Appendix A

Supplementary data tables and significance tests

Tables A1-A7 provide more detailed information on a range of indicators and sub-groups, to supplement the data presented in Section 4 of the paper.

For some of these tables, and for the sub-group comparisons included in the paper, statistical significance tests were carried out to assess whether the differences in index and dimension scores for a given group are significantly different from those of non-group members.

Quantile-Quantile (QQ) plots on the weighted data identified that dimension scores were non-normal at either extreme of the distribution for all dimensions, and survey-adjusted Levene tests found unequal variances in indicators between many pairs of sub-groups. As a result, non-parametric Kruskal-Wallis H tests, Mann-Whitney U tests and Willcoxon tests were carried out as appropriate, depending on whether the two groups were independent or non-independent.

Table A1. Employees - time series of headcount ratios on each indicator, 2012-13 to 2020-21.

Dimension	Indicator	Score	2012-13	2014-15	2016-17	2018-19	2020-21
Earnings	Earnings Sufficiency	Worst	43%	44%	43%	44%	41%
		Middle	18%	18%	21%	17%	18%
		Best	39%	38%	36%	39%	41%
	Earnings Equity	Worst	16%	10%	13%	10%	6%
		Middle	43%	49%	47%	51%	55%
		Best	41%	41%	40%	39%	39%
Insurance	Pension	Worst	47%	35%	28%	23%	22%
		Middle	3%	4%	2%	2%	1%
		Best	50%	61%	70%	76%	77%
Security	Continuous Employment	Worst	12%	12%	13%	13%	13%
		Middle	15%	15%	15%	13%	13%
		Best	73%	73%	73%	74%	74%
	Composite Security	Worst	16%	16%	15%	14%	18%
		Best	84%	84%	85%	86%	82%
Autonomy and Voice	Autonomy	Worst	13%	11%	12%	12%	12%
		Middle	38%	37%	39%	41%	39%
		Best	49%	51%	49%	48%	48%
	Collective Voice	Worst	54%	54%	55%	56%	56%
		Best	46%	46%	45%	44%	44%
Work-life balance	Flexibility	Worst	25%	22%	22%	22%	22%
		Middle	48%	49%	53%	52%	52%
		Best	28%	29%	25%	26%	26%
	Excessive Hours	Worst	14%	15%	15%	14%	13%
		Middle	40%	38%	40%	40%	42%
		Best	45%	47%	45%	45%	46%
Prospects	Managerial Duties	Worst	64%	64%	64%	65%	65%
		Best	37%	36%	36%	35%	35%
	Short-Term Prospects	Worst	73%	75%	76%	75%	79%
		Best	27%	26%	25%	25%	21%

Table A2. Employees - time series of weighted mean index and dimension scores, 2012-13 to 2020-21. Asterisks represent whether the difference between 2020-21 and 2012-13 scores are statistically significant at the 0.05 (*), 0.01(**) and 0.001(***) confidence level.

Dimension	2012-13	2014-15	2016-17	2018-19	2020-21	Change – 2012-13 vs. 2020-21
Index	**3.73**	**3.88**	**3.90**	**3.98**	**3.99**	**+0.26*** **
Earnings (25%)	0.92	0.94	0.92	0.94	0.97	+0.05***
Insurance	0.51	0.63	0.71	0.77	0.77	+0.26***
Security	0.82	0.82	0.82	0.83	0.81	-0.01(n.s)
Autonomy and Voice	0.57	0.58	0.57	0.56	0.56	-0.01**
Work-life balance	0.59	0.60	0.58	0.59	0.59	+0.01*
Prospects	0.32	0.31	0.30	0.30	0.28	-0.04***

Table A3. Self-employed – Time series of headcount ratios on each indicator, 2012-13 to 2018-19.

