

The United Kingdom 2024 World Bank Enterprise Survey Implementation Report

I. Introduction

This document provides information on the World Bank Enterprise Surveys (WBES) implemented in the United Kingdom between April 2024 and March 2025. The WBES collect both objective data based on firms' day-to-day experiences, and perceptions of enterprises regarding the business environment in which they operate. The WBES currently cover over 225,000 firms in 160 countries with a total of 372 surveys since 2006. The WBES are also used to build a panel of enterprise data that will make it possible to track changes in the business environment over time.¹

This report describes the sampling design of the survey, the data set structure as well as additional information that may be useful when using the data, such as information on survey non-response and the appropriate use of the sampling weights.

II. Sampling Structure

The WBES use stratified random sampling, where the population of establishments is first separated into non-overlapping groups, called strata, and then respondents are selected through simple random sampling from each stratum. The detailed methodology is provided in the Sampling Note.² Stratified random sampling has several advantages over simple random sampling. In particular, it:

- produces unbiased estimates of the whole population or universe of inference, as well as at the levels of stratification
- ensures representativeness by including observations in all of those categories
- produces more precise estimates for a given sample size or budget allocation, and
- may reduce implementation costs by splitting the population into convenient subdivisions.

The WBES typically use three levels of stratification: industry classification, establishment size, and subnational region (used in combination). Starting in 2022, the WBES bases the industry classification on ISIC Rev. 4 (with earlier surveys using ISIC Rev. 3.1).³ For regional coverage within a country, the WBES has national coverage.

¹ A “panel interview” refers to an interview with a business that was also interviewed in the previous WBES.

² The Sampling Note is available at:

https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Sampling_Note-Consolidated-2-16-22.pdf. For further methodological background see, Richard L. Scheaffer; Mendenhall, W.; Lyman, R., “Elementary Survey Sampling”, Fifth Edition, 1996.

³ The WBES universe includes: all manufacturing (ISIC 4.0 codes 10-33), services (ISIC 4.0 codes 41-43, 45-47, 49-56, 58, 61, 62, 69-75, 79, 95). Details on sectoral coverage and the WBES universe of inference can be found in the *Enterprise Surveys Manual and Guide* (p. 4).

II.1 Stratification Categories

The United Kingdom 2024 WBES uses the following stratification categories:

- **Industry: 7 categories:**
 - Within manufacturing: Fabricated Metal Products, and Other manufacturing
 - Within services: Construction, Retail, Hotels, Professional Activities, and Other Services
- **Size: 4 categories:** Small (5 to 19 employees), Medium (20 to 99 employees), Large (100 to 249 employees), Top 1% (250+ employees)
- **Region: 7 categories:** London, South England, Midlands and East England, North England, Scotland, Wales, and Northern Ireland.

Industry strata for the manufacturing sector were selected by their contribution to total value added, to employment and to total number of establishments, using data from UNIDO INSTAT 4 available as of fall 2023. The manufacturing sector stratified separately represent 12%, 12% and 21% of total value added, employment, and number of establishments, respectively, with the rest of sectors grouped into a residual, "Other Manufacturing", stratum. By number of establishments, the manufacturing sectors stratified separately represent 2% of the whole ES universe.

The strata for the services sector were selected by contribution to the total number of establishments, using the sampling frame sourced from Orbis BvD. The sectors stratified separately represent 50% of the total number of establishments in the services sector, and 44% of the whole ES universe.

Region strata of the United Kingdom 2024 WBES were selected based on administrative divisions, with some territories grouped together to achieve minimum required precision of estimates at the level of each stratification region. The region strata of the United Kingdom 2024 WBES are: London, South England (composed of South East and South West), Midlands and East England (composed of West Midlands, East Midlands, East of England), North England (composed of North-East; North-West; Yorkshire and the Humber), Scotland, Wales, and Northern Ireland.

II.2 Universe

The universe of inference includes all formal (i.e., registered) private sector businesses (with at least 1% private ownership) and with at least five employees. In terms of sectoral criteria, all manufacturing businesses (ISIC Rev 4. codes 10-33) are eligible; for services businesses, those corresponding to the ISIC Rev 4 codes 41-43, 45-47, 49-53, 55-56, 58, 61-62, 69-75, 79, and 95 are included in the Enterprise Surveys. Cooperatives and collectives are excluded from the Enterprise Surveys. All eligible establishments must be registered with the registration agency. In the case of the United Kingdom, the definition of registration aligns with Companies House or HM Revenue and Customs. The universe table is the total number of eligible establishments, and

the table is partitioned by the stratification groups (industry classification, establishment size, and subnational region) in a country.

