

The Ethiopia 2025 World Bank Enterprise Survey Implementation Report

I. Introduction

This document provides information on the World Bank Enterprise Surveys (WBES) implemented in Ethiopia between April and December 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 has global coverage. 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 than simple random sampling 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.

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 Universe

The universe of inference includes all formal (i.e., registered) private sector establishments⁴ (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 Ministry of Trade and Regional Integration (MoTRI). 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 Ethiopia 2025 WBES, the universe table, shown in Table 1 below, was constructed using the 2024 business registry provided by the Ministry of Trade and Regional Integration (MoTRI). The MoTRI business registry is the complete list of all registered establishments operating within the country.

II.2 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 Ethiopia 2025 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 Ethiopia 2015 WBES. The Fresh Sampling Frame, i.e., list of establishments that are in the WBES universe and that have not participated in the Ethiopia 2015 WBES, for the manufacturing sector (ISIC 4.0 codes 10-33), was obtained mainly from the Ministry of Trade and Regional Integration (MoTRI). However, the business registry from MoTRI lacks information on the number of workers. To fill this gap, the MoTRI database was merged with Private Organization Employees' Social Security Administration (POESSA), which provides the number of workers for registered employers. Establishments were matched, and for unmatched cases, employment was imputed using a sector-specific regression between paid-up capital (from MoTRI) and observed number of workers (from POESSA).

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

⁴ The unit of analysis of every WBES is the establishment defined as a business entity associated with a physical location with its own set of financial statements, including Balance Sheet and Income Statement. However, in many economies official statistics are provided at the firm level, where a firm may be composed of several establishments, the so called multi-establishment firms.

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 universe equals the sampling frame (that is the weights project to universe totals by cell, coming from the sampling frame). Table 4 reports response outcomes.

II.3 Stratification Categories

The Ethiopia 2025 WBES uses the following stratification categories:

- **Industry:**
 - Food (ISIC Rev. 4: 10)
 - Garments and Textiles (ISIC Rev. 4: 13–14)
 - Other Manufacturing (ISIC Rev. 4: 11–12, 15–33)
 - Construction (ISIC Rev. 4: 41–43)
 - Retail (ISIC Rev. 4: 47)
 - Hotels and Restaurants (ISIC Rev. 4: 55–56)
 - Other Services (ISIC Rev. 4: 45–46, 49–53, 58, 61, 62, 69–75, 79, 95)
- **Size:**
 - Small (5 to 19 workers)
 - Medium (20 to 99 workers)
 - Large (100 or more workers)
- **Region:**
 - Addis Ababa
 - Oromia
 - Amhara
 - Tigray
 - South: Sidama, South West Ethiopia Peoples’, Central Ethiopia, and South Ethiopia Regional States
 - East: Afar, Dire Dawa, Harari, and Somali
 - West: Benishangul-Gumuz and Gambela

Industry strata were selected by their contribution to the total number of establishments, using Ministry of Trade & Regional Integration (MoTRI) business registry. Region strata were selected based on administrative divisions, with some regions grouped together to achieve minimum required precision of estimates at the level of each stratification region. Specifically, the southern regions—Sidama, South West Ethiopia Peoples’, Central Ethiopia, and South Ethiopia—were combined into a single South stratum. Likewise, Afar, Dire Dawa, Harari, and Somali were grouped into the East stratum, while Benishangul-Gumuz and Gambela were combined into the West stratum. The remaining four regions—Addis Ababa, Oromia, Amhara, Tigray, and one for each grouped set—follow Ethiopia’s established administrative boundaries.

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. 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*.⁵ The original survey design for the Ethiopia 2025 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 Ethiopia 2025 WBES were conducted between April and December 2025. The interviews were conducted in the following languages: Amharic, Afar Oromo, Tigrigna. For monetary variables, the currency was the Ethiopian Birr (ETB). Establishments were asked to report the end of their fiscal year using either the Ethiopian calendar or the Gregorian calendar, with approximately 98 percent choosing to report in the Ethiopian calendar. For consistency and comparability, all fiscal year–end dates were converted into the Gregorian calendar for data publication. After conversion, the fiscal year end corresponds to July 7.

