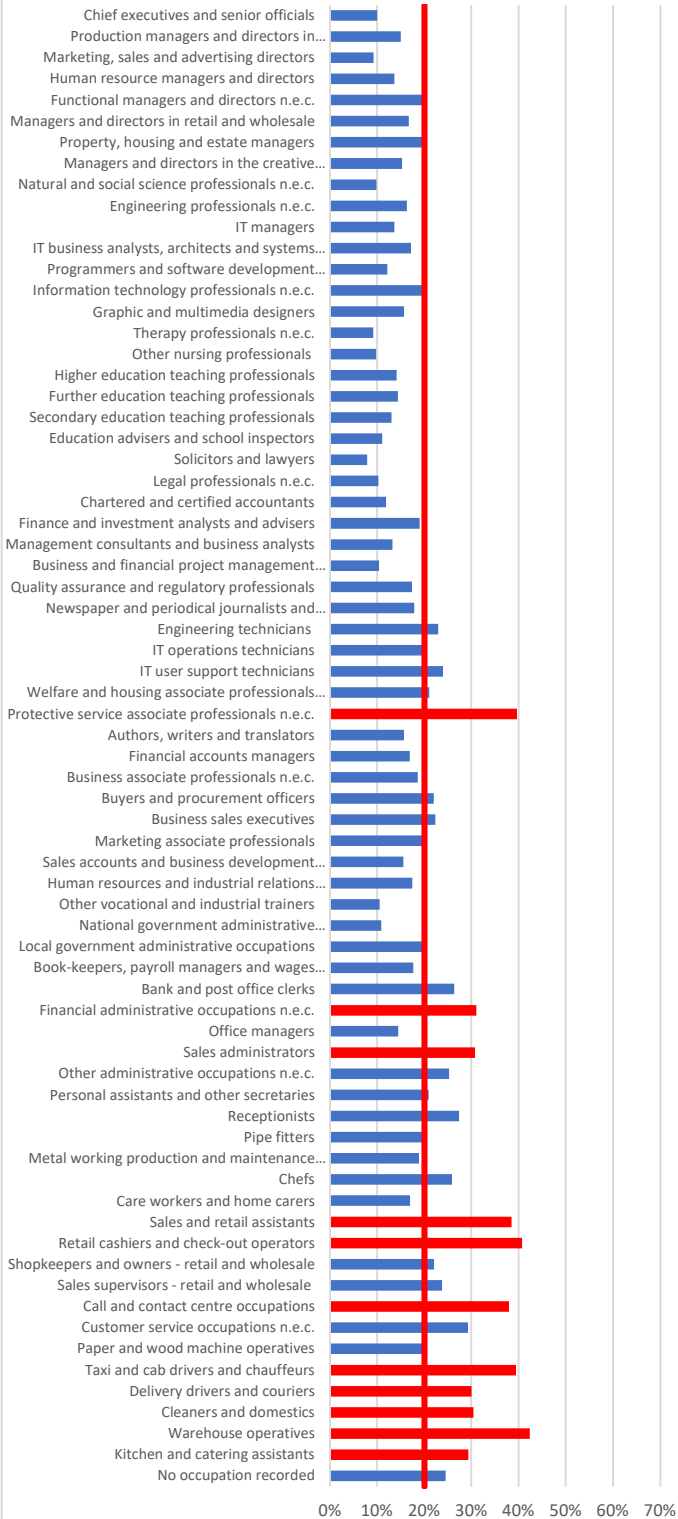
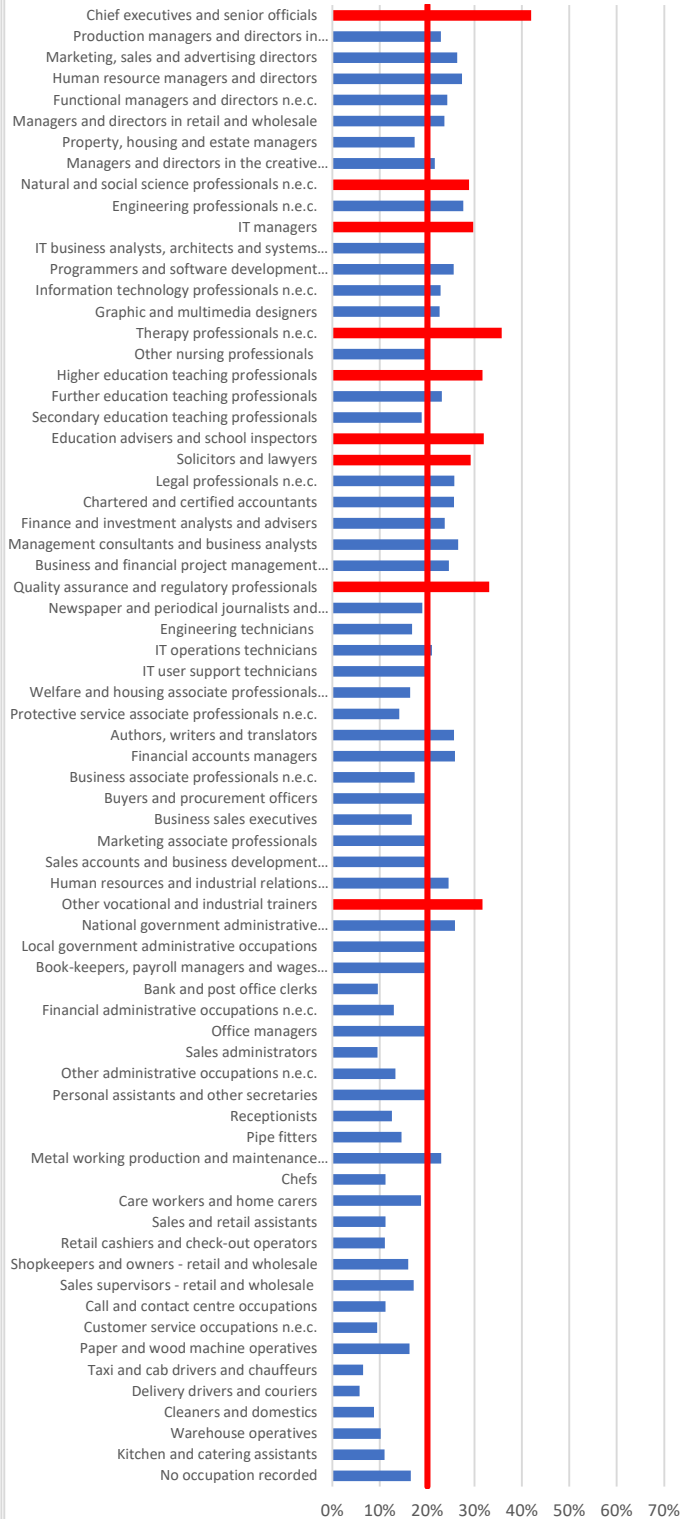Terms of employment: % in lowest quintile of index by SOC2020 Unit group