For the United Kingdom 2024 WBES, the universe table, shown in Table 1 below, was obtained the Business Registers Strategy & Outputs provided by the Office for National Statistics (ONS). The ONS business register is a comprehensive count of all establishments located within the geographical boundaries of the country. The sub-set corresponding to the standard ES universe was used.

II.3 Sampling Frame

The WBES requires the most complete and up-to-date Sampling Frame, the list of eligible establishments with information on industry classification, size, address and other contact information that will be used to randomly select the sample. In countries where a previous round of the WBES exists, the Sampling Frame also includes the Panel Sampling Frame, which provides information about all the establishments that participated in the previous round of the WBES in the country.

The Sampling Frame for the United Kingdom 2024 WBES was constructed from the following sources (see counts of establishments in the frame in Table 2). Since there is no panel component, the Fresh Sampling Frame, i.e., the list of establishments that are in the WBES universe, for both the manufacturing sector (ISIC Rev. 4 codes 10-32) and the services sector (ISIC Rev. 4 codes 41-43, 45-47, 49-56, 58, 61, 62, 69-75, 79, 95), was obtained from a commercial source (Orbis BvD). This frame includes formally registered establishments employing at least five workers.

For every WBES, necessary measures are taken to ensure the quality of the frame; however, the sample frames are not immune to the typical problems found in establishment surveys: positive rates of non-eligibility, repetition, non-existent units, etc. Given the impact that non-eligible units included in the sample universe may have on the results, eligibility adjustments may be needed when computing the appropriate sampling weights for individual observations (if and only if the weights are computed the sampling frame that is also the universe). Table 4 reports response outcomes.

II.4 Sample Design

The WBES sample design, i.e., target number of interviews in each combination of stratification categories (cells), is generated using the two primary criteria: 1) minimize the difference from the purely proportional sample within each cell; and 2) achieve a sufficient sample size by stratification category to allow for estimates of a given level of precision.⁴ Additional information on the criteria for determining the sample size by stratification category is given in the *Sampling Note*, and additional information on the sample design is given in the *Enterprise*

⁴ Additional constraints are also considered in the design stage. These are generally practical and include, for example, having a sufficient number of available contacts in the sample.

Surveys Manual and Guide.⁵ The original survey design for the United Kingdom 2024 WBES is given in Table 3.

III. Data Collection

The detailed information on the WBES methodology and data collection is provided in the Enterprise Surveys Manual and Guide. The interviews for the United Kingdom 2024 WBES are being conducted between April 2024 and March 2025. The interviews are conducted in English. For monetary variables, the currency is British Pound Sterling (GBP).

III.1 Questionnaire

The standard WBES questionnaire covers several topics regarding the business environment and business performance. These topics include general firm characteristics, infrastructure, sales and supplies, trade, management practices, competition, innovation, capacity, land and permits, finance, business-government relations, exposure to bribery, labor, and performance. Information about the general structure of the questionnaire is available in the *Enterprise Surveys Manual and Guide*.

III.2 Contractor

The fieldwork for the United Kingdom 2024 WBES was implemented by Kapa Research and Perspective Research Services. The selection for the implementing agency followed the standard World Bank procurement practices that are described in more detail in the *Enterprise Surveys Manual and Guide*.

III.3 Sampling and screening

Samples are drawn by the Enterprise Surveys team in batches, following the stratification and sample design. The contractor conducted a thorough screening process before scheduling the ES interviews. Results of the screening are provided using the eligibility and status codes as listed in Table 4. In cases of unit non-response (either a refusal or an inability to obtain an interview after exhaustive attempts), the contractor proceeded with the contact that appeared next in the list drawn in the respective cell. The process of sampling and screening is described in more detail in the *Enterprise Surveys Manual and Guide*.

III.4 Survey response

In all surveys, including the WBES, some respondents choose not to participate. The Enterprise Analysis team and the contractor take all necessary measures to boost participation, through various methods of recruitment. The proper management of the screening process and sample replacement ensures that the resulting sample remains random.

The main measure of survey participation is the yield, which is the ratio of the total number of achieved interviews to the total number of contacted establishments. There are two main

⁵ The *Enterprise Surveys Manual and Guide* is available at:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Enterprise-Surveys-Manual-and-Guide.pdf>

elements that boost yields. First is the survey participation rate, measured as the share of establishments that participated among those that can be assumed to have been eligible. The second element is the quality of frame. If only a small fraction of the contacted establishments is actually eligible to participate in the survey, then the sampling frame is far from ideal. This quality is measured by the ratio of the total number of establishments that can be assumed to be eligible for the WBES with the total number of contacted establishments in the frame. In other words:

$$Yield = Survey\ response\ rate * Rate\ of\ quality\ of\ the\ frame$$

which can be rewritten as follows:

$$\frac{Total\ interviewed}{Total\ contacted} = \frac{Total\ interviewed}{Assumed\ eligible} * \frac{Assumed\ eligible}{Total\ contacted}$$

Table 5 provides these measures for the United Kingdom 2024 WBES and across its stratification levels.

