

The Sweden 2024 World Bank Enterprise Survey Implementation Report

I. Introduction

This document provides information on the World Bank Enterprise Surveys (WBES) implemented in Sweden between January 2024 and December 2024. 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 222,000 firms in 159 countries with a total of 366 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 Sweden 2024 WBES uses the following stratification categories:

- **Industry: 5 categories:**
 - Within manufacturing: Fabricated Metal Products, Other manufacturing
 - Within services: Retail, Professional Activities, and Other Services
- **Size: 3 categories:** Small (5 to 19 employees), Medium (20 to 99 employees), Large (100 or more employees)
- **Region: 8 categories:** Stockholm; Östra Mellansverige; Småland med öarna; Sydsverige; Västsverige; Norra Mellansverige; Mellersta Norrland; and Övre Norrland

Industry strata for the manufacturing sector were selected by their contribution to total value added, to employment and to total number of establishments, using UNIDO INSTAT 4, available as of summer 2023. The manufacturing sectors stratified separately represent 8%, 13% and 19% 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 3% of the whole ES universe.

The strata for the services sector were selected by contribution to total number of establishments, using the data obtained from Sweden Statistics. The sectors stratified separately represent 39% of the total number of establishments in the services sector, and 24% of the whole ES universe.

Region strata of the Sweden 2024 WBES were selected based on NUTS⁴ administrative divisions, therefore the regional stratification for the Sweden ES was done across eight regions: Stockholm, Östra Mellansverige, Småland med öarna, Sydsverige, Västsverige, Norra Mellansverige, Mellersta Norrland and Övre Norrland.

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 Sweden, the definition of registration with Bolagsverket was used. 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.

⁴ See <https://ec.europa.eu/eurostat/web/nuts>.

For the Sweden 2024 WBES, the universe table, shown in Table 1 below, was obtained from Statistics Sweden.

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 Sweden 2024 WBES was constructed from the following sources (see counts of establishments in the frame in Table 2). The Panel Sampling Frame was constructed using information on all the establishments that participated in the Sweden 2020 WBES. The Fresh Sampling Frame, i.e., list of establishments that are in the WBES universe and that have not participated in the Sweden 2020 WBES, both the manufacturing sector (ISIC 4.0 codes 10-32) and the services sector (ISIC 4.0 codes 41-43, 45-47, 49-56, 58, 61, 62, 69-75, 79, 95), were obtained from Statistics Sweden.

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.⁵ 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 Surveys Manual and Guide*.⁶ The original survey design for the Sweden 2024 WBES is given in Table 3.

⁵ 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.

⁶ The *Enterprise Surveys Manual and Guide* is available at:

<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Enterprise-Surveys-Manual-and-Guide.pdf>

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 Sweden 2024 WBES were conducted between January 2024 and December 2024. The interviews were conducted in the Swedish. For monetary variables, the currency was Swedish Krona (SEK).

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 Sweden 2024 WBES was implemented by Norstat Sverige AB. 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 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 Sweden 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 Sweden 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.⁷ 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.⁸

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). The variable *panel* identifies panel establishments, i.e., those that participated in the Sweden 2020 WBES. The combination of *a4a*, *a2*, *a6a*, and *panel* forms stratum of each establishment, which is contained in variable *strata*.

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

⁷ 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.

⁸ 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.