Terms of employment: % in highest quintile of index by SOC2020 Unit group
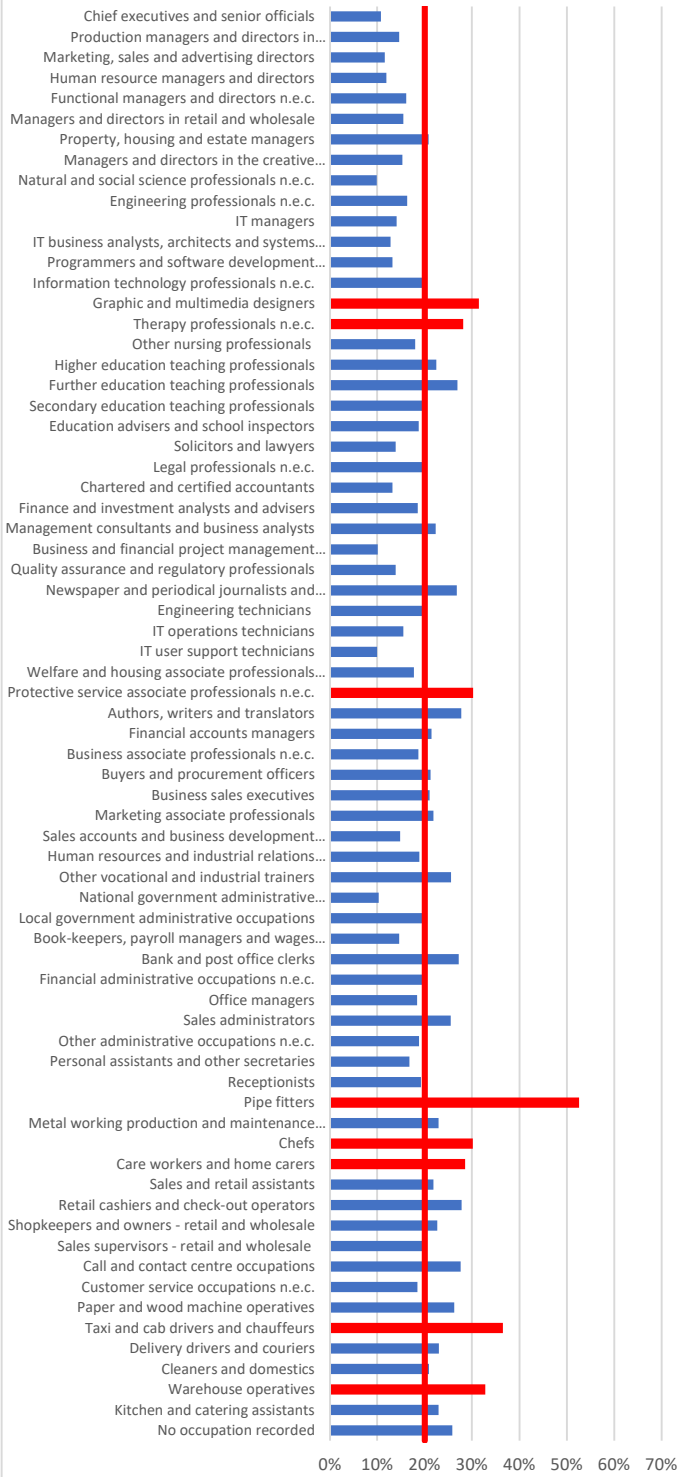
Job design and nature of work: % in lowest quintile of index by SOC2020 Unit group
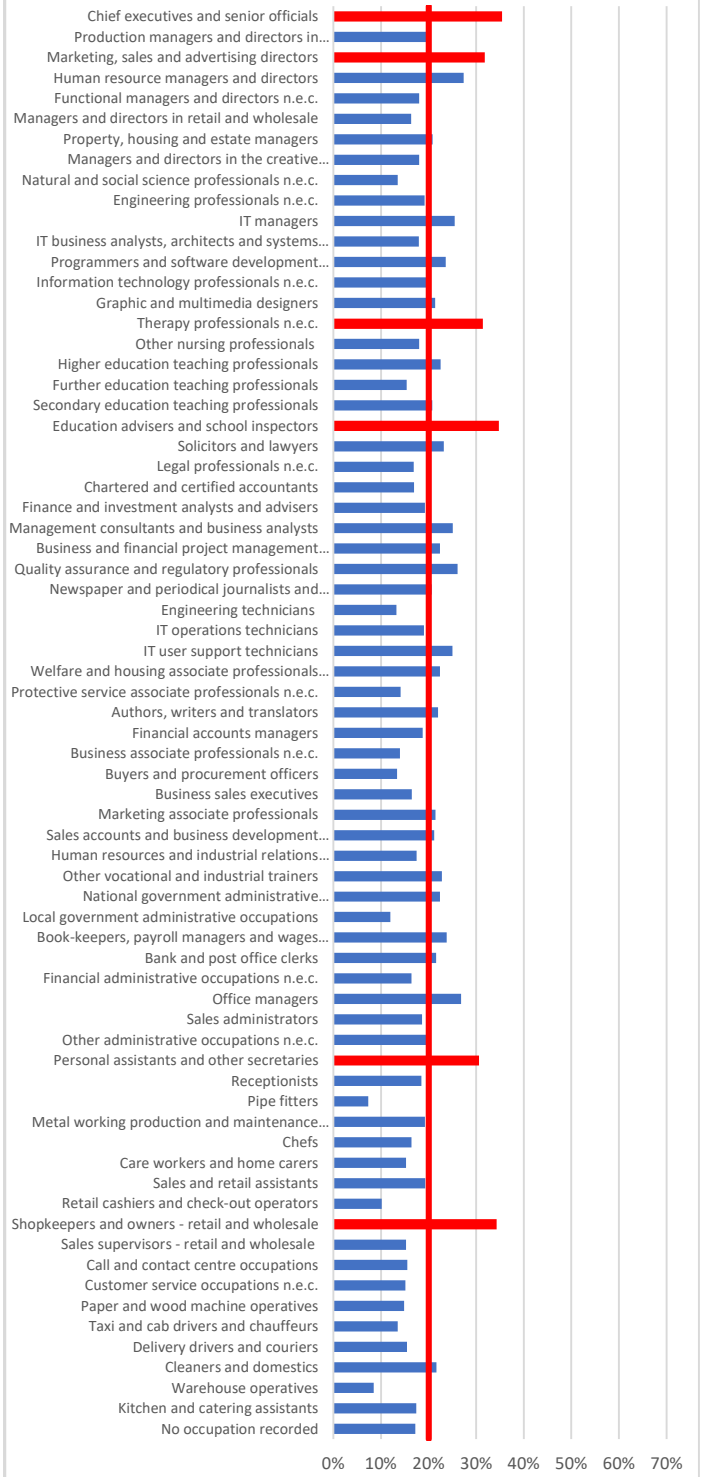