III.5 Achieved Sample

Tables 6 and 7 provide counts of the WBES interviews collected for each stratification cell, i.e., broken down by industry, establishment size, and region. Table 6 reports full sample, while Table 7 shows counts of only panel interviews.

III.6 Sampling Weights

Since the WBES uses stratified random sampling, individual observations should be properly weighted when making inferences about the population, since unweighted estimates are biased unless sample sizes are proportional to the size of each stratum. For each WBES, special care is given to correctly compute sampling weights. Whenever the Universe is used to draw the sample (i.e., Sampling Frame is the same as the Universe) it is imperative to accurately adjust the universe within each stratum to account for the presence of ineligible establishments (e.g., the firm discontinued businesses, or is deemed ineligible due to its business activity or having fewer than five employees). Proper treatment of panel establishments is also crucial. Details about how the WBES sampling weights are calculated are given in the *Sampling Note*.

Three versions of sampling weights are calculated, depending on the assumptions that determine eligibility of establishments to be counted towards the WBES universe. These assumptions are called weak, medium, and strong; and are defined as given in the table below. Prevalence of each of these outcomes for the United Kingdom 2024 WBES is given in Table 4. All indicators and analysis conducted by the Enterprise Surveys team use the sampling weights based on the median assumption. Tables 8-10 report estimated universe based on the respective assumption.

Assumption	Eligibility codes for inclusion in the WBES universe
Strict	1,2,3,4
Median	1,2,3,4,10,11,13,133
Weak	1,2,3,4,10,11,13,133,91,92,93,94,12

For descriptions of each eligibility code, see Table 4.

III.7 Item response rates

Item response rate must be differentiated from survey response rates. The latter refers to participation in the survey itself (see Section III.4) whereas the former refers to the absence of responses to specific survey questions.⁶ The WBES, as any survey, suffer from item non-response; and different strategies are used by the data collection team to address this. In particular:

- For sensitive questions, such as on corruption or tax evasion, enumerators were instructed to collect the refusal to respond (-8) as a separate response category from don't know (-9).
- Establishments with incomplete information were re-contacted to fill gaps.

Table 11 provides item response rates for several key variables, broken down across the stratification levels.

III.8 Database Structure

The WBES datafiles are organized in ways that reflect the corresponding questionnaire. The variables that are standard across countries have the first letter in their name correspond to the questionnaire section where the variable belongs in the questionnaire, i.e., *a1* denotes section A. All variables are numeric with the exception of those variables with an “x” at the end of their names. The suffix “x” denotes that the variable is alpha-numeric.

The WBES datafiles contain two establishment identifiers, *idstd* and *id*. The former is a global unique identifier of each establishment, while the latter is unique identifier within each survey. The variable *idstd* can be used to match the WBES establishment one-to-one across databases. The variables *wweak*, *wmedian*, and *wstrong* corresponding to sampling weights based on, respectively, weak, median, and strong assumptions about eligibility (see Section III.6). The variable *strata* corresponds to the stratum of each observation.⁷

Additionally, the WBES datafiles contain many standard variables. The variable *d1a2_v4* denotes the main activity of the establishment, as obtained during the WBES interview, coded in the four-digit ISIC Rev. 4. Users should note that this activity may differ from the industry classification given in the Sampling Frame, *a4a*. Users are generally advised to use industry categories based on the realized information in *d1a2_v4*. Additional sampling information is contained in variables *a2* (region) and *a6a* (size).

⁶ The WBES questionnaire is organized so that there is always some entry in the database when the question was posed. An empty entry means that the question was not asked to the corresponding respondent, typically, due to skip patterns, or lack of applicability of that question in general.

⁷ Note that the sampling weights may vary within *strata* for panel establishments due to the procedure used for projecting the universe from the previous round of the survey.

The last complete fiscal year for each establishment is contained in variables a20m (last month of last complete fiscal year) and a20y (last complete fiscal year).

Note that when an entry in the WBES database is empty, this means that the question was not asked to the corresponding respondent. This happens when the question is deemed inapplicable, due to skip patterns or other reasons. In cases when the question was posed, some entry is provided, including don't know, which is an example of item non-response.