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	Statistics Sweden, business registrar as of November 2023
Source of Sampling Frame	Statistics Sweden, business registrar as of November 2023
Levels of Universe Table and Sampling Frame	Universe Table: Establishment-level Sampling Frame: Establishment-level
Registration agency	Bolagsverket
Stratification sectors	Manufacturing of: Fabricated Metal Products, Other manufacturing; Retail, Professional Activities, and Other Services
Stratification sizes	Small (5 to 19 employees), Medium (20 to 99 employees), Large (100 or more employees)
Stratification regions	Stockholm; Östra Mellansverige; Småland med Öarna; Sydsverige; Västsverige; Norra Mellansverige; Mellersta Norrland; and Övre Norrland
Contractor	Norstat Sverige AB
Fieldwork dates	January 2024 – December 2024
Interview languages	Swedish
Survey software	Survey Solutions
Currency for nominal variables	Swedish Krona
Reference fiscal year	2022 (33 obs.), 2023 (506 obs.), and 2024 (61 obs.)
VAT Applicable	YES
Additional definitions	“Consumption Tax” was referred to as MOMS. “Occupancy Permit” was referred to as “Slutbesked”. For the capital city (a3b) and for the main business city (a3c), Stockholm was entered.
Sample Size	Total: 600 Fresh: 420 Panel: 180
Survey response rates	Yield: 12% Response rate: 24% Frame quality: 51%
Item response rates	d2: 99% n2a: 96% 11: 100% all TFP vars.: 86%
Additional topics covered in the questionnaire	None
Additional surveys available (if any)	None

Tables

Table 1: Sweden 2024 WBES Universe

		Fabricated Metal Products	Other Manufacturing	Retail	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	170	670	1376	2850	9316	19,849
Stockholm	Medium (20-99)	41	212	436	935	2891	
Stockholm	Large (100 or more)	2	89	110	179	572	
Östra Mellansverige	Small (5-19)	300	645	883	822	4857	9,929
Östra Mellansverige	Medium (20-99)	119	287	216	199	1319	
Östra Mellansverige	Large (100 or more)	13	97	33	36	103	
Småland med Öarna	Small (5-19)	312	573	609	353	2721	6,311
Småland med Öarna	Medium (20-99)	141	378	129	73	791	
Småland med Öarna	Large (100 or more)	15	109	14	6	87	
Sydsverige	Small (5-19)	184	645	850	947	4673	9,909
Sydsverige	Medium (20-99)	69	336	214	232	1363	
Sydsverige	Large (100 or more)	4	118	38	41	195	
Västsverige	Small (5-19)	342	923	1418	1385	7147	15,289
Västsverige	Medium (20-99)	130	482	331	398	2144	
Västsverige	Large (100 or more)	16	169	66	73	265	
Norra Mellansverige	Small (5-19)	186	429	529	392	2675	5,532
Norra Mellansverige	Medium (20-99)	92	186	126	75	681	
Norra Mellansverige	Large (100 or more)	13	62	17	6	63	
Mellersta Norrland	Small (5-19)	67	162	257	200	1241	2,475
Mellersta Norrland	Medium (20-99)	20	81	59	32	297	
Mellersta Norrland	Large (100 or more)	2	27	6	4	20	
Övre Norrland	Small (5-19)	100	265	308	253	1511	3,289
Övre Norrland	Medium (20-99)	36	107	77	60	473	
Övre Norrland	Large (100 or more)	3	23	11	4	58	
		2,377	7,075	8,113	9,555	45,463	72,583

Source: Statistics Sweden (Establishment-level)

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

		Fabricated Metal Products	Other Manufacturing	Retail	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	173	680	1384	2850	9337	19,945
Stockholm	Medium (20-99)	46	221	442	935	2911	
Stockholm	Large (100 or more)	2	99	112	179	574	
ÖstraMellansverige	Small (5-19)	301	653	886	822	4866	10,007
ÖstraMellansverige	Medium (20-99)	128	301	220	199	1327	
ÖstraMellansverige	Large (100 or more)	16	109	33	36	110	
Smålandmedöarna	Small (5-19)	314	582	612	353	2730	6,375
Smålandmedöarna	Medium (20-99)	145	390	130	73	793	
Smålandmedöarna	Large (100 or more)	20	120	17	6	90	
Sydsverige	Small (5-19)	185	656	852	947	4677	9,976
Sydsverige	Medium (20-99)	73	345	221	232	1374	
Sydsverige	Large (100 or more)	4	132	39	41	198	
Västsverige	Small (5-19)	347	931	1423	1385	7158	15,370
Västsverige	Medium (20-99)	141	491	335	398	2151	
Västsverige	Large (100 or more)	19	180	68	73	270	
NorraMellansverige	Small (5-19)	189	439	542	392	2679	5,621
NorraMellansverige	Medium (20-99)	99	201	133	75	688	
NorraMellansverige	Large (100 or more)	15	80	18	6	65	
MellerstaNorrland	Small (5-19)	69	171	262	200	1247	2,526
MellerstaNorrland	Medium (20-99)	25	88	63	32	301	
MellerstaNorrland	Large (100 or more)	3	35	6	4	20	
ÖvreNorrland	Small (5-19)	104	277	316	253	1515	3,354
ÖvreNorrland	Medium (20-99)	41	121	80	60	475	
ÖvreNorrland	Large (100 or more)	4	32	12	4	60	
		2,463	7,334	8,206	9,555	45,616	73,174