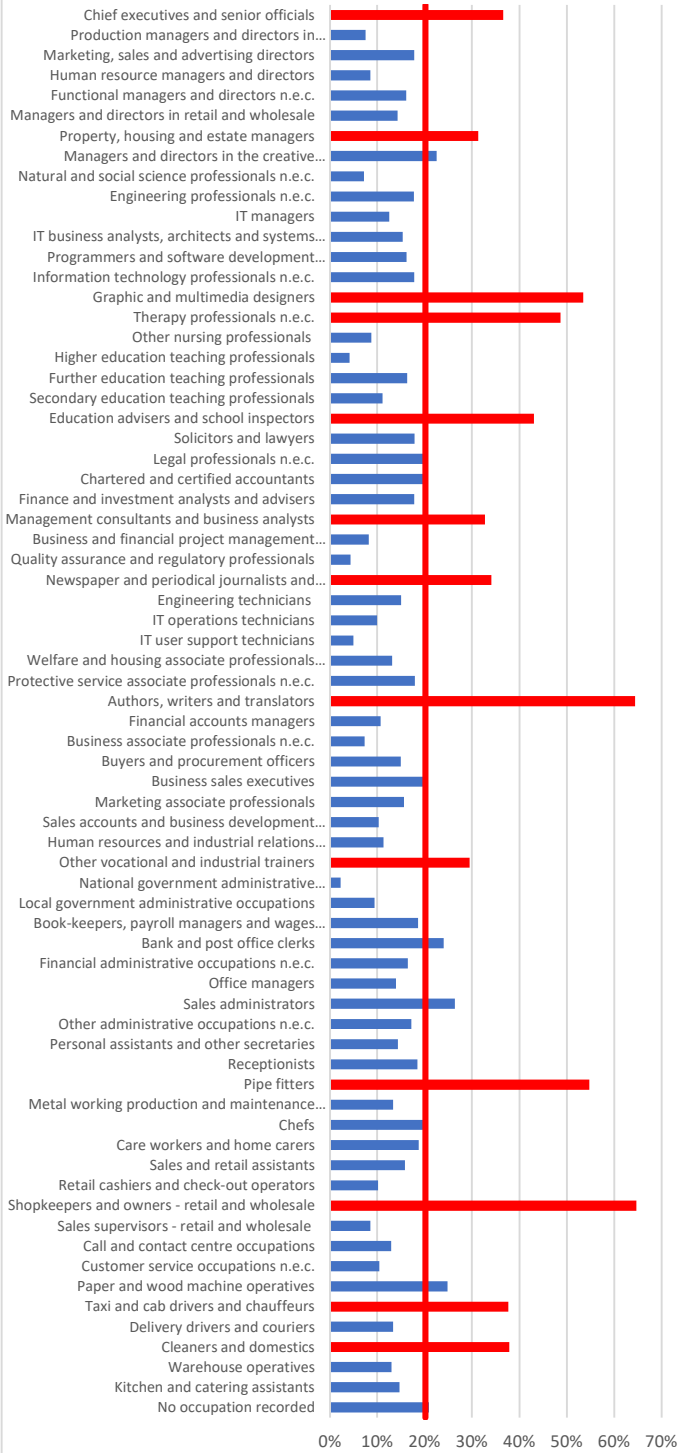## Job design and nature of work: % in highest quintile of index by SOC2020 Unit group