IV. Useful Links

The users of the WBES data may find the following links useful:

- *Sampling Note* is available at:
https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Sampling_Note-Consolidated-2-16-22.pdf
- The *Enterprise Surveys Manual and Guide* is available at:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Enterprise-Surveys-Manual-and-Guide.pdf>
- The WBES global questionnaires are available at:
<https://www.enterprisesurveys.org/en/methodology>
- The projects that are currently being implemented by the Enterprise Surveys team are available at: <https://www.enterprisesurveys.org/en/methodology/current-projects>
- The list of all WBES databases and detailed information about each is available here:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/DataDetails.xls>
- The description of the WBES indicators is available at:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/Indicator-Description.pdf>

Fact Sheet

Source of Universe Table	Business Registers Strategy & Outputs - Office for National Statistics (ONS)
Source of Sampling Frame	Orbis BvD
Levels of Universe Table and Sampling Frame	Universe Table: Establishment-level Sampling Frame: Establishment-level
Registration agency	Companies House or HM Revenue and Customs (HMRC)
Stratification sectors	Manufacturing of: Fabricated Metal Products, Other Manufacturing; Construction, Wholesale, Retail, Hotels, Professional Activities, and Other Services
Stratification sizes	Small (5 to 19 employees), Medium (20 to 99 employees), Large (100-249), and Top 1% (250 or more employees)
Stratification regions	London, South England, Midlands and East England, North England, Scotland, Wales, and Northern Ireland
Contractor	Kapa Research
Fieldwork dates	April 2024 – March 2025
Interview languages	English
Survey software	Survey Solutions
Currency for nominal variables	British Pound Sterling (GBP)
Reference fiscal year	2023 (209 obs.), 2024 (790 obs.) and 2025 (4 obs)
VAT Applicable	Yes
Additional definitions	“Consumption Tax” was referred to as “VAT”. “Occupancy Permit” was referred to as “Certificate of Occupancy”. For the capital city (a3b) and the main business city (a3c), London was entered.
Sample Size	Total: 1003 Fresh: 1003
Survey response rates	Yield: 4.3% Response rate: 8% Frame quality: 52.9%
Item response rates	d2: 100% n2a: 100% 11: 100% all TFP vars.: 91.8%
Additional topics covered in the questionnaire	Global ES 2024 questionnaire
Additional surveys available (if any)	None

Tables

Table 1: United Kingdom 2024 WBES Universe

		Fabricated Metal Products	Other Manufacturing	Retail	Construction	Hotels	Professional Activities	Other Services	Grand Total
London	Small (5-19)	275	2375	7320	5560	695	11850	20235	61,335
London	Medium (20-99)	80	580	965	550	420	3015	5035	
London	Large (100-199)	5	85	110	70	95	455	615	
London	Top 1%	0	55	125	35	45	265	420	
South England	Small (5-19)	1330	5770	10470	11035	1300	10665	31355	90,610
South England	Medium (20-99)	485	2115	1570	1485	775	2280	7090	
South England	Large (100-199)	45	375	120	135	95	295	720	
South England	Top 1%	15	220	85	70	35	190	485	
Midlands and East England	Small (5-19)	2300	7725	11410	11745	825	10210	35990	100,755
Midlands and East England	Medium (20-99)	1055	3415	1415	1700	620	2155	7075	
Midlands and East England	Large (100-199)	90	615	100	160	55	245	670	
Midlands and East England	Top 1%	25	345	95	80	25	135	475	
North England	Small (5-19)	1735	6260	10545	9430	940	8760	30455	86,605
North England	Medium (20-99)	710	2775	1390	1715	630	2165	6270	
North England	Large (100-199)	80	560	100	125	55	275	580	
North England	Top 1%	25	305	110	60	30	150	370	
Scotland	Small (5-19)	390	1635	3780	3730	885	2995	9700	29,280
Scotland	Medium (20-99)	165	700	505	735	480	715	1980	
Scotland	Large (100-199)	25	155	30	70	40	70	170	
Scotland	Top 1%	5	85	25	40	20	45	105	
Wales	Small (5-19)	240	1050	2225	2035	495	1455	6040	16,720
Wales	Medium (20-99)	105	440	245	335	210	335	1070	
Wales	Large (100-199)	15	110	15	20	10	40	65	
Wales	Top 1%	5	80	10	15	5	15	35	
Northern Ireland	Small (5-19)	205	810	1650	1290	55	1030	3720	11,350
Northern Ireland	Medium (20-99)	70	350	400	245	95	200	855	
Northern Ireland	Large (100-199)	10	65	35	20	20	25	85	
Northern Ireland	Top 1%	0	55	15	5	5	0	35	
		9,490	39,110	54,865	52,495	8,960	60,035	171,700	396,655

Source: Business Registers Strategy & Outputs - Office for National Statistics (ONS)

Table 2: United Kingdom 2024 WBES Sample Frame (Fresh and Panel Combined)