Apart from the challenges with participation and call-backs that are standard for all surveys, the Ethiopia 2025 WBES faced significant difficulties interviewing establishments in high-conflict areas, particularly in the Amhara region. Data collection in several parts of Amhara was repeatedly disrupted by ongoing security incidents—especially in South Wello (Sayint, Wogidi, Were Ilu), West Gojam (Quarit), West Gondar (Quara), and North Shewa (Ensaro). These areas experienced unstable conditions and sudden movement restrictions that made safe physical access impossible at various points during fieldwork. For establishments in these locations, eligibility status code 133 was applied in the progress report.

III.1 Questionnaire

The standard WBES questionnaire covers several topics regarding the business environment and business performance. These topics include general establishment 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*.

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>

III.2 Contractor

The fieldwork for the Ethiopia 2025 WBES was implemented by Ipsos Kenya and SART Consult. 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 are eligible for the WBES to the total number of contacted establishments in the frame. In other words:

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

which can be rewritten as follows:

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

Table 5 provides these measures for the Ethiopia 2025 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 establishment 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 Ethiopia 2025 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 of the sampling note.

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. 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.⁶

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 Ethiopia 2015 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 inapplicable, due to skip patterns or other reasons.

⁶ 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.

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.worldbank.org/content/dam/enterprisesurveys/documents/methodology/Enterprise%20Surveys_Manual%20and%20Guide.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/project-schedule>
- The list of all WBES databases and detailed information about each is available here:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/DataDetails.xls>
- The description of the WBES indicators is available at:
<https://www.enterprisesurveys.org/content/dam/enterprisesurveys/documents/methodology/Indicator-Description.pdf>

Fact Sheet

Source of Universe Table	2024 Business Registry from the Ministry of Trade and Regional Integration (MoTRI)
Source of Sampling Frame	2024 Business Registry from the Ministry of Trade and Regional Integration (MoTRI)
Levels of Universe Table and Sampling Frame	Universe Table: Establishment-level Sampling Frame: Establishment-level
Registration agency	Ministry/Bureau of Trade and Regional Integration (MoTRI)
Stratification sectors	Manufacturing of: Food, Garments and Textiles, and Other manufacturing Services: Construction, Retail, Hotels and Restaurants, and Other Services
Stratification sizes	Small (5 to 19 workers), Medium (20 to 99 workers), Large (100+ workers)
Stratification regions	Addis Ababa; Oromia, Amhara, Tigray, South, East comprising of Afar, Dire Dawa, Harari and Somali regions; West comprising of Benishangul Gumuz and Gambela
Contractor	Ipsos Kenya and SART Consult
Fieldwork dates	April 2025 - December 2025
Interview languages	Amharic, Afar Oromo, Tigrigna, English
Survey software	Survey Solutions
Currency for nominal variables	Ethiopian Birr (ETB)
Reference fiscal year	2024 (708 obs.) and 2025 (303 obs.)
VAT Applicable	YES
Additional definitions	“Consumption Tax” was referred to as VAT. For the capital city (a3b) and main business city (a3c), Addis Ababa was entered.
Sample Size	Total: 1011 Fresh: 732 Panel: 279
Survey response rates	Yield: 24.9% Response rate: 78.7% Frame quality: 31.6%
Item response rates	d2: 99.6% n2a: 99.7% l1: 100% all TFPvars ⁷ : 97.8%
Additional topics covered in the questionnaire	N/A
Additional surveys available (if any)	N/A

⁷ TFP stands for total factor productivity. TFP variables are d2 (annual sales), n2a (annual cost of labor), n2e (annual cost of intermediate goods) and n7e (replacement cost of capital). Response rate for TFP variables is calculated only for manufacturing establishments.