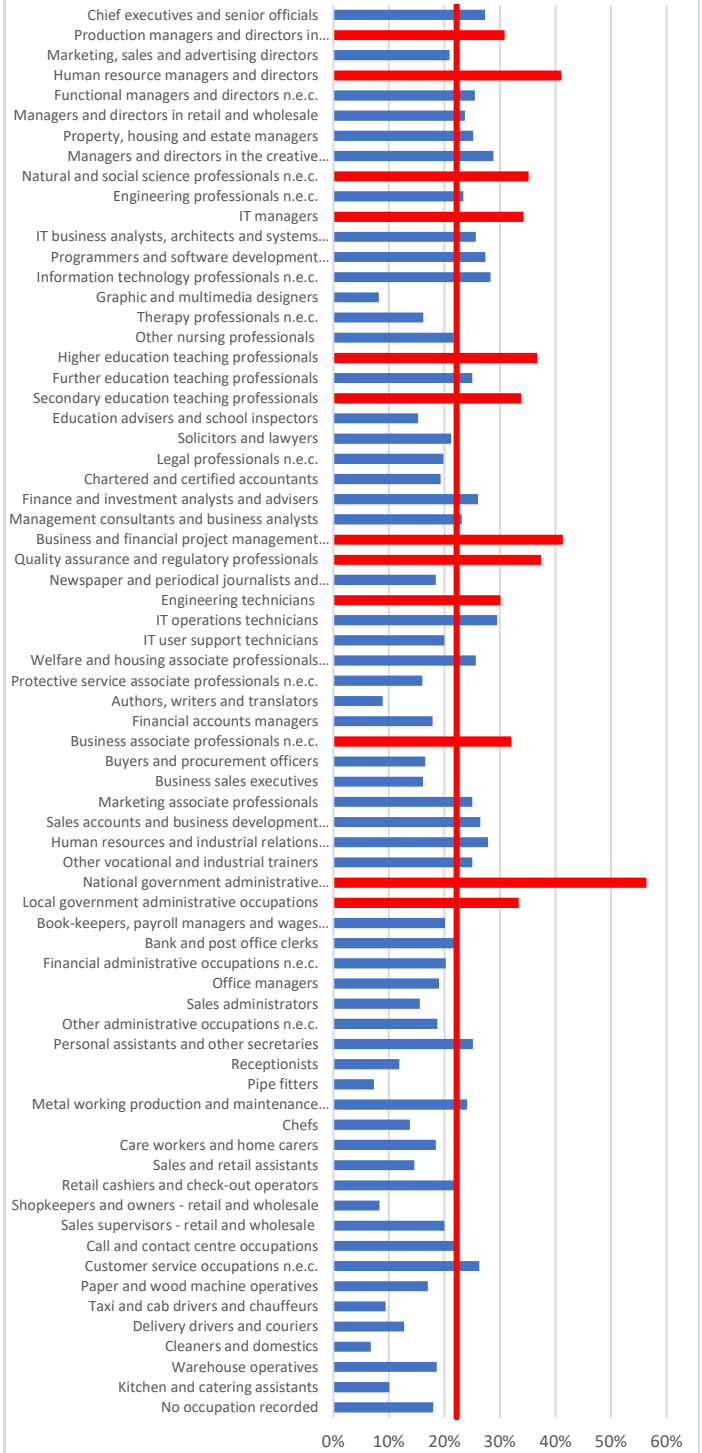Social support and cohesion: % in lowest quintile of index by SOC2020 Unit group