		Fabricated Metal Products	Other Manufacturing	Retail	Construction	Hotels	Professional Activities	Other Services	Grand Total
London	Small (5-19)	459	3286	9000	6854	982	9326	26137	77352
London	Medium (20-99)	147	1220	1571	1243	780	3199	8007	
London	Large (100-249)	26	263	213	193	227	732	1257	
London	Top 1% (250+)	10	223	176	158	104	674	885	
South England	Small (5-19)	1153	6678	11144	10936	1730	9286	32492	98350
South England	Medium (20-99)	459	3030	2164	2085	1219	2671	8851	
South England	Large (100-249)	68	598	199	221	182	428	1065	
South England	Top 1% (250+)	25	391	131	96	62	310	676	
Midlands and East England	Small (5-19)	2011	7749	10120	9530	1122	7433	28775	89891
Midlands and East England	Medium (20-99)	927	3695	1671	2071	731	2089	7493	
Midlands and East England	Large (100-249)	163	791	173	222	111	369	956	
Midlands and East England	Top 1% (250+)	38	482	115	117	32	274	631	
North England	Small (5-19)	2150	7392	11293	9740	1434	8344	31280	97322
North England	Medium (20-99)	774	3801	1912	2480	979	2557	8332	
North England	Large (100-249)	124	900	212	267	155	451	984	
North England	Top 1% (250+)	45	494	166	125	59	317	555	
Scotland	Small (5-19)	313	1819	4011	3379	982	2631	10134	31287
Scotland	Medium (20-99)	159	894	606	943	692	761	2658	
Scotland	Large (100-249)	29	203	42	97	70	111	251	
Scotland	Top 1% (250+)	9	129	27	58	28	75	176	
Wales	Small (5-19)	212	1217	2221	2073	581	1448	6144	18125
Wales	Medium (20-99)	118	566	320	452	312	374	1456	
Wales	Large (100-249)	26	122	23	42	23	66	123	
Wales	Top 1% (250+)	3	92	12	12	12	22	53	
Northern Ireland	Small (5-19)	155	891	1821	1265	95	1106	3760	12818
Northern Ireland	Medium (20-99)	79	426	556	337	131	249	1345	
Northern Ireland	Large (100-249)	17	91	38	46	39	48	112	
Northern Ireland	Top 1% (250+)	2	66	22	13	7	29	72	
		9,701	47,509	59,959	55,055	12,881	55,380	184,660	425,145

Source: Orbis (BvD)

Table 3: Original Survey Design (Fresh and Panel Combined)

		Fabricated Metal Products	Other Manufacturing	Retail	Construction	Hotels	Professional Activities	Other Services	Grand Total
London	Small (5-19)	2	4	9	7	2	12	25	148
London	Medium (20-99)	2	2	2	2	3	6	17	
London	Large (100-199)	5	3	2	2	5	4	5	
London	Top 1%	5	3	3	3	5	4	4	
South England	Small (5-19)	2	7	12	12	2	11	25	165
South England	Medium (20-99)	3	6	4	4	4	5	19	
South England	Large (100-199)	5	3	2	3	5	3	4	
South England	Top 1%	5	3	2	2	5	3	4	
Midlands and East England	Small (5-19)	3	8	12	12	2	11	25	164
Midlands and East England	Medium (20-99)	4	7	3	4	3	4	16	
Midlands and East England	Large (100-199)	6	4	2	3	5	3	4	
Midlands and East England	Top 1%	5	3	2	2	5	3	3	
North England	Small (5-19)	3	8	12	10	2	9	25	163
North England	Medium (20-99)	4	7	3	4	3	5	18	
North England	Large (100-199)	5	4	2	3	5	3	4	
North England	Top 1%	5	3	3	2	5	3	3	
Scotland	Small (5-19)	2	2	5	4	2	3	11	120
Scotland	Medium (20-99)	4	3	2	3	4	2	7	
Scotland	Large (100-199)	7	4	4	4	6	4	4	
Scotland	Top 1%	7	4	4	4	6	4	4	
Wales	Small (5-19)	2	2	3	3	2	2	7	120
Wales	Medium (20-99)	5	3	2	2	5	2	5	
Wales	Large (100-199)	8	5	5	5	7	5	5	
Wales	Top 1%	3	5	5	5	7	5	5	
Northern Ireland	Small (5-19)	2	2	2	2	2	2	4	120
Northern Ireland	Medium (20-99)	5	3	3	3	5	3	5	
Northern Ireland	Large (100-199)	9	6	5	5	8	5	5	
Northern Ireland	Top 1%	2	6	5	5	5	5	6	
		120	120	120	120	120	131	269	1,000

Table 4: Response Outcomes

		Totals	Rates relative to total contacted
Overall	Contacts available in frame	425,145	
	Issued	35,485	
	Contacted	23,575	
Screening phase	Eligibles	4,883	20.7%
	Screener refusals	4,111	17.4%
	Assumed eligibles	12,478	52.9%
	Ineligible + out of target	1,293	5.5%
	Unobtainables	10,059	42.7%
Interview phase (only if eligible)	Interview refusals	3,880	16.5%
	Complete interviews	1,003	4.3%