Tables

Table 1: Ethiopia 2025 WBES Universe

		Food	Garments and Textiles	Other Manufacturing	Construction	Retail	Hotels and Restaurants	Other Services	Grand Total
Addis Ababa	Small (5-19)	845	850	3606	3481	18291	4150	35175	85,592
Addis Ababa	Medium (20-99)	352	311	1307	1001	2504	978	9908	
Addis Ababa	Large (100-199)	66	77	303	191	245	189	1762	
Oromia	Small (5-19)	1591	187	1537	1514	10984	3772	14188	42,480
Oromia	Medium (20-99)	417	92	929	470	1004	347	3978	
Oromia	Large (100-199)	75	65	305	111	148	55	711	
Amhara	Small (5-19)	1411	693	1281	1208	16479	3219	7995	37,562
Amhara	Medium (20-99)	231	34	286	440	1237	292	2214	
Amhara	Large (100-199)	28	14	41	77	98	26	258	
Tigray	Small (5-19)	507	137	1647	475	6501	1269	2768	16,330
Tigray	Medium (20-99)	82	27	438	161	885	119	889	
Tigray	Large (100-199)	23	10	54	56	73	38	171	
South	Small (5-19)	651	329	633	753	8585	2698	3795	20,572
South	Medium (20-99)	131	24	120	248	977	215	1110	
South	Large (100-199)	8	1	27	56	76	34	101	
East	Small (5-19)	156	19	280	1063	2118	635	2436	9,197
East	Medium (20-99)	40	3	123	484	282	93	1040	
East	Large (100-199)	19	7	29	73	42	20	235	
West	Small (5-19)	25	5	44	204	464	182	346	1,577
West	Medium (20-99)	5	0	11	50	115	5	85	
West	Large (100-199)	1	0	3	14	3	2	13	
		6,664	2,885	13,004	12,130	71,111	18,338	89,178	213,310

Source: 2024 Business Registry from the Ministry of Trade and Regional Integration (MoTRI)

Table 2: Ethiopia 2025 WBES Sample Frame

		Food	Garments and Textiles	Other Manufacturing	Construction	Retail	Hotels and Restaurants	Other Services	Grand Total
Addis Ababa	Small (5-19)	846	853	3629	3491	18325	4156	35263	86049
Addis Ababa	Medium (20-99)	361	323	1363	1017	2509	986	9966	
Addis Ababa	Large (100 or more)	79	87	357	204	250	194	1790	
Oromia	Small (5-19)	1599	191	1553	1515	10997	3784	14213	42613
Oromia	Medium (20-99)	427	92	940	471	1006	350	3983	
Oromia	Large (100 or more)	82	67	311	111	150	59	712	
Amhara	Small (5-19)	1414	694	1288	1209	16485	3221	8021	37631
Amhara	Medium (20-99)	233	34	292	441	1238	297	2217	
Amhara	Large (100 or more)	28	15	42	77	98	27	260	
Tigray	Small (5-19)	512	145	1682	479	6511	1279	2781	16439
Tigray	Medium (20-99)	85	29	444	163	886	122	890	
Tigray	Large (100 or more)	23	12	57	56	73	38	172	
South	Small (5-19)	655	329	642	754	8587	2706	3799	20625
South	Medium (20-99)	138	24	122	249	977	218	1113	
South	Large (100 or more)	9	2	31	57	76	36	101	
East	Small (5-19)	159	19	282	1063	2120	635	2440	9224
East	Medium (20-99)	42	3	128	485	282	93	1041	
East	Large (100 or more)	20	9	33	73	42	20	235	
West	Small (5-19)	25	5	44	204	464	182	346	1577
West	Medium (20-99)	5	0	11	50	115	5	85	
West	Large (100 or more)	1	0	3	14	3	2	13	
		6,743	2,933	13,254	12,183	71,194	18,410	89,441	214,158

Source: 2024 Business Registry from the Ministry of Trade and Regional Integration (MoTRI)