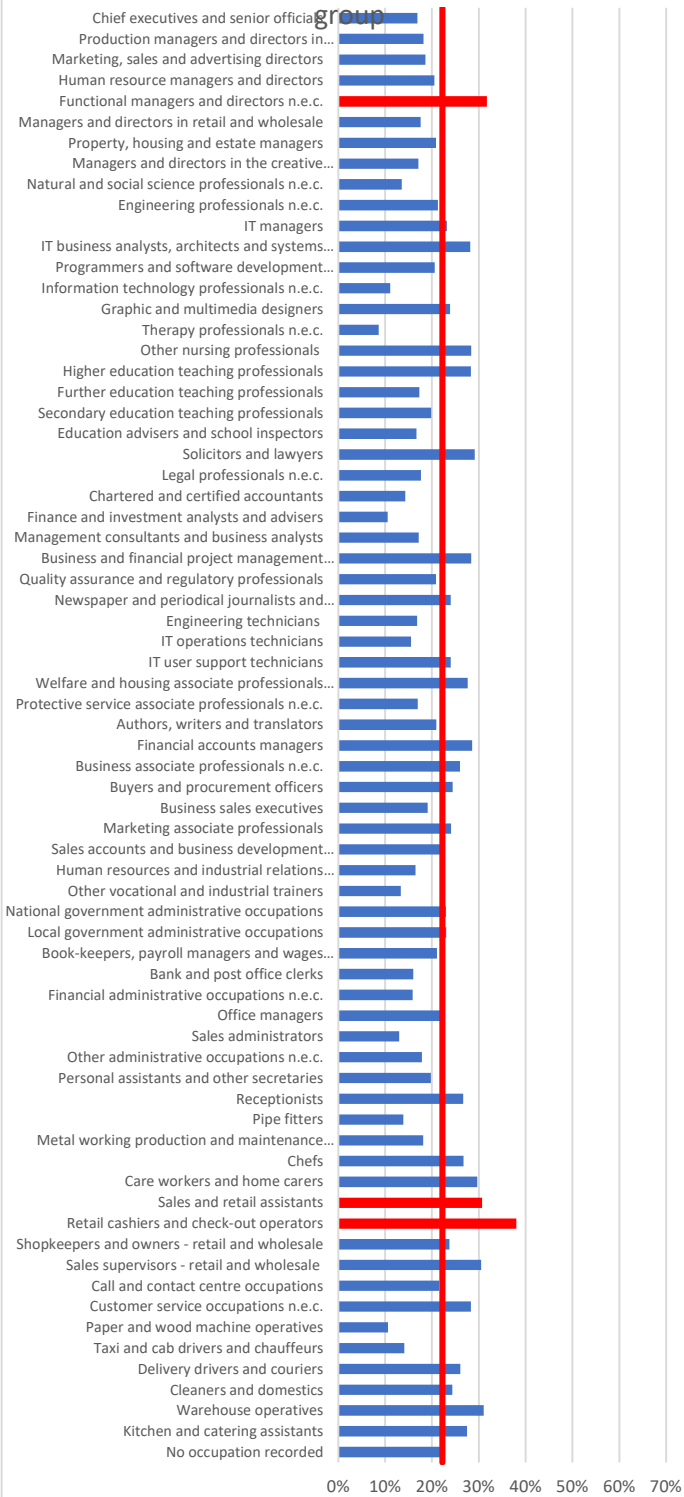Social support and cohesion: % in highest quintile of index by SOC2020 Unit group