Table 5: Survey Yield Rates

	Stratification	Yield	Survey response rate	Frame quality
Panel	Fresh	4.3%	8.0%	52.9%
	Panel	N/A	N/A	N/A
Size	Small (5-19)	4.0%	7.2%	56.0%
	Medium (20-99)	4.2%	7.4%	56.9%
	Large (100-249)	4.6%	9.4%	48.3%
	Top 1% (250+)	4.4%	9.5%	45.7%
Region	London	5.1%	10.9%	46.6%
	South England	4.9%	8.7%	56.0%
	Midlands and East England	3.8%	7.0%	53.3%
	North England	3.2%	6.1%	52.1%
	Scotland	3.8%	7.2%	53.1%
	Wales	4.7%	8.2%	57.5%
	Northern Ireland	5.6%	9.7%	57.9%
Sector	Fabricated Metal Products	4.7%	7.7%	61.8%
	Other Manufacturing	4.3%	7.7%	56.8%
	Retail	5.6%	10.2%	54.4%
	Construction	3.4%	6.2%	53.8%
	Hotels	6.9%	12.8%	53.8%
	Professional Activities	4.5%	8.9%	50.7%
	Other Services	3.2%	6.6%	49.4%
Overall	United Kingdom 2024	4.3%	8.0%	52.9%

Notes: the rates are calculated as defined in Section III.4.

Table 6: Achieved Total Sample (Fresh and Panel Combined)

		Fabricated Metal Products	Other Manufacturing	Retail	Construction	Hotels	Professional Activities	Other Services	Grand Total
London	Small (5-19)	3	3	11	5	3	15	19	205
London	Medium (20-99)	2	2	3	2	2	8	25	
London	Large (100-249)	2	6	5	4	21	10	10	
London	Top 1% (250+)	0	16	8	7	3	4	6	
South England	Small (5-19)	3	9	29	9	1	10	26	201
South England	Medium (20-99)	2	6	20	1	6	4	16	
South England	Large (100-249)	2	4	3	3	11	5	9	
South England	Top 1% (250+)	1	4	3	2	2	5	5	
Midlands and East England	Small (5-19)	3	12	18	10	3	11	21	186
Midlands and East England	Medium (20-99)	4	7	3	3	6	2	13	
Midlands and East England	Large (100-249)	6	5	2	3	13	7	6	
Midlands and East England	Top 1% (250+)	4	9	1	4	2	5	3	
North England	Small (5-19)	2	8	12	7	3	11	11	150
North England	Medium (20-99)	4	3	1	3	4	5	11	
North England	Large (100-249)	4	5	1	5	11	4	9	
North England	Top 1% (250+)	5	5	3	3	5	3	2	
Scotland	Small (5-19)	3	3	4	2	2	6	9	102
Scotland	Medium (20-99)	2	3	2	4	7	3	7	
Scotland	Large (100-249)	1	4	3	4	4	3	6	
Scotland	Top 1% (250+)	0	5	0	4	1	2	8	
Wales	Small (5-19)	3	3	6	4	3	1	5	75
Wales	Medium (20-99)	5	3	3	4	5	2	2	
Wales	Large (100-249)	3	3	1	0	1	4	5	
Wales	Top 1% (250+)	0	5	1	0	1	1	1	
Northern Ireland	Small (5-19)	2	2	3	2	2	1	6	84
Northern Ireland	Medium (20-99)	4	1	10	5	6	4	6	
Northern Ireland	Large (100-249)	0	2	1	3	6	3	4	
Northern Ireland	Top 1% (250+)	0	4	2	1	0	1	3	
		70	142	159	104	134	140	254	1,003