Dimension	Indicator	Score	2012-13	2014-15	2016-17	2018-19	2020-21
Earnings	Earnings Sufficiency	Worst	60%	56%	58%	61%	63%
		Middle	9%	11%	11%	9%	8%
		Best	31%	34%	31%	29%	29%
	Earnings Equity	Worst	45%	39%	44%	45%	40%
		Middle	24%	28%	23%	25%	28%
		Best	31%	34%	33%	30%	32%
Insurance	Pension	Worst	84%	83%	84%	84%	87%
		Middle	16%	17%	16%	16%	13%
		Best	-	-	-	-	-
Security	Continuous Employment	Worst	100%	100%	100%	100%	100%
		Middle	-	-	-	-	-
		Best	-	-	-	-	-
	Composite Security	Worst	16%	15%	20%	24%	32%
		Best	84%	85%	80%	76%	68%
Autonomy and Voice	Autonomy	Worst	2%	2%	2%	2%	2%
		Middle	10%	11%	11%	13%	14%
		Best	88%	87%	87%	85%	84%
	Collective Voice	Worst	100%	100%	100%	100%	100%
		Best	-	-	-	-	-
Work-life balance	Flexibility	Worst	-	-	-	-	-
		Middle	-	-	-	-	-
		Best	-	-	-	-	-
	Excessive Hours	Worst	24%	23%	21%	19%	18%
		Middle	28%	27%	27%	27%	24%
		Best	48%	51%	51%	54%	58%
Prospects	Managerial Duties	Worst	84%	83%	85%	87%	88%
		Best	16%	17%	15%	13%	12%
	Short-Term Prospects	Worst	85%	90%	91%	90%	92%
		Best	15%	10%	9%	10%	8%

Table A4. Self-Employed - time series of weighted mean index and dimension scores, 2012-13 to 2020-21. Asterisks represent whether the difference between 2020-21 and 2012-13 scores are statistically significant at the 0.05 (*), 0.01(**) and 0.001(***) confidence level.

Dimension	2012-13	2014-15	2016-17	2018-19	2020-21	Change – 2012-13 vs. 2020-21
Index	**2.40**	**2.47**	**2.38**	**2.34**	**2.33**	**-0.07***
Earnings (25%)	0.66	0.72	0.67	0.63	0.66	+0.01 (n.s)
Insurance	0.08	0.09	0.08	0.08	0.06	-0.02*
Security	0.42	0.42	0.40	0.38	0.34	-0.08***
Autonomy and Voice	0.46	0.46	0.46	0.46	0.45	-0.01**
Work-life balance	0.62	0.64	0.65	0.67	0.70	+0.09***
Prospects	0.16	0.14	0.12	0.12	0.10	-0.06***

Table A5. Ethnicity - weighted mean index and dimension scores by ten ethnic groups in Wave 12 (2020-21).

Dimension	White UK	Irish	Other White	Mixed	Indian	Pakistani	Bangladeshi	Chinese	Black Caribbean	Black African
Index	**3.79**	**3.95**	**3.66**	**3.48**	**3.90**	**3.29**	**3.19**	**4.48**	**4.00**	**3.73**
Earnings (/1.66)	0.56	0.59	0.56	0.51	0.64	0.45	0.47	0.78	0.62	0.60
Insurance	0.69	0.70	0.67	0.56	0.70	0.48	0.33	0.78	0.74	0.62
Security	0.76	0.76	0.71	0.65	0.74	0.68	0.64	0.82	0.74	0.64
Autonomy and Voice	0.55	0.61	0.52	0.52	0.56	0.49	0.52	0.60	0.54	0.55
Work-life balance	0.61	0.60	0.58	0.64	0.56	0.64	0.68	0.63	0.67	0.57
Prospects	0.25	0.29	0.26	0.28	0.27	0.24	0.24	0.35	0.29	0.36

Table A6. Region - weighted mean index and dimension scores by Government Office Region of residence in Wave 12 (2020-21).

Dimension	North East	North West	Yorks & Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
Index	3.76	3.81	3.83	3.68	3.73	3.75	3.90	3.78	3.71	3.73	3.88	3.62
Earnings (/1.66)	0.54	0.55	0.55	0.53	0.54	0.57	0.65	0.58	0.54	0.51	0.57	0.49
Insurance	0.71	0.69	0.71	0.68	0.69	0.68	0.64	0.67	0.66	0.72	0.73	0.70
Security	0.75	0.77	0.79	0.76	0.75	0.75	0.70	0.74	0.75	0.78	0.77	0.77
Autonomy and Voice	0.55	0.56	0.56	0.52	0.53	0.53	0.54	0.52	0.54	0.58	0.58	0.56
Work-life balance	0.62	0.63	0.60	0.59	0.60	0.59	0.62	0.62	0.61	0.59	0.60	0.58
Prospects	0.23	0.25	0.25	0.26	0.26	0.27	0.31	0.27	0.24	0.21	0.25	0.20

Table A7. Age - weighted mean index and dimension scores by four age categories in Wave 12 (2020-21).