Voice and representation: % in lowest quintile of index by SOC2020 Unit group

Voice and representation: % in highest quintile of index by SOC2020 Unit group

Health, safety and psychosocial wellbeing: % in lowest quintile of index by SOC2020 Unit group

Health, safety and psychosocial wellbeing: % in highest quintile of index by SOC2020 Unit group
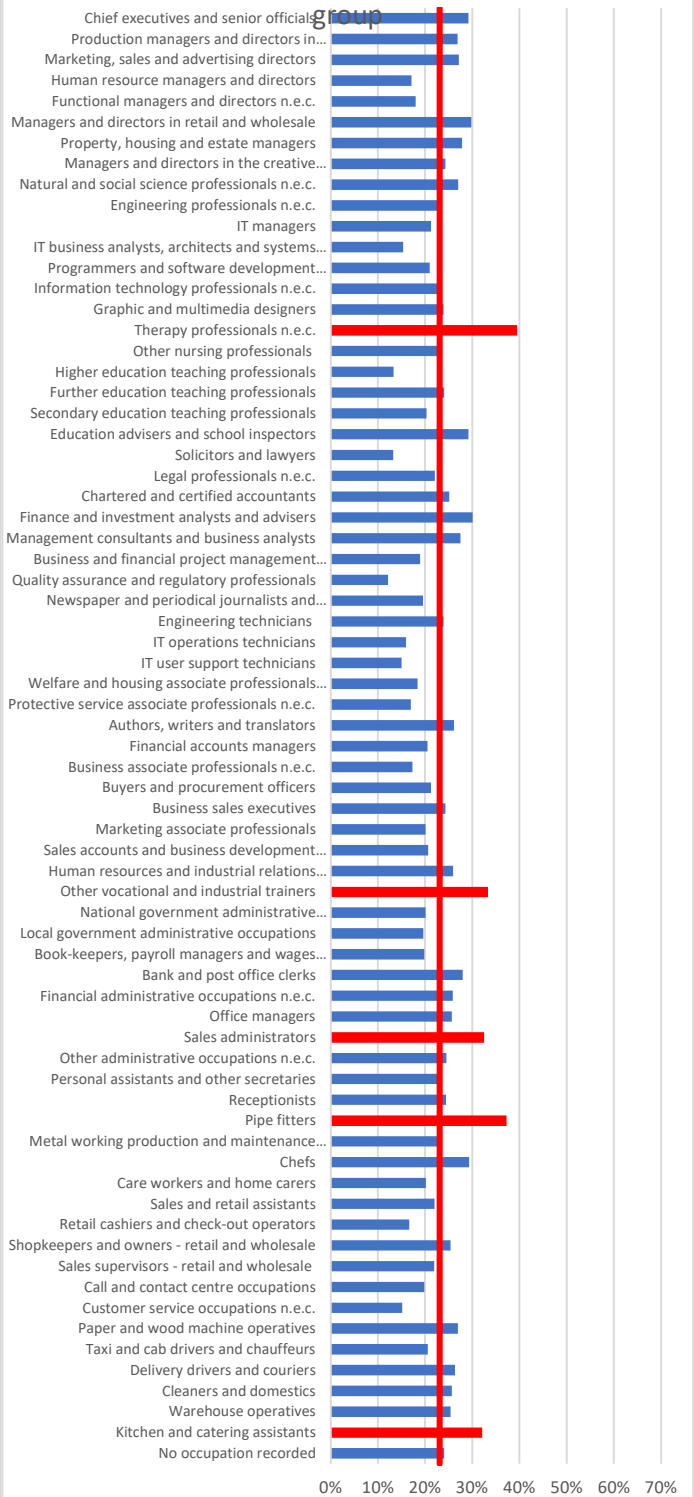
ReWAGE