Table 7: Weak Universe Estimates

		Fabricated Metal Products	Other Manufacturing	Retail	Construction	Hotels	Professional Activities	Other Services	Grand Total
London	Small (5-19)	459	3286	9000	6854	982	11850	26137	79840
London	Medium (20-99)	147	1220	1571	1243	780	3199	8007	
London	Large (100-249)	0	263	213	193	227	732	1257	
London	Top 1% (250+)	0	223	176	158	104	674	885	
London	Large and Top 1% (100+)	36	0	0	0	0	0	0	100067
South England	Small (5-19)	1330	6678	11144	11035	1730	10665	32492	
South England	Medium (20-99)	485	3030	2164	2085	1219	2671	8851	
South England	Large (100-249)	68	598	199	221	182	428	1065	
South England	Top 1% (250+)	25	391	131	96	62	310	676	
East England Midlands and East England	Small (5-19)	2300	7749	11410	11745	1122	10210	35990	175920
East England Midlands and East England	Medium (20-99)	1055	3695	1671	2071	731	2155	7493	
East England Midlands and East England	Large (100-249)	163	791	173	222	111	369	956	
East England Midlands and East England	Top 1% (250+)	38	482	115	117	32	274	631	
North England	Small (5-19)	2150	7392	11293	9740	1434	8760	31280	
North England	Medium (20-99)	774	3801	1912	2480	979	2557	8332	57201
North England	Large (100-249)	124	900	212	267	155	451	984	
North England	Top 1% (250+)	45	494	166	125	59	317	555	
Scotland	Small (5-19)	390	1819	4011	3730	982	2995	10134	
Scotland	Medium (20-99)	165	894	606	943	692	761	2658	
Scotland	Large (100-249)	0	203	0	97	70	111	251	
Scotland	Top 1% (250+)	0	129	0	58	28	75	176	18011
Scotland	Large and Top 1% (100+)	38	0	69	0	0	0	0	
Wales	Small (5-19)	240	1217	2225	2073	581	1455	6144	
Wales	Medium (20-99)	118	566	320	0	312	374	1456	
Wales	Large (100-249)	0	122	23	0	23	66	123	
Wales	Top 1% (250+)	0	92	12	0	12	22	53	12943
Wales	Large and Top 1% (100+)	31	0	0	0	0	0	0	
Wales	Medium, Large and Top 1% (20+)	0	0	0	509	0	0	0	
Northern Ireland	Small (5-19)	205	891	1821	1290	95	1106	3760	
Northern Ireland	Medium (20-99)	0	426	556	337	131	249	1345	
Northern Ireland	Large (100-249)	0	91	38	46	0	48	112	681
Northern Ireland	Top 1% (250+)	0	66	22	13	0	29	72	
Northern Ireland	Large and Top 1% (100+)	0	0	0	0	46	0	0	
Northern Ireland	Medium, Large and Top 1% (20+)	98	0	0	0	0	0	0	
		10484	47509	61253	57748	12881	62913	191875	444663

Table 8: Median Universe Estimates

		Fabricated Metal Products	Other Manufacturing	Retail	Construction	Hotels	Professional Activities	Other Services	Grand Total
London	Small (5-19)	459	3286	9000	6854	982	11850	26137	79840
London	Medium (20-99)	147	1220	1571	1243	780	3199	8007	
London	Large (100-249)	0	263	213	193	227	732	1257	
London	Top 1% (250+)	0	223	176	158	104	674	885	
London	Large and Top 1% (100+)	36	0	0	0	0	0	0	100067
South England	Small (5-19)	1330	6678	11144	11035	1730	10665	32492	
South England	Medium (20-99)	485	3030	2164	2085	1219	2671	8851	
South England	Large (100-249)	68	598	199	221	182	428	1065	
South England	Top 1% (250+)	25	391	131	96	62	310	676	
Midlands and East England	Small (5-19)	2300	7749	11410	11745	1122	10210	35990	175920
Midlands and East England	Medium (20-99)	1055	3695	1671	2071	731	2155	7493	
Midlands and East England	Large (100-249)	163	791	173	222	111	369	956	
Midlands and East England	Top 1% (250+)	38	482	115	117	32	274	631	
North England	Small (5-19)	2150	7392	11293	9740	1434	8760	31280	
North England	Medium (20-99)	774	3801	1912	2480	979	2557	8332	57201
North England	Large (100-249)	124	900	212	267	155	451	984	
North England	Top 1% (250+)	45	494	166	125	59	317	555	
Scotland	Small (5-19)	390	1819	4011	3730	982	2995	10134	
Scotland	Medium (20-99)	165	894	606	943	692	761	2658	
Scotland	Large (100-249)	0	203	0	97	70	111	251	
Scotland	Top 1% (250+)	0	129	0	58	28	75	176	18011
Scotland	Large and Top 1% (100+)	38	0	69	0	0	0	0	
Wales	Small (5-19)	240	1217	2225	2073	581	1455	6144	
Wales	Medium (20-99)	118	566	320	0	312	374	1456	
Wales	Large (100-249)	0	122	23	0	23	66	123	
Wales	Top 1% (250+)	0	92	12	0	12	22	53	12943
Wales	Large and Top 1% (100+)	31	0	0	0	0	0	0	
Wales	Medium, Large and Top 1% (20+)	0	0	0	509	0	0	0	
Northern Ireland	Small (5-19)	205	891	1821	1290	95	1106	3760	
Northern Ireland	Medium (20-99)	0	426	556	337	131	249	1345	
Northern Ireland	Large (100-249)	0	91	38	46	0	48	112	681
Northern Ireland	Top 1% (250+)	0	66	22	13	0	29	72	
Northern Ireland	Large and Top 1% (100+)	0	0	0	0	46	0	0	
Northern Ireland	Medium, Large and Top 1% (20+)	98	0	0	0	0	0	0	
		10484	47509	61253	57748	12881	62913	191875	444663