Dimension	16-24	25-54	55-64	>65
Index	2.66	4.07	3.78	2.94
Earnings (/1.66)	0.31	0.63	0.55	0.41
Insurance	0.35	0.77	0.70	0.29
Security	0.53	0.80	0.78	0.61
Autonomy and Voice	0.41	0.57	0.56	0.51
Work-life balance	0.61	0.59	0.63	0.72
Prospects	0.25	0.29	0.19	0.11

Appendix B

Indicator robustness and representativeness

This section discusses the robustness of the indicators within each dimension of the QoW index; explores some alternative indicators; and gives an overview of how indicators compare with other published statistics.

B.1 EARNINGS

As noted in Section 3.1, the earnings data in in Understanding Society has already been found to compare well with other published statistics. This paper supplements this by comparing the representativeness of the two Earnings indicators.

No equivalent published statistics for the Earnings Sufficiency indicator are available, but I test representativeness by comparing with an alternative indicator on the proportion of employees earning below the Living Wage with published data from the Annual Survey of Hours and Earnings (see Figure A.1). Caution should be advised in over-interpreting this data because in order to make the data comparable, Understanding Society respondents are separated from their waves and put in years, thus affecting their representativeness. Nonetheless, the data suggest a broadly similar proportion of employees scoring low on this indicator in each year.

Following the introduction of the National Living Wage, the UK has seen falling incidences of the proportion of employees on low pay (though not self-employed) (Cominetti et al., 2022, pp. 27–28) and higher increases in nominal pay at the lowest (10^{th}) percentile of the distribution than at higher levels of the pay distribution (Resolution Foundation, 2023; Thwaites, 2022). This index broadly matches this trend, with an improvement in Earnings Equity at the bottom 20% of the wage distribution – particularly in Wave 12. However, it

supplements this analysis by suggesting that trends in Earnings Sufficiency are not so positive, especially for the self-employed due to a corresponding fall in working hours. This highlights the importance of measuring not just *hourly wages*, but *overall take-home earnings* in job quality indices. An exclusive focus on the former may fail to pick up important trends in the interaction of wages, hours worked, and agreed minimum standards of living.

It could be argued that the Earnings Sufficiency indicator should set a different threshold based on wages rather than the Minimum Income Standard. However, this study rejects the use of indicator cut-offs based on LW/LLW thresholds for normative reasons. In addition to the issues described in the above paragraph, there are the following challenges with such a threshold:

- The LW/LLW rates assume 100% take-up of any welfare benefits individuals are eligible for. This means that whilst the rates are an improvement on the Government's National Living Wage, the thresholds are still insufficient for someone to enjoy a minimum standard of wellbeing from work alone.
- The above discrepancy has the effect of making changes in the time series sensitive to changes in welfare provision, rather than any underlying change in job quality.
- The process by which the thresholds account for costs associated with other household members is unclear. It is therefore not clear whether the wage is designed to be sufficient for eg a person with children, and if so how many children; whether childcare costs are included; whether another household member contributes to these costs, etc.

The MIS thresholds do not have these three issues. No assumptions about welfare benefits receipt are made: they are designed to be weekly income thresholds which need to be met in order to enjoy a decent standard of living. This means it is possible to establish whether someone is able to meet these standards from earnings alone, simply by

comparing net earnings to the weekly thresholds. This should not be misinterpreted as making any normative statement about whether individuals should be expected to secure their wellbeing from work alone. Rather, this process ensures that the QoW index measures what it is expressly designed to measure: it means trends in Earnings Equity are less sensitive to extraneous factors which wouldn't reflect an underlying change in job quality. The MIS thresholds are also very explicit about the household costs they capture, making a distinction between costs for a range of sub-groups (see Table A.8). This means it is possible to use these thresholds to establish whether an individual has the Capability to exercise these family-related Functionings, whether on their own or as part of a dual-earning couple.

Finally, in another part of the index, it could be argued that an alternative indicator on insufficient hours should be used, either as a complement to or a substitute for the proposed Earnings Sufficiency indicator. Such a question could ask workers whether they want to work more hours in addition to their current number of hours worked. It should be noted that one significant limitation of Understanding Society is the lack of a question on whether the worker wants to work more hours – one was only introduced in the last two waves, so there is no relevant question for earlier waves. Notwithstanding this, I suggest that the proposed Earnings Sufficiency indicator gives a more objective picture of the sufficiency of working hours: it is less sensitive to a worker's subjective assessment of whether they should work more hours, which could be affected by adaptation – for example, a worker with few labour market prospects, who has effectively given up on increasing their hours, would be less likely to report wanting to work more hours regardless of the sufficiency of those hours plus their wage to meet MIS thresholds.

