

The Philippines 2023 World Bank Enterprise Survey Implementation Report

I. Introduction

This document provides information on the World Bank Enterprise Surveys (WBES) implemented in the Philippines between April 2023 and February 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 180,000 firms in 154 countries with a total of 306 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 Philippines 2023 WBES uses the following stratification categories:

- **Industry: 7 categories:**
 - Within manufacturing: Food, Fabricated Metal Products, Other manufacturing
 - Within services: Retail, Hotels, Professional Services, and Other Services
- **Size: 3 categories:** Small (5 to 19 employees), Medium (20 to 99 employees), Large (100 or more employees)
- **Region: 5 categories:** National Capital Region (NCR); Central Luzon and Northern; Calabarzon and Bicol; Cebu and Central eastern; Davao and southern

Industry strata for the manufacturing sector were selected by their contribution to the total number of establishments according to information from the Philippines Statistical Authority's (PSA) List of Establishments (LE), updated in 2022. Similarly, the strata for the services sector were also selected by contribution to total number of establishments based on the LE database.

Region strata of the Philippines 2023 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. In particular, the country is grouped into the following 5 regions for this survey: ***National Capital Region (NCR)*** [covering the National Capital Region and Manila]; ***Central Luzon and Northern*** [covering Cordillera Administrative Region (CAR), Region I (Ilocos Region), Region II (Cagayan Valley), Region III (Central Luzon), and MIMAROPA Region)]; ***Calabarzon and Bicol*** [covering Region IV-A (CALABARZON) and Region V (Bicol Region)]; ***Cebu and central eastern*** [covering Region VI (Western Visayas), Region VII (Central Visayas), Metro Cebu, Region VIII (Eastern Visayas)]; ***Davao and southern***, [covering Northern Mindanao, Davao, Soccsksargen included Region IX (Zamboanga Peninsula), Region X (Northern Mindanao), Region XI (Davao Region); Region XII (SOCCSKSARGEN), Region XIII (Caraga)].

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 Philippines, the listing from the PSA's List of Establishments (LE), a registrar of businesses operating in the Philippines, was used. The registration agency is the Securities and Exchange Commission (SEC). 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 Philippines 2023 WBES, the universe table, shown in Table 1 below, was obtained from the PSA's List of Establishments (LE) updated in 2022.

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 Philippines 2023 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 Philippines 2015 WBES. The Fresh Sampling Frame, i.e., list of establishments that are in the WBES universe and that have not participated in the Philippines 2015 WBES, for the manufacturing sector (ISIC 4.0 codes 10-32), was obtained mainly from the PSA.

The Fresh Sampling Frame for the services sector (ISIC 4.0 codes 41-43, 45-47, 49-56, 58, 61, 62, 69-75, 79, 95) is from the PSA.

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 of non-eligible units included in the sample universe 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 using 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 Surveys Manual and Guide*.⁵ The original survey design for the Philippines 2023 WBES is given in Table 3.

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.

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. 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 Philippines 2023 WBES were conducted between April 2023 and February 2024. The interviews were conducted in English and Tagalog. For monetary variables, the currency was the Philippines Peso.

Apart from the challenges with participation and call-backs that are standard for all surveys, the Philippines 2023 WBES faced significant challenges concerning the item-response rate for recall questions, particularly recall questions for sales (variable n3). Due to the timing of some of the recall questions (e.g., variable n3), which overlapped with the COVID-19 pandemic period, many firms reported that they were not operational during that time. As a result, the values for these variables are considered missing and have been coded as -7. Additionally, many respondents reported no recollection of their values, particularly for n3, which led to a high rate of non-response despite repeated follow-up calls.

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, 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*.

The questionnaire implemented in the Philippines 2023 WBES included additional questions tailored for the Business Ready Report covering infrastructure, trade, government regulations, finance, labor, and other topics.

III.2 Contractor

The fieldwork for the Philippines 2023 WBES was implemented by the main contractor, Mekong Economics LTD, and a local sub-contractor, Business Planners. 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:

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

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 Philippines 2023 WBES and across its stratification levels.

III.5 Achieved Sample

Tables 6 and 7 provide count 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 Philippines 2023 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	1,2,3,4,16
Median	1,2,3,4,16,10,11,13
Weak	1,2,3,4,16,10,11,13,91,92,93,94,12

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

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.