Table 3: Original Survey Design

		Garments and		Other		Retail	Hotels and Restaurants	Other Services	Grand Total
		Food	Textiles	Manufacturing	Construction				
Addis Ababa	Small (5-19)	4	4	7	6	45	7	55	238
Addis Ababa	Medium (20-99)	6	11	9	5	5	7	27	
Addis Ababa	Large (100-199)	6	12	5	4	4	5	4	
Oromia	Small (5-19)	4	4	4	4	19	7	25	149
Oromia	Medium (20-99)	6	10	7	4	4	4	7	
Oromia	Large (100-199)	7	11	5	4	4	5	4	
Amhara	Small (5-19)	4	4	4	4	36	6	14	141
Amhara	Medium (20-99)	6	10	4	4	4	4	4	
Amhara	Large (100-199)	6	6	4	4	4	5	4	
Tigray	Small (5-19)	4	4	4	4	11	4	5	120
Tigray	Medium (20-99)	7	12	7	4	4	6	4	
Tigray	Large (100-199)	9	5	6	5	4	7	4	
South	Small (5-19)	4	4	4	4	15	5	7	120
South	Medium (20-99)	8	10	6	5	4	7	4	
South	Large (100-199)	4	1	7	6	4	7	4	
East	Small (5-19)	4	4	4	4	4	4	5	120
East	Medium (20-99)	10	2	8	8	4	9	4	
East	Large (100-199)	8	4	10	8	4	8	4	
West	Small (5-19)	10	2	8	7	4	10	4	112
West	Medium (20-99)	2	0	5	20	10	2	10	
West	Large (100-199)	1	0	2	6	2	1	6	
		120	120	120	120	195	120	205	1,000

Table 4: Response Outcomes

		Totals	Rates relative to total contacted
Overall	Contacts available in frame	214,158	
	Issued	4,467	
Screening phase	Contacted	4,063	
	Eligibles	1,123	27.6%
	Screener refusals	121	3.0%
	Assumed eligibles	1,318	32.4%
	Ineligible + out of target	1,107	27.2%
	Unobtainables	1,681	41.4%
Interview phase (only if eligible)	Interview refusals	76	1.9%
	Complete interviews	1,011	24.9%

Table 5: Survey Yield Rates

Stratification		Yield	Survey response rate	Frame quality
Panel	Fresh	21.7%	73.4%	29.5%
	Panel	40.7%	86.9%	46.8%
Size	Small (5-19)	23.6%	74.1%	31.9%
	Medium (20-99)	25.8%	77.9%	33.2%
	Large (100+)	26.1%	79.7%	32.7%
Region	Addis Ababa	31.9%	80.6%	39.5%
	Oromia	25.5%	82.2%	31.0%
	Amhara	16.8%	69.7%	24.1%
	Tigray	31.4%	83.6%	37.6%
	South	23.4%	73.2%	32.0%
	East	24.3%	68.9%	35.2%
Sector	West	20.5%	75.4%	27.1%
	Food	30.2%	87.3%	34.6%
	Garments	30.0%	83.6%	36.0%
	Other Manufacturing	28.7%	83.8%	34.3%
Sector	Construction	20.1%	69.1%	29.1%
	Retail	19.7%	67.6%	29.2%
	Hotels	33.8%	85.3%	39.6%
	Other Services	22.6%	72.0%	31.3%
	Overall	Ethiopia 2025	24.9%	76.7%

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

Table 6: Achieved Total Sample

		Food	Garment and textiles	Other Manufacturing	Construction	Retail	Hotel and Restaurant	Other Services	Grand Total
Addis Ababa	Small (5-19)	4	4	7	7	33	10	57	279
Addis Ababa	Medium (20-99)	7	11	23	11	6	5	27	
Addis Ababa	Large (100 or more)	8	21	16	10	4	4	4	
Oromia	Small (5-19)	5	4	4	4	19	10	21	148
Oromia	Medium (20-99)	7	10	8	4	4	5	7	
Oromia	Large (100 or more)	5	11	5	4	3	4	4	
Amhara	Small (5-19)	4	4	4	4	30	6	15	129
Amhara	Medium (20-99)	5	9	3	4	4	5	4	
Amhara	Large (100 or more)	4	5	3	4	3	5	4	
Tigray	Small (5-19)	4	7	6	5	12	6	5	127
Tigray	Medium (20-99)	9	11	7	4	4	7	4	
Tigray	Large (100 or more)	4	4	6	6	4	8	4	
South	Small (5-19)	10	5	4	4	15	5	7	120
South	Medium (20-99)	10	5	7	6	4	6	4	
South	Large (100 or more)	4	1	4	5	3	7	4	
East	Small (5-19)	4	4	4	4	4	4	5	122
East	Medium (20-99)	11	1	7	8	4	9	6	
East	Large (100 or more)	8	4	10	7	4	9	5	
West	Small (5-19)	9	1	8	7	5	10	4	86
West	Medium (20-99)	2	0	4	13	8	2	7	
West	Large (100 or more)	0	0	0	2	0	1	3	
		124	122	140	123	173	128	201	1,011