Table A9

The UK Labour Force Survey has been identified as the most suitable survey[23] to carry additional questions relating to job quality. The table below shows variables already present on the LFS data files that are relevant to the indicators of job quality.

LFS variables relevant to the indicators of job quality

Carnegie report	LFS labels	LFS codes
Minimum guaranteed hours	Type of working hours arrangement	FLEX10
	Respondent has zero hours contract	FLEXW7
Underemployment	Whether would like to work longer hours, at current basic rate of pay	UNDEMP
Pay (actual)	Gross weekly paid in main job	GRSSWK
	Gross pay last time	GROSS99
	Normal gross pay for period	USUGPAY
Physical injury	Accident resulting in injury at work	ACCDNT
Over-employment	Rather work shorter hours for less pay	LESPAY
Overtime (paid and unpaid)	Usual hours of paid overtime	POTHR
	Usual hours of unpaid overtime	UOTHR
	Trade union or staff assoc member (GB)	UNION

---

[23] See Irvine *et al.* (2018, p.6).

ReWAGE

Acknowledgements

The authors would like to thank the following members of a Steering Group who provided much helpful advice and guidance at all stages of this feasibility study:

Matthew Taylor   Chief Executive
(Chair)   NHS Confederation

Mike Brewer   Deputy Chief Executive and Chief Economist
                        Resolution Foundation

Alan Felstead   Professor
                        Wales Institute of Social and Economic Research and Data

David Freeman   Head of Labour Market and Households
                        Office for National Statistics

Jonny Gifford   Senior Adviser for Organisational Behaviour
                        Chartered Institute of Personnel and Development

Mark McAllister   Director of Employment Relations Services
                        Labour Relations Agency

Chris Warhurst   Director
                        Warwick Institute for Employment Research

Patrick Watt   Head of Evaluation and Research
                        Skills Development Scotland

Gill Dix   Head of Workplace Policy
                        Advisory, Conciliation and Arbitration Service

Duncan Gallie   Fellow
                        Nuffield College, Oxford

Hannah Slaughter   Senior Economist
                        Resolution Foundation

Douglas White   Head of Advocacy
                        Carnegie UK Trust

Additional thanks are also due to Melanie Green and Jon Boys at the CIPD for assistance with access to the UK Working Lives Surveys and details of further related work, and to Sally Wright at the IER.

ReWAGE

About the authors

- This evidence paper was authored for ReWAGE by: Peter Elias (Warwick University), Rosie Day (Warwick University) and Jeisson Cardenas-Rubio (Warwick University).

- This evidence paper represents the views of the authors based on the available research. It is not intended to represent the views of all ReWAGE members.

Funding

- ReWAGE is part of an integrated research infrastructure funded in response to COVID-19 by the Economic and Social Research Council. The ESRC is part of UK Research and Innovation, a non-departmental public body funded by a grant-in-aid from the UK government. For more information visit www.ukri.org.

About ReWAGE

- ReWAGE is an independent expert advisory group modelled on SAGE, which supports government's strategic response to the recovery and renewal of work and employment in the UK as it tackles the impact of Covid-19.

- Its recommendations cover: the maintenance and creation of jobs, improving the quality of jobs, ensuring that the workforce has the right skills to access those jobs, and access to training and jobs is available to all. Its scope covers employers, employees and the self-employed.

- Website: https://warwick.ac.uk/fac/soc/ier/rewage/

- For more information: rewage@warwick.ac.uk