B.2 INSURANCE

The trends in the Insurance indicator serve as a validation of the representativeness of UKHLS data: they align with ONS

data which show a sharp rise in the proportion of employees covered by workplace pensions following the introduction of Automatic Enrolment (ONS, 2022). The self-employed, who only have recourse to personal pensions, have seen no such improvement.

It would be possible to devise an alternative Pension indicator which treats the self-employed more generously, for example by only assigning them a Best if they contribute to a personal pension. This would not affect the overall conclusions of this paper, since the data already shows sharp differences in the Insurance dimension for employees and the self-employed, which widen over the time series with the implementation of automatic enrolment – it would only serve to slightly reduce these differences. Nonetheless, this approach was rejected for normative reasons. Whilst it may be reasonable to assume that some self-employed workers have pensions which are better quality than employees, in practice employers do not contribute to most personal pensions – depriving the self-employed, and employees without workplace pensions, of crucial opportunities to supplement their pension savings.

Whilst the Pensions indicator is an improvement on other job quality indices, most of which do not have such an indicator, there is still scope for further refinements. Understanding Society does not contain data on the size of the pension pots of respondents, so it is not possible to establish whether respondents who belong to employer schemes have saved enough to enjoy their retirement. Conversely, older respondents with access to a pension may choose not to contribute because they already have sufficient retirement earnings: indeed, people aged over 65 in the QoW index do in fact score significantly worse on the Insurance dimension. Finally, it is not always clear whether Understanding Society's derived net earnings variables deduct for earnings related to employee pension contributions, since this would depend on how the worker reports the income from their payslip (which would usually deduct for pension costs). These could be non-trivial sums for many workers enrolled

onto employee pensions for the first time, reducing their real wages below the MIS thresholds. It is suggested that future research should explore ways of addressing these limitations by making use of a wider range of indicators in Understanding Society, and potentially imputing data from other datasets. The future integration of Conversion Factors and the Capability Set into the index will shed light on aspects of this. For example, it would allow us to distinguish between older workers who aren't contributing to a pension who (a) have no alternative pension, limited assets and few earnings from other household members and (b) have an alternative pension and/or sufficient assets and other household members' earnings.

B.3 SECURITY

It is difficult to find comparable data for Continuous Employment, since Understanding Society has the advantage of (a) surveying all paid workers (employees and self-employed); (b) following those out of the labour force in-between waves; and (c) interviewing workers directly rather than through eg employers. ASHE, by contrast, is an employer survey of employees only. ASHE data suggests that mean job tenure for many workers is very long, standing at 9.8 years in the public sector and 6.7 years in the private sector (ONS, 2017). Whilst this would appear to be consistent with the headcount ratios in the QoW index, any discrepancy could also reflect the different nature of the two populations and survey methods as noted above.

An alternative indicator of Continuous Employment could be developed focussing entirely on prior spells out of paid employment – such as whether the respondent was unemployed or inactive in the previous wave. This would be in line with an indicator used in another application of the Alkire-Foster method to measuring job quality (González et al., 2021). This approach is rejected in this paper, since it is possible to take advantage of the richness of Understanding Society data to create a more comprehensive indicator. The indicator already captures any individuals who were not in

paid employment in the prior wave and/or the wave prior to that, since these people will by definition have less than 1 or 2 waves of continuous employment. However, in addition to this, it also captures (a) anyone self-employed, since by definition they lack the statutory rights associated with continuous employment, thus scoring Worst; and (b) any employees who, despite being continuously employed, have fewer than 1 or 2 waves' continuous service in their current job. It should also be noted that the key question used to create this variable (jbsamr) is asked in such a way as to match the UK's legal framework for continuous employment: it specifically refers to having "worked continuously for the same employer", and an additional prompt in the questionnaire specifically advises interviewers to code workers who have been transferred to another employer under TUPE arrangements as continuously employed.