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 Philippines 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. 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	Philippine Statistics Authority (PSA), the 2022 List of Establishments (LE) of the PSA
Source of Sampling Frame	Philippine Statistics Authority (PSA), specifically the 2022 List of Establishments (LE) of the PSA
Stratification sectors:	<ul style="list-style-type: none"> • Food manufacturing; • Manufacturing of fabricated metal products; • Other manufacturing; • Retail; • Hotels; • Professional Services; and • Other Services.
Stratification sizes:	<ul style="list-style-type: none"> • Small (5 to 19 employees); • Medium (20 to 99 employees); • Large (100 or more employees).
Stratification regions	<ul style="list-style-type: none"> • National Capital Region (NCR); • Central Luzon and Northern; • Calabarzon and Bicol; • Cebu and Central Eastern; • Davao and Southern.
Contractor	Main contractor: Main contractor is Mekong Economics LTD, with Business Planners the local sub-contractor.
Fieldwork dates	April 2023 – February 2024.
Interview languages	English and Tagalog.
Survey software	Survey Solutions
Currency for nominal variables	Philippines Peso.
Reference fiscal year	2022 (995 obs.) and 2023 (7 obs.)
Sample Size	Total: 1,002 Fresh: 669 Panel: 333
Survey response rates	Yield: 38% Response rate: 68% Frame quality: 55.8%
Item response rates	d2: 97.1% n2a: 91.8% 11: 99.3% all TFP vars.: 49.8%
Additional topics covered in the questionnaire	None
Additional surveys available (if any)	None

Tables

Table 1: Philippines 2023 WBES Universe

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	1198	359	2604	11854	445	1598	17019	46076
National Capital Region	Medium (20-99)	268	194	1194	1636	193	590	4880	
National Capital Region	Large (100 or more)	111	34	337	249	39	149	1125	
Central Luzon and Northern	Small (5-19)	1677	383	2823	12818	887	487	12091	36037
Central Luzon and Northern	Medium (20-99)	330	82	558	1210	184	32	1812	
Central Luzon and Northern	Large (100 or more)	86	14	225	107	20	5	206	
Calabarzon and Bicol	Small (5-19)	1908	408	2323	11859	673	452	10746	33878
Calabarzon and Bicol	Medium (20-99)	301	187	735	1145	162	55	1800	
Calabarzon and Bicol	Large (100 or more)	95	61	567	94	10	22	275	
Cebu and Central Eastern	Small (5-19)	2383	149	1915	11821	840	533	10602	33071
Cebu and Central Eastern	Medium (20-99)	261	47	392	1120	215	79	1948	
Cebu and Central Eastern	Large (100 or more)	95	9	189	173	26	20	254	
Davao and Southern	Small (5-19)	2583	242	1847	11749	753	484	11623	33539
Davao and Southern	Medium (20-99)	311	49	288	1136	128	53	1744	
Davao and Southern	Large (100 or more)	101	4	79	124	9	7	225	
		11,708	2,222	16,076	67,095	4,584	4,566	76,350	182,601

Source: Philippines Statistical Authority's (PSA) List of Establishments (LE), updated in 2022.

Table 2: Philippines 2023 WBES Sample Frame (Fresh and Panel Combined)

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	38	98	125	168	39	111	169	2200
National Capital Region	Medium (20-99)	84	147	188	43	118	135	104	
National Capital Region	Large (100 or more)	93	36	244	53	23	95	89	
Central Luzon and Northern	Small (5-19)	39	94	67	151	51	75	145	1368
Central Luzon and Northern	Medium (20-99)	79	70	82	21	113	19	32	
Central Luzon and Northern	Large (100 or more)	63	10	164	38	13	5	37	
Calabarzon and Bicol	Small (5-19)	42	90	59	147	46	75	144	1438
Calabarzon and Bicol	Medium (20-99)	68	134	66	19	97	33	27	
Calabarzon and Bicol	Large (100 or more)	62	45	189	37	8	13	37	
Cebu and Central Eastern	Small (5-19)	58	78	53	143	52	78	141	1336
Cebu and Central Eastern	Medium (20-99)	74	36	53	19	111	47	31	
Cebu and Central Eastern	Large (100 or more)	71	12	165	37	21	15	41	
Davao and Southern	Small (5-19)	57	75	21	135	48	75	135	993
Davao and Southern	Medium (20-99)	66	29	15	15	76	31	18	
Davao and Southern	Large (100 or more)	60	4	47	35	8	7	36	
		954	958	1,538	1,061	824	814	1,186	7,335

Source: Philippines Statistical Authority's (PSA) List of Establishments (LE), updated in 2022.