Table 9: Strict Universe Estimates

		Fabricated Metal Products	Other Manufacturing	Retail	Construction	Hotels	Professional Activities	Other Services	Grand Total
London	Small (5-19)	459	3286	9000	6854	982	11850	26137	79840
London	Medium (20-99)	147	1220	1571	1243	780	3199	8007	
London	Large (100-249)	0	263	213	193	227	732	1257	
London	Top 1% (250+)	0	223	176	158	104	674	885	
London	Large and Top 1% (100+)	36	0	0	0	0	0	0	100067
South England	Small (5-19)	1330	6678	11144	11035	1730	10665	32492	
South England	Medium (20-99)	485	3030	2164	2085	1219	2671	8851	
South England	Large (100-249)	68	598	199	221	182	428	1065	
South England	Top 1% (250+)	25	391	131	96	62	310	676	
Midlands and East England	Small (5-19)	2300	7749	11410	11745	1122	10210	35990	175920
Midlands and East England	Medium (20-99)	1055	3695	1671	2071	731	2155	7493	
Midlands and East England	Large (100-249)	163	791	173	222	111	369	956	
Midlands and East England	Top 1% (250+)	38	482	115	117	32	274	631	
North England	Small (5-19)	2150	7392	11293	9740	1434	8760	31280	
North England	Medium (20-99)	774	3801	1912	2480	979	2557	8332	57201
North England	Large (100-249)	124	900	212	267	155	451	984	
North England	Top 1% (250+)	45	494	166	125	59	317	555	
Scotland	Small (5-19)	390	1819	4011	3730	982	2995	10134	
Scotland	Medium (20-99)	165	894	606	943	692	761	2658	
Scotland	Large (100-249)	0	203	0	97	70	111	251	
Scotland	Top 1% (250+)	0	129	0	58	28	75	176	18011
Scotland	Large and Top 1% (100+)	38	0	69	0	0	0	0	
Wales	Small (5-19)	240	1217	2225	2073	581	1455	6144	
Wales	Medium (20-99)	118	566	320	0	312	374	1456	
Wales	Large (100-249)	0	122	23	0	23	66	123	
Wales	Top 1% (250+)	0	92	12	0	12	22	53	12943
Wales	Large and Top 1% (100+)	31	0	0	0	0	0	0	
Wales	Medium, Large and Top 1% (20+)	0	0	0	509	0	0	0	
Northern Ireland	Small (5-19)	205	891	1821	1290	95	1106	3760	
Northern Ireland	Medium (20-99)	0	426	556	337	131	249	1345	
Northern Ireland	Large (100-249)	0	91	38	46	0	48	112	681
Northern Ireland	Top 1% (250+)	0	66	22	13	0	29	72	
Northern Ireland	Large and Top 1% (100+)	0	0	0	0	46	0	0	
Northern Ireland	Medium, Large and Top 1% (20+)	98	0	0	0	0	0	0	
		10484	47509	61253	57748	12881	62913	191875	444663

Table 10: Item Response Rates

	 Screener/Interview	 d2	 I1	 n2a	 all TFP variables
Panel	Fresh	100.0%	100.0%	100.0%	91.8%
	Panel	N/A	N/A	N/A	N/A
Size	Small (5-19)	100.0%	100.0%	100.0%	94.2%
	Medium (20-99)	100.0%	100.0%	100.0%	92.6%
	Large (100+)	100.0%	100.0%	100.0%	90.1%
Region	London	100.0%	100.0%	100.0%	93.3%
	South England	100.0%	100.0%	100.0%	92.9%
	Midlands and East England	100.0%	100.0%	100.0%	93.0%
	North England	100.0%	100.0%	100.0%	88.4%
	Scotland	100.0%	100.0%	100.0%	90.9%
	Wales	100.0%	100.0%	100.0%	88.0%
	Northern Ireland	100.0%	100.0%	100.0%	100.0%
Sector	Construction	100.0%	100.0%	100.0%	N/A
	Fabricated Metal Products	100.0%	100.0%	100.0%	95.0%
	Hotels	100.0%	100.0%	100.0%	N/A
	Other Manufacturing	100.0%	100.0%	100.0%	91.0%
	Other Services	100.0%	100.0%	100.0%	N/A
	Professional Activities	100.0%	100.0%	100.0%	N/A
	Retail	100.0%	100.0%	100.0%	N/A
Overall	United Kingdom 2024	100.0%	100.0%	100.0%	91.8%

Notes: the rates are calculated as follows. The number of responses with informative content in the respective variable (or combination of variables in the case of TFP) is divided by the same number plus the number of responses that are "don't know" (code -9) or refusal (code -8).