Source: Statistics Sweden (Establishment-level) and establishments that participated in the Sweden 2020 WBES

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

		Fabricated Metal Products	Other Manufacturing	Retail	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	4	4	8	15	14	94
Stockholm	Medium (20-99)	6	4	4	15	5	
Stockholm	Large (100 or more)	1	4	4	2	4	
ÖstraMellansverige	Small (5-19)	3	4	5	2	7	75
ÖstraMellansverige	Medium (20-99)	4	4	4	2	4	
ÖstraMellansverige	Large (100 or more)	6	11	7	8	4	
Smålandmedöarna	Small (5-19)	4	4	5	2	5	80
Smålandmedöarna	Medium (20-99)	5	4	3	15	4	
Smålandmedöarna	Large (100 or more)	7	10	6	2	4	
Sydsverige	Small (5-19)	3	4	4	2	7	79
Sydsverige	Medium (20-99)	5	4	5	14	4	
Sydsverige	Large (100 or more)	1	4	9	9	4	
Västsverige	Small (5-19)	6	7	12	12	10	92
Västsverige	Medium (20-99)	9	4	4	2	5	
Västsverige	Large (100 or more)	7	4	4	2	4	
NorraMellansverige	Small (5-19)	4	4	4	2	5	60
NorraMellansverige	Medium (20-99)	7	4	4	2	4	
NorraMellansverige	Large (100 or more)	5	4	5	2	4	
MellerstaNorrländ	Small (5-19)	4	4	4	2	4	60
MellerstaNorrländ	Medium (20-99)	8	4	5	2	4	
MellerstaNorrländ	Large (100 or more)	2	12	2	1	2	
ÖvreNorrländ	Small (5-19)	5	4	4	2	4	60
ÖvreNorrländ	Medium (20-99)	12	4	4	2	4	
ÖvreNorrländ	Large (100 or more)	2	4	4	1	4	
		120	120	120	120	120	600

Table 4: Response Outcomes

		Totals	Rates relative to total contacted
Overall	Contacts available in frame	73,174	
	Issued	6,365	
	Contacted	4,853	
Screening phase	Eligibles	834	17.2%
	Screeners refusals	1,521	31.3%
	Assumed eligibles	2,455	50.6%
	Ineligible + out of target	399	8.2%
	Unobtainables	2,064	42.5%
Interview phase (only if eligible)	Interview refusals	234	4.8%
	Complete interviews	600	12.4%

Table 5: Survey Yield Rates

		Yield	Survey response rate	Frame quality
Panel	Fresh	9.6%	19.9%	48.6%
	Panel	36.0%	52.9%	68.0%
Size	Small (5-19)	11.2%	22.6%	49.6%
	Medium (20-99)	15.5%	27.2%	56.8%
	Large (100+)	11.1%	24.2%	45.8%
Region	Stockholm	8.4%	22.9%	36.6%
	Östra Mellansverige	15.9%	26.5%	60.0%
	Småland med Öarna	13.8%	24.8%	55.4%
	Sydsverige	12.0%	24.4%	49.3%
	Västsverige	12.9%	24.6%	52.6%
	Norra Mellansverige	12.1%	19.9%	60.8%
	Mellersta Norrland	19.6%	32.4%	60.5%
	Övre Norrland	13.2%	23.9%	55.3%
	Fabricated Metal Products	21.2%	31.1%	68.2%
	Other Manufacturing	17.1%	30.4%	56.2%
Sector	Retail	7.8%	15.7%	50.0%
	Professional Activities	13.6%	30.3%	44.9%
	Other Services	9.4%	21.3%	44.2%
	Sweden 2024	12.4%	24.4%	50.6%