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

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	6	6	6	33	3	3	39	240
National Capital Region	Medium (20-99)	6	8	6	6	6	3	15	
National Capital Region	Large (100 or more)	23	16	17	6	3	14	15	
Central Luzon and Northern	Small (5-19)	11	12	13	21	3	3	16	200
Central Luzon and Northern	Medium (20-99)	14	17	9	6	6	4	9	
Central Luzon and Northern	Large (100 or more)	13	5	19	6	7	2	4	
Calabarzon and Bicol	Small (5-19)	8	11	14	17	4	3	15	200
Calabarzon and Bicol	Medium (20-99)	7	21	13	6	3	7	11	
Calabarzon and Bicol	Large (100 or more)	7	11	19	9	3	7	4	
Cebu and Central Eastern	Small (5-19)	9	8	8	14	4	3	12	180
Cebu and Central Eastern	Medium (20-99)	12	10	8	6	3	3	10	
Cebu and Central Eastern	Large (100 or more)	15	7	19	7	9	6	7	
Davao and Southern	Small (5-19)	3	3	3	7	29	43	7	180
Davao and Southern	Medium (20-99)	3	3	3	3	34	16	3	
Davao and Southern	Large (100 or more)	3	2	3	3	3	3	3	
		140	140	160	150	120	120	170	1,000

Table 4: Response Outcomes

		Totals	Rates relative to total contacted
Overall	Contacts available in frame	7,335	
	Issued	3,124	
	Contacted	2,640	
Screening phase	Eligibles	1,379	52.2%
	Screener refusals	95	3.6%
	Assumed eligibles	1,474	55.8%
	Ineligible + out of target	217	8.2%
	Unobtainables	236	8.9%
Interview phase (only if eligible)	Interview refusals	198	7.5%
	Complete interviews	1,002	38.0%

Table 5: Survey Yield Rates

	Stratification	Yield	Survey response rate	Frame quality
Panel	Fresh	43.1%	77.8%	55.4%
	Panel	30.6%	54.2%	56.4%
Size	Small (5-19)	43.7%	75.8%	57.7%
	Medium (20-99)	38.7%	66.9%	57.9%
	Large (100+)	30.5%	59.1%	51.6%
Region	National Capital Region	29.5%	55.8%	52.9%
	Central Luzon and Northern	42.2%	71.3%	59.2%
	Calabarzon and Bicol	32.2%	68.7%	46.9%
	Cebu and Central Eastern	51.2%	74.6%	68.7%
	Davao and Southern	48.9%	78.2%	62.6%
Sector	Food	36.2%	68.1%	53.1%
	Fabricated Metal Products	40.8%	67.4%	60.5%
	Other Manufacturing	26.0%	51.0%	51.0%
	Retail	40.9%	80.6%	50.8%
	Hotels	47.9%	77.2%	62.1%
	Professional Activities	45.5%	75.5%	60.3%
	Other Services	43.6%	71.7%	60.8%
Overall	Philippines 2023	38.0%	68.0%	55.8%

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

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

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	8	7	6	28	5	2	50	231
National Capital Region	Medium (20-99)	6	10	15	8	3	5	20	
National Capital Region	Large (100 or more)	8	8	17	5	2	10	8	
Central Luzon and Northern	Small (5-19)	11	10	13	24	3	3	19	176
Central Luzon and Northern	Medium (20-99)	11	15	8	4	4	4	6	
Central Luzon and Northern	Large (100 or more)	8	3	14	6	6	1	3	
Calabarzon and Bicol	Small (5-19)	4	5	13	26	4	4	20	228
Calabarzon and Bicol	Medium (20-99)	10	19	19	8	3	9	12	
Calabarzon and Bicol	Large (100 or more)	15	15	28	4	1	4	5	
Cebu and Central Eastern	Small (5-19)	9	8	8	18	4	4	13	188
Cebu and Central Eastern	Medium (20-99)	12	11	9	6	4	2	10	
Cebu and Central Eastern	Large (100 or more)	14	7	19	7	8	8	7	
Davao and Southern	Small (5-19)	3	3	3	7	29	42	7	179
Davao and Southern	Medium (20-99)	2	4	4	4	36	16	4	
Davao and Southern	Large (100 or more)	3	1	1	3	3	3	1	
		124	126	177	158	115	117	185	1,002

Table 7: Achieved Panel Sample

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	4	3	3	18	0	0	11	106
National Capital Region	Medium (20-99)	3	5	9	4	0	0	15	
National Capital Region	Large (100 or more)	6	5	14	2	0	0	4	
Central Luzon and Northern	Small (5-19)	6	7	10	6	0	0	5	77
Central Luzon and Northern	Medium (20-99)	8	11	5	2	2	0	3	
Central Luzon and Northern	Large (100 or more)	4	0	6	2	0	0	0	
Calabarzon and Bicol	Small (5-19)	2	2	10	3	1	0	5	59
Calabarzon and Bicol	Medium (20-99)	0	6	6	2	0	0	5	
Calabarzon and Bicol	Large (100 or more)	2	4	10	1	0	0	0	
Cebu and Central Eastern	Small (5-19)	6	4	5	7	1	0	5	91
Cebu and Central Eastern	Medium (20-99)	8	5	6	3	0	0	6	
Cebu and Central Eastern	Large (100 or more)	8	3	16	3	1	0	4	
		57	55	100	53	5	-	63	333