Table 7: Achieved Panel Sample

		Food	Garment and textiles	Other Manufacturing	Construction	Retail	Hotel and Restaurant	Other Services	Grand Total
Addis Ababa	Small (5-19)	0	0	4	4	13	2	29	137
Addis Ababa	Medium (20-99)	4	6	13	7	3	1	14	
Addis Ababa	Large (100 or more)	5	6	14	6	2	2	2	
Oromia	Small (5-19)	3	2	2	0	6	6	9	51
Oromia	Medium (20-99)	4	0	4	1	1	1	4	
Oromia	Large (100 or more)	2	1	3	0	0	2	0	
Amhara	Small (5-19)	0	0	0	0	2	1	5	18
Amhara	Medium (20-99)	1	0	1	0	0	3	2	
Amhara	Large (100 or more)	0	1	0	0	0	1	1	
Tigray	Small (5-19)	1	5	4	3	6	5	3	42
Tigray	Medium (20-99)	3	0	3	1	1	3	0	
Tigray	Large (100 or more)	0	0	3	0	0	0	1	
South	Small (5-19)	0	0	1	0	0	2	2	15
South	Medium (20-99)	1	0	2	0	0	2	1	
South	Large (100 or more)	0	1	1	0	0	2	0	
East	Small (5-19)	1	0	2	0	0	0	1	16
East	Medium (20-99)	2	0	3	1	0	0	0	
East	Large (100 or more)	1	2	3	0	0	0	0	
		28	24	63	23	34	33	74	279

Table 8: Weak Universe Estimates

		Food	Garments	Other Manufacturing	Construction	Retail	Hotels	Other Services	Grand Total
Addis Ababa	Small (5-19)	739	878	2064	2156	2719	41	28592	67150
Addis Ababa	Medium (20-99)	192	549	3248	1113	970	645	12538	
Addis Ababa	Large (100 or more)	508	144	3119	579	49	3089	3218	
Oromia	Small (5-19)	2274	112	492	355	4647	101	10563	26910
Oromia	Medium (20-99)	728	419	263	763	171	51	4000	
Oromia	Large (100 or more)	127	67	1245	285	0	0	246	
Amhara	Small (5-19)	2297	1107	878	1113	7377	1101	5247	22785
Amhara	Medium (20-99)	84	236	354	115	707	143	1440	
Amhara	Large (100 or more)	34	2	15	10	0	47	478	
Tigray	Small (5-19)	1450	60	1415	197	2222	377	2026	10182
Tigray	Medium (20-99)	204	34	462	38	485	53	938	
Tigray	Large (100 or more)	0	0	186	0	0	7	29	
South	Small (5-19)	368	606	1362	223	3774	687	3744	13916
South	Medium (20-99)	112	0	57	179	363	93	1828	
South	Large (100 or more)	11	394	21	19	0	30	44	
East	Small (5-19)	87	10	411	858	1164	132	2804	7477
East	Medium (20-99)	94	5	199	734	113	174	651	
East	Large (100 or more)	10	0	10	0	0	13	9	
West	Small (5-19)	5	3	62	100	161	47	198	665
West	Medium (20-99)	14	0	0	52	6	4	9	
West	Large (100 or more)	0	0	2	0	0	0	3	
		9336	4627	15864	8888	24927	6836	78605	149083