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	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	4	6	8	15	29	107
Stockholm	Medium (20-99)	5	5	2	12	4	
Stockholm	Large (100 or more)	1	5	3	4	4	
ÖstraMellansverige	Small (5-19)	5	4	6	4	5	74
ÖstraMellansverige	Medium (20-99)	6	4	4	4	4	
ÖstraMellansverige	Large (100 or more)	4	8	7	7	2	
Smålandmedöarna	Small (5-19)	6	5	5	4	4	76
Smålandmedöarna	Medium (20-99)	9	6	4	9	4	
Smålandmedöarna	Large (100 or more)	7	7	2	0	4	
Sydsverige	Small (5-19)	4	4	5	4	4	75
Sydsverige	Medium (20-99)	6	4	6	11	4	
Sydsverige	Large (100 or more)	2	6	4	7	4	
Västsverige	Small (5-19)	6	5	10	10	10	86
Västsverige	Medium (20-99)	8	4	3	4	5	
Västsverige	Large (100 or more)	4	6	5	4	2	
NorraMellansverige	Small (5-19)	3	4	4	5	4	59
NorraMellansverige	Medium (20-99)	7	4	4	4	3	
NorraMellansverige	Large (100 or more)	3	7	1	2	4	
MellerstaNorrland	Small (5-19)	6	4	4	4	4	60
MellerstaNorrland	Medium (20-99)	7	5	5	4	4	
MellerstaNorrland	Large (100 or more)	1	9	0	0	3	
ÖvreNorrland	Small (5-19)	6	5	5	4	4	63
ÖvreNorrland	Medium (20-99)	11	4	6	4	3	
ÖvreNorrland	Large (100 or more)	2	5	0	0	4	
		123	126	103	126	122	600

Table 7: Achieved Panel Sample

		Fabricated Metal Products	Other Manufacturing	Retail	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	2	4	3	0	9	33
Stockholm	Medium (20-99)	3	3	1	0	3	
Stockholm	Large (100 or more)	0	2	1	0	2	
Östra Mellansverige	Small (5-19)	0	2	2	0	2	22
Östra Mellansverige	Medium (20-99)	3	2	1	0	2	
Östra Mellansverige	Large (100 or more)	2	5	0	0	1	
Småland med Öarna	Small (5-19)	1	2	1	0	2	21
Småland med Öarna	Medium (20-99)	1	3	0	0	0	
Småland med Öarna	Large (100 or more)	3	4	2	0	2	
Sydsverige	Small (5-19)	1	2	0	0	1	16
Sydsverige	Medium (20-99)	3	2	3	0	2	
Sydsverige	Large (100 or more)	0	2	0	0	0	
Västsverige	Small (5-19)	4	2	3	0	4	30
Västsverige	Medium (20-99)	6	2	1	0	1	
Västsverige	Large (100 or more)	1	4	1	0	1	
Norra Mellansverige	Small (5-19)	1	2	2	0	1	21
Norra Mellansverige	Medium (20-99)	4	2	1	0	1	
Norra Mellansverige	Large (100 or more)	1	4	0	0	2	
Mellersta Norrland	Small (5-19)	0	2	2	0	2	20
Mellersta Norrland	Medium (20-99)	4	2	1	0	1	
Mellersta Norrland	Large (100 or more)	1	5	0	0	0	
Övre Norrland	Small (5-19)	1	3	2	0	1	17
Övre Norrland	Medium (20-99)	3	2	2	0	0	
Övre Norrland	Large (100 or more)	1	2	0	0	0	
		46	65	29	-	40	180