Although there is little comparable data available, the data on intensity and headcount ratios for Composite Security are markedly better than information on employees' actual contracts would suggest it should be. Indeed, even a majority of *self-employed* workers report having permanent jobs in this indicator (albeit still markedly lower than employees). This is likely due to question ordering in Understanding Society data: workers are *first* asked whether their current job is permanent or temporary, and if they say it is temporary, they are *then* only afterwards prompted for the ways it is not permanent – such as fixed-term contracts, seasonal work, platform labour in the gig economy, etc. Whilst this issue does not affect the overall conclusions of this paper, it is suggested that future indices could arrive at a more objective measure of job insecurity by asking workers a set of binary questions about the existence of specific contractual arrangements *first*. This would likely give a more reasonable picture of the real level of insecure working arrangements in the UK labour market.

B.4 AUTONOMY AND VOICE

As noted in Section 3.2.4, because the number of potential

Autonomy scores is not divisible by 3, the Autonomy indicator assigns the Middle category an extra score. Table A.9 shows that an alternative approach, simply summing up autonomy scores and measuring trends using the weighted means, would have no effect on the trends in QoW since they show a similar stagnation in autonomy scores.

For the Collective Voice indicator, there is a recognised discrepancy in the level of union and collective bargaining coverage across different national surveys, and no clear consensus exists about which survey represents the true levels (BEIS, 2022). Due to discrepancies in question ordering and wording between the LFS and Understanding Society, Understanding Society tends to over-estimate collective representation (by prompting for "staff associations" as well as unions in the question) and under-estimate union membership (by only asking those who report collective agreements in the workplace about their union membership). As a result of this, the Collective Voice indicator in the QoW index should be interpreted conservatively: it should not be interpreted as suggesting the existence of a formal *collective bargaining* arrangement for all respondents. However, for the purposes of an indicator on Union Representation in the QoW index, this is a reasonable question: it reflects the existence of some collective means through which workers can exercise their voice in the workplace.

B.5 WORK-LIFE BALANCE

As noted in Section 3.2.5, the Flexibility indicator assigns a greater weight to improvements in autonomy at the lower end of the distribution. This reflects the fact that very few workers report having a large number of flexible work arrangements in the workplace, suggesting diminishing marginal returns to flexibility. Table A.10 presents the results of an alternative indicator summing up flexibility scores, ie assigning an equal weight to flexible work arrangements across the distribution, and measuring trends using weighted means. The data shows no notable

differences in trends, regardless of the indicator adopted: whilst there is a slight improvement in indicator headcount ratios over the time series for the cut-off approach, the overall picture is of stagnation of Work-Life Balance for employees, as is reflected in the data in Table A.10.

The Excessive Hours data closely corresponds with published data in the Labour Force Survey. For example a 2014 study by the then- Department for Business, Innovation and Skills into the impact of the UK's Working Time Regulations found a similar proportion of employees (13%-15%) worked over 48 hours in 2010-2013 (BIS, 2014, p. 32). LFS data also shows a similar polarised distribution of self-employed hours worked, with a higher proportion working excessive and low hours and a lower proportion in the middle of the distribution (BIS, 2014, pp. 27, 29). The higher incidence of excessive hours partly reflects the fact that the UK Working Time Directive requirement to opt-out of a 48-hour working week only applies to employees, and not to self-employed. The higher incidence of low hours reflects the fact that newly self-employed appear to have poor work histories, and thus are likely accessing what little self-employed work they can given their poor work opportunities (Giupponi and Xu, 2020).

B.6 PROSPECTS

The data on Managerial Duties serves as a validation of the representativeness of Understanding Society data, since it shows an increase in the proportion of solo-self employed within the self-employed population. This is in line with national labour market statistics, which show that the rise in self-employment in the UK over recent decades has been led entirely by solo self-employment (Giupponi and Xu, 2020).

The data on Short-Term Prospects is also in line with other published data, which tend to show a relatively low proportion of workers taking an optimistic view about their future prospects. As with Composite Security, this is partly a reflection of the more subjective nature of this question, and the added complexity of a very narrow timeframe (12 months) for workers to assess their future prospects. This

short timeframe is one key limitation of this indicator. Another key limitation is that it does not account for the quality of the job being done: for example someone in an already good-quality job (i.e. a role which scores highly in other dimensions and indicators) who neither wants or expects a better job will score worse on this indicator than someone in a low-quality job who expects a better role.

These twin limitations of Short-Term Prospects are intended to be addressed in future iterations of this index, using data on the longer-term prospects of different occupations based on their occupational code. This would provide an opportunity to bring together the extensive literature on the future prospects of occupations – such as the resilience of green jobs in the context of the climate emergency, and the use of in-demand skills – into job quality indices.