Table 9: Median Universe Estimates

		Food	Garments	Other Manufacturing	Construction	Retail	Hotels	Other Services	Grand Total
Addis Ababa	Small (5-19)	353	392	1037	876	1254	20	13432	30671
Addis Ababa	Medium (20-99)	75	219	1425	445	425	329	5720	
Addis Ababa	Large (100 or more)	213	66	1252	242	20	1489	1387	
Oromia	Small (5-19)	872	55	241	124	1866	46	4342	11027
Oromia	Medium (20-99)	309	175	145	298	63	23	1682	
Oromia	Large (100 or more)	57	24	468	101	0	0	135	
Amhara	Small (5-19)	885	428	296	379	2623	487	1876	8247
Amhara	Medium (20-99)	30	76	111	33	214	57	557	
Amhara	Large (100 or more)	12	1	5	3	0	16	159	
Tigray	Small (5-19)	688	35	666	89	1113	162	1078	5005
Tigray	Medium (20-99)	109	21	207	15	231	28	453	
Tigray	Large (100 or more)	0	0	94	0	0	4	13	
South	Small (5-19)	175	287	575	84	1636	350	1757	6278
South	Medium (20-99)	54	0	22	69	165	46	836	
South	Large (100 or more)	5	173	8	7	0	13	16	
East	Small (5-19)	40	5	178	319	478	69	1193	3118
East	Medium (20-99)	42	3	75	293	41	90	273	
East	Large (100 or more)	4	0	5	0	0	6	3	
West	Small (5-19)	3	2	30	48	80	28	104	340
West	Medium (20-99)	7	0	0	26	3	3	4	
West	Large (100 or more)	0	0	1	0	0	0	1	
		3933	1962	6841	3450	10212	3266	35020	64685

Table 10: Strict Universe Estimates

		Food	Garments	Other Manufacturing	Construction	Retail	Hotels	Other Services	Grand Total
Addis Ababa	Small (5-19)	290	260	793	702	921	20	10097	23423
Addis Ababa	Medium (20-99)	65	190	1147	363	315	294	4353	
Addis Ababa	Large (100 or more)	182	60	968	203	16	1080	1104	
Oromia	Small (5-19)	658	49	196	104	1402	43	3474	8765
Oromia	Medium (20-99)	245	131	124	235	48	22	1364	
Oromia	Large (100 or more)	55	23	380	84	0	0	126	
Amhara	Small (5-19)	609	280	184	236	1578	356	1159	5236
Amhara	Medium (20-99)	23	48	72	23	132	44	365	
Amhara	Large (100 or more)	9	1	4	2	0	10	102	
Tigray	Small (5-19)	544	32	557	75	853	128	902	4072
Tigray	Medium (20-99)	106	20	176	13	178	26	372	
Tigray	Large (100 or more)	0	0	76	0	0	4	11	
South	Small (5-19)	170	236	457	72	1257	326	1458	5120
South	Medium (20-99)	52	0	20	58	125	45	668	
South	Large (100 or more)	5	133	7	6	0	12	14	
East	Small (5-19)	37	5	132	259	359	62	894	2426
East	Medium (20-99)	38	3	64	223	32	81	219	
East	Large (100 or more)	4	0	5	0	0	6	3	
West	Small (5-19)	3	1	24	39	63	26	87	282
West	Medium (20-99)	6	0	0	20	2	3	4	
West	Large (100 or more)	0	0	1	0	0	0	1	
		3102	1470	5388	2719	7281	2585	26776	49322

Table 11: Item Response Rates

	 Screener/Interview	d2	I1	n2a	all TFP variables
Panel	Fresh	99.5%	100.0%	99.6%	97.3%
	Panel	100.0%	100.0%	100.0%	99.1%
Size	Small (5-19)	100.0%	100.0%	100.0%	99.2%
	Medium (20-99)	98.8%	100.0%	99.1%	96.0%
	Large (100+)	100.0%	100.0%	100.0%	98.1%
Region	Addis Ababa	100.0%	100.0%	100.0%	100.0%
	Oromia	100.0%	100.0%	100.0%	100.0%
	Amhara	100.0%	100.0%	100.0%	100.0%
	Tigray	100.0%	100.0%	100.0%	96.8%
	South	98.2%	100.0%	98.2%	89.6%
	East	100.0%	100.0%	100.0%	100.0%
	West	97.4%	100.0%	98.7%	93.3%
Sector	Food	98.3%	100.0%	100.0%	97.5%
	Garments	100.0%	100.0%	100.0%	97.7%
	Other Manufacturing	100.0%	100.0%	99.4%	98.1%
	Construction	98.8%	100.0%	98.8%	N/A
	Retail	100.0%	100.0%	100.0%	N/A
	Hotels	100.0%	100.0%	100.0%	N/A
	Other Services	99.7%	100.0%	99.7%	N/A
Overall	Ethiopia 2025	99.6%	100.0%	99.7%	97.8%

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).