Table 8: Weak Universe Estimates

		Fabricated Metal Products	Other Manufacturing	Retail	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	159	605	1243	2531	8500	18,267
Stockholm	Medium (20-99)	41	203	418	880	2797	
Stockholm	Large (100 or more)	2	83	103	164	539	
Östra Mellansverige	Small (5-19)	274	566	775	710	4309	8,896
Östra Mellansverige	Medium (20-99)	115	267	201	182	1241	
Östra Mellansverige	Large (100 or more)	12	88	30	32	94	
Småland med Öarna	Small (5-19)	290	513	546	311	2464	5,779
Småland med Öarna	Medium (20-99)	139	359	0	0	759	
Småland med Öarna	Large (100 or more)	14	101	0	0	81	
Småland med Öarna	Medium and Large (20+)	0	0	130	71	0	
Sydsverige	Small (5-19)	171	578	762	835	4234	9,010
Sydsverige	Medium (20-99)	68	319	203	217	0	
Sydsverige	Large (100 or more)	4	109	35	37	0	
Sydsverige	Medium and Large (20+)	0	0	0	0	1436	
Västsverige	Small (5-19)	317	824	1267	1217	6452	13,942
Västsverige	Medium (20-99)	128	456	314	371	2052	
Västsverige	Large (100 or more)	15	156	61	66	247	
Norra Mellansverige	Small (5-19)	175	388	479	349	2445	5,107
Norra Mellansverige	Medium (20-99)	92	178	121	71	660	
Norra Mellansverige	Large (100 or more)	13	58	16	6	59	
Mellersta Norrland	Small (5-19)	63	146	232	177	1129	2,267
Mellersta Norrland	Medium (20-99)	0	77	0	0	287	
Mellersta Norrland	Large (100 or more)	0	25	0	0	19	
Mellersta Norrland	Medium and Large (20+)	21	0	60	32	0	
Övre Norrland	Small (5-19)	94	240	279	225	1381	3,033
Övre Norrland	Medium (20-99)	36	103	0	0	458	
Övre Norrland	Large (100 or more)	3	21	0	0	55	
Övre Norrland	Medium and Large (20+)	0	0	81	58	0	
		2246	6462	7354	8541	41698	66301

Table 9: Median Universe Estimates

		Fabricated Metal Products	Other Manufacturing	Retail	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	79	249	477	906	2781	6,330
Stockholm	Medium (20-99)	21	87	168	331	960	
Stockholm	Large (100 or more)	1	30	34	52	155	
ÖstraMellansverige	Small (5-19)	229	395	505	431	2392	5,366
ÖstraMellansverige	Medium (20-99)	101	195	137	116	722	
ÖstraMellansverige	Large (100 or more)	9	54	17	17	46	
Smålandmedöarna	Small (5-19)	222	326	324	172	1248	3,292
Smålandmedöarna	Medium (20-99)	112	239	0	0	403	
Smålandmedöarna	Large (100 or more)	10	56	0	0	36	
Smålandmedöarna	Medium and Large (20+)	0	0	94	47	0	
Sydsverige	Small (5-19)	118	331	408	417	1933	4,558
Sydsverige	Medium (20-99)	49	192	114	114	0	
Sydsverige	Large (100 or more)	2	55	17	16	0	
Sydsverige	Medium and Large (20+)	0	0	0	0	792	
Västsverige	Small (5-19)	231	499	716	642	3108	7,267
Västsverige	Medium (20-99)	98	290	186	205	1037	
Västsverige	Large (100 or more)	10	83	30	31	104	
NorraMellansverige	Small (5-19)	146	269	310	211	1350	3,088
NorraMellansverige	Medium (20-99)	80	130	82	45	382	
NorraMellansverige	Large (100 or more)	9	35	9	3	29	
MellerstaNorrrland	Small (5-19)	51	98	146	104	606	1,333
MellerstaNorrrland	Medium (20-99)	0	55	0	0	161	
MellerstaNorrrland	Large (100 or more)	0	15	0	0	9	
MellerstaNorrrland	Medium and Large (20+)	20	0	45	23	0	
ÖvreNorrrland	Small (5-19)	71	150	163	123	688	1,663
ÖvreNorrrland	Medium (20-99)	28	67	0	0	240	
ÖvreNorrrland	Large (100 or more)	2	12	0	0	24	
ÖvreNorrrland	Medium and Large (20+)	0	0	57	38	0	
		1700	3911	4038	4044	19204	32897