Figure A.1. Comparison of ASHE and Understanding Society (UKHLS) data on the proportion of employees paid below the Living Wage Foundation's Living Wage by year. ASHE data sourced from Richardson (2021, 8). Note: figure used for illustrative purposes only. As the Understanding Society data here is split into years of interview rather than waves, caution is advised in over-interpreting this data.

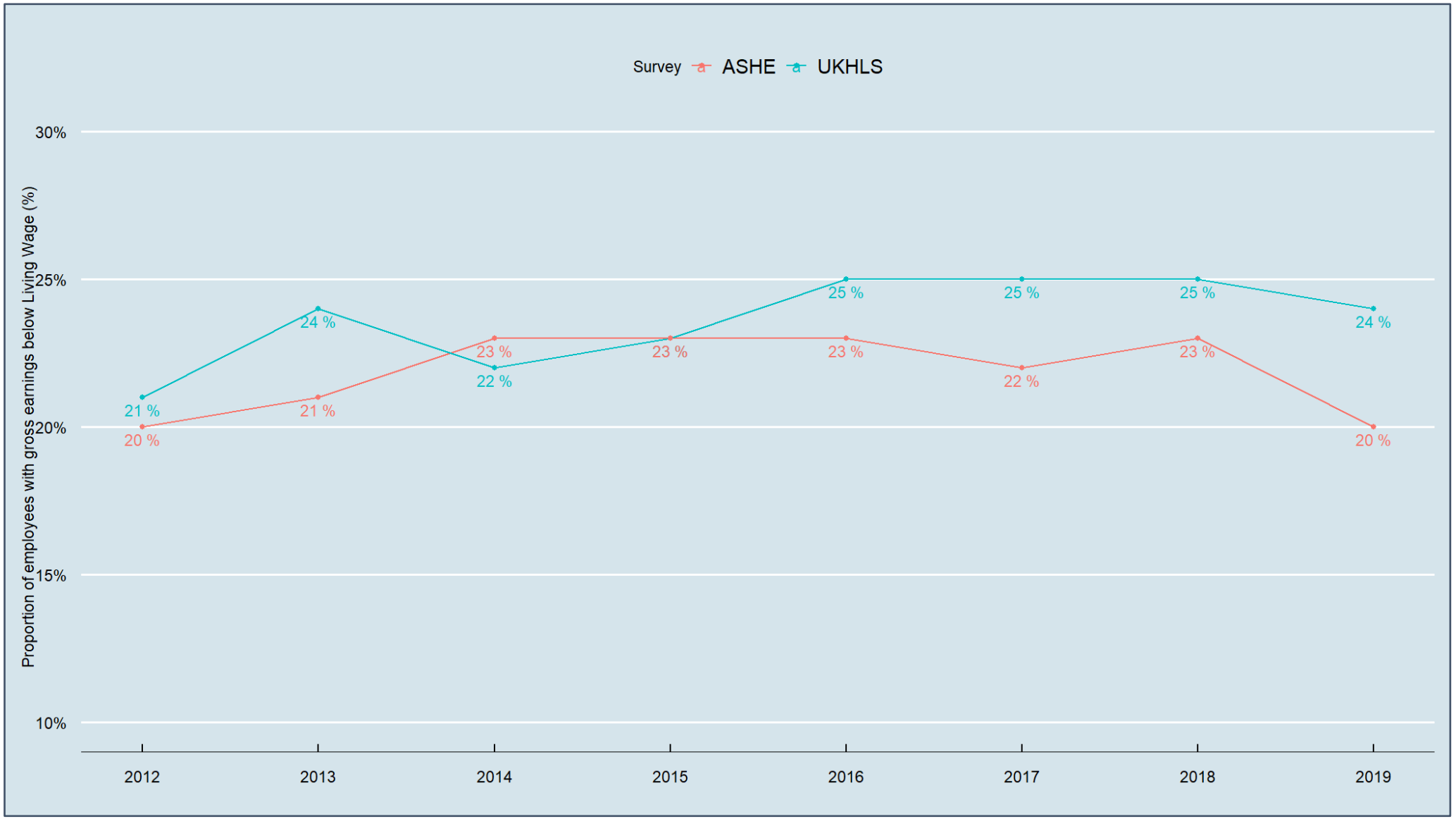

Table A.8 . Published Joseph Rowntree Foundation Minimum Income Standard thresholds for each wave of Understanding Society. Relevant thresholds highlighted.