Table 10: Strict Universe Estimates

		Fabricated Metal Products	Other Manufacturing	Retail	Professional Activities	Other Services	Grand Total
Stockholm	Small (5-19)	24	71	103	330	731	1,808
Stockholm	Medium (20-99)	7	27	39	130	273	
Stockholm	Large (100 or more)	1	8	7	18	39	
ÖstraMellansverige	Small (5-19)	79	127	123	178	715	1,699
ÖstraMellansverige	Medium (20-99)	38	68	36	52	234	
ÖstraMellansverige	Large (100 or more)	4	18	7	7	13	
Smålandmedöarna	Small (5-19)	73	100	76	68	356	991
Smålandmedöarna	Medium (20-99)	40	80	0	0	125	
Smålandmedöarna	Large (100 or more)	7	16	0	0	10	
Smålandmedöarna	Medium and Large (20+)	0	0	22	19	0	
Sydsverige	Small (5-19)	38	100	93	162	541	1,339
Sydsverige	Medium (20-99)	17	63	29	48	0	
Sydsverige	Large (100 or more)	2	16	4	7	0	
Sydsverige	Medium and Large (20+)	0	0	0	0	220	
Västsverige	Small (5-19)	73	146	160	242	848	2,101
Västsverige	Medium (20-99)	34	92	45	84	306	
Västsverige	Large (100 or more)	4	23	6	11	27	
NorraMellansverige	Small (5-19)	41	70	62	71	329	792
NorraMellansverige	Medium (20-99)	24	37	18	16	101	
NorraMellansverige	Large (100 or more)	3	9	2	2	7	
MellerstaNorrländ	Small (5-19)	20	36	40	48	204	471
MellerstaNorrländ	Medium (20-99)	0	21	0	0	59	
MellerstaNorrländ	Large (100 or more)	0	9	0	0	3	
MellerstaNorrländ	Medium and Large (20+)	8	0	12	11	0	
ÖvreNorrländ	Small (5-19)	23	46	38	48	195	497
ÖvreNorrländ	Medium (20-99)	11	22	0	0	73	
ÖvreNorrländ	Large (100 or more)	2	5	0	0	6	
ÖvreNorrländ	Medium and Large (20+)	0	0	13	15	0	
		575	1209	935	1566	5412	9698

Table 11: Item Response Rates

	Screeners/Interview	d2	l1	n2a	all TFP variables
Panel	Fresh	99.3%	100.0%	96.0%	83.1%
	Panel	98.3%	100.0%	96.1%	90.4%
Size	Small (5-19)	100.0%	100.0%	96.9%	90.0%
	Medium (20-99)	98.5%	100.0%	96.1%	91.8%
	Large (100+)	97.8%	100.0%	94.1%	73.0%
Region	Stockholm	100.0%	100.0%	95.2%	90.9%
	Östra Mellansverige	100.0%	100.0%	98.6%	82.8%
	Småland med Öarna	98.8%	100.0%	93.8%	81.0%
	Sydsverige	98.6%	100.0%	94.5%	85.2%
	Västsverige	100.0%	100.0%	96.5%	97.0%
	Norra Mellansverige	98.3%	100.0%	93.2%	80.8%
	Mellersta Norrland	98.4%	100.0%	100.0%	87.5%
	Övre Norrland	96.8%	100.0%	96.8%	86.2%
Sector	Fabricated Metal Products	100.0%	100.0%	96.0%	90.0%
	Other Manufacturing	97.9%	100.0%	96.4%	83.6%
	Retail	99.0%	100.0%	98.0%	N/A
	Professional Activities	99.1%	100.0%	93.6%	N/A
	Other Services	99.3%	100.0%	96.1%	N/A
Overall	Sweden 2024	99.0%	100.0%	96.0%	86.3%

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).