Year	Understanding Society Wave(s)	Weekly budget including rent, council tax and childcare				
		Single working-age person	One earner couple, two children, no childcare	Two-earner couple + two children, with childcare	Two-earner couple + two children, with childcare (Per person)	Lone parent, 1-2 children
Apr-12	Wave 4	£262.25	£537.19	£685.04	£342.52	£502.80
Apr-13	Wave 4	£273.86	£558.04	£714.61	£357.31	£524.57
Apr-14	Wave 4 & 6	£279.35	£573.62	£735.36	£367.68	£540.06
Apr-15	Wave 6	£282.29	£576.91	£742.53	£371.27	£545.12
Apr-16	Wave 6 & 8	£286.53	-	£776.28	£388.14	£548.56
Apr-17	Wave 8	£296.82	-	£800.17	£400.09	£555.37
Apr-18	Wave 8 & 10	£304.71	-	£772.61	£386.31	£683.02
Apr-19	Wave 10	£313.68	-	£788.99	£394.50	£696.43
Apr-20	Wave 10 & 12	£320.69	-	£806.17	£403.09	£707.70
Apr-21	Wave 12	£325.26	-	£829.80	£414.90	£719.14
Apr-22	Wave 12	£391.98	-	£936.59	£468.30	£827.16

Table A.9. Weighted mean autonomy scores by year. Note higher scores = *lower* autonomy.

Score	2012-13	2014-15	2016-17	2018-19	2020-21
All workers	9.77	9.27	9.61	9.68	9.74
Employees	10.27	9.74	10.09	10.13	10.16
Self-employed	6.54	6.38	6.61	6.24	6.78

Table A.10. Weighted mean flexibility scores by year. Note higher scores = *higher* flexibility.

Score	2012-13	2014-15	2016-17	2018-19	2020-21
Employees	1.84	1.95	1.75	1.79	1.83

Appendix C

Missing values and imputation approach

A.11 contains the weighted missing values for each indicator of the QoW index, broken down by year, as a proportion of all workers. The data show relatively low numbers and proportions of missing values for most of the indicators across the time series. There are five instances where the proportion of missing values goes over 5%:

- The most marked of these is Continuous Employment, where there is a notably higher proportion of missings due to non-response in prior waves.

- There is an unusually high proportion of missing values in Wave 6 for the Pension, Composite Security, Collective Voice and Flexibility indicators. This is a result of the introduction of the Immigration and Ethnic Minority Booster in Wave 6, where some new respondents were not asked relevant questions.

- In Wave 12, there are no personal pension (ppen, ppreg) indicators. Whilst the coverage of employee pension data is good, which captures the vast majority of workers, imputation needs to be carried out to identify the proportion of (a) self-employed and (b) employees who contribute to personal pensions, and thus score "Middle" in the index.

Owing to this, the index imputes missing values using multivariate imputation using chained equations (using the 'Mice' package in R). For the first two of the above three cases imputation is carried out on each wave individually, with imputed scores a function of all other indicator scores, sex, ethnic group and region of residence. A more complex imputation method is used for the third, using projected time series trends.

Table A.11. Weighted proportion of missing values over time for each indicator in the QoW index.

Dimension	Indicator	2012-13	2014-15	2016-17	2018-19	2020-21
Earnings	Earnings Sufficiency	0.0%	0.0%	0.0%	0.0%	0.0%
	Earnings Equity	0.7%	4.5%	1.9%	2.6%	3.2%
Insurance	Pension	1.7%	7.5%	3.0%	2.7%	*No ppen*
Security	Continuous Employment	13.6%	12.7%	11.7%	12.5%	12.9%
	Composite Security	0.1%	5.1%	0.5%	0.4%	0.6%
Autonomy and Voice	Autonomy	0.3%	3.3%	0.6%	0.7%	0.6%
	Collective Voice	2.2%	10.1%	4.6%	3.6%	3.8%
Work-life balance	Flexibility*	0.8%	8.2%	2.4%	2.2%	3.1%
	Excessive Hours	0.9%	2.5%	2.8%	3.2%	3.6%
Prospects	Managerial Duties	0.5%	3.5%	0.2%	0.3%	0.4%
	Short-Term Prospects	0.4%	4.1%	1.1%	0.7%	0.5%

* Self-employed are not scored on the Flexibility indicator. As such, Flexibility missing figures are as a proportion of employees only, excluding the self-employed.

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