Table 8: Weak Universe Estimates

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	691	270	1669	7054	370	1189	11292	29,851
National Capital Region	Medium (20-99)	163	154	809	1029	170	464	3422	
National Capital Region	Large (100 or more)	53	21	178	122	27	91	614	
Central Luzon and Northern	Small (5-19)	1074	320	2010	8471	819	403	8910	25,576
Central Luzon and Northern	Medium (20-99)	223	73	420	845	180	28	1411	
Central Luzon and Northern	Large (100 or more)	45	10	132	58	15	3	125	
Calabarzon and Bicol	Small (5-19)	728	203	986	4671	370	223	4719	14,281
Calabarzon and Bicol	Medium (20-99)	121	98	330	477	94	29	835	
Calabarzon and Bicol	Large (100 or more)	30	27	198	30	5	9	99	
Cebu and Central Eastern	Small (5-19)	1608	131	1437	8232	818	464	8232	24,651
Cebu and Central Eastern	Medium (20-99)	186	44	311	824	221	73	1599	
Cebu and Central Eastern	Large (100 or more)	53	7	117	99	21	14	162	
Davao and Southern	Small (5-19)	1815	222	1443	8520	763	439	9398	26,013
Davao and Southern	Medium (20-99)	231	47	238	871	137	51	1490	
Davao and Southern	Large (100 or more)	58	3	51	74	7	5	150	
		7079	1631	10327	41376	4018	3486	52457	120372

Table 9: Median Universe Estimates

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	611	222	1451	6196	292	1024	10292	26,828
National Capital Region	Medium (20-99)	148	130	720	925	137	409	3193	
National Capital Region	Large (100 or more)	51	19	169	117	23	86	613	
Central Luzon and Northern	Small (5-19)	886	246	1630	6943	603	323	7576	21,248
Central Luzon and Northern	Medium (20-99)	189	59	349	709	135	23	1228	
Central Luzon and Northern	Large (100 or more)	41	8	117	52	12	3	116	
Calabarzon and Bicol	Small (5-19)	675	176	899	4306	307	201	4514	13,363
Calabarzon and Bicol	Medium (20-99)	115	87	308	450	80	26	818	
Calabarzon and Bicol	Large (100 or more)	30	26	198	31	4	9	104	
Cebu and Central Eastern	Small (5-19)	1430	109	1256	7275	649	402	7548	22,105
Cebu and Central Eastern	Medium (20-99)	169	37	278	746	180	64	1501	
Cebu and Central Eastern	Large (100 or more)	51	7	112	96	18	14	163	
Davao and Southern	Small (5-19)	1407	160	1100	6563	528	331	7512	20,346
Davao and Southern	Medium (20-99)	183	35	186	687	97	39	1219	
Davao and Southern	Large (100 or more)	50	2	42	62	6	4	131	
		6036	1324	8814	35158	3069	2959	46529	103889

Table 10: Strict Universe Estimates

		Food	Fabricated Metal Products	Other Manufacturing	Retail	Hotel	Professional Activities	Other Services	Grand Total
National Capital Region	Small (5-19)	549	216	1396	5857	275	977	9892	25,499
National Capital Region	Medium (20-99)	130	124	680	859	127	383	3015	
National Capital Region	Large (100 or more)	45	18	161	109	21	81	582	
Central Luzon and Northern	Small (5-19)	813	244	1602	6705	581	315	7440	20,609
Central Luzon and Northern	Medium (20-99)	170	58	337	673	128	22	1185	
Central Luzon and Northern	Large (100 or more)	37	8	114	50	12	3	113	
Calabarzon and Bicol	Small (5-19)	632	178	901	4239	301	200	4518	13,202
Calabarzon and Bicol	Medium (20-99)	106	87	303	435	77	26	804	
Calabarzon and Bicol	Large (100 or more)	28	26	196	30	4	9	103	
Cebu and Central Eastern	Small (5-19)	1288	106	1211	6892	614	385	7271	20,990
Cebu and Central Eastern	Medium (20-99)	150	35	264	694	167	61	1420	
Cebu and Central Eastern	Large (100 or more)	46	7	106	90	17	13	155	
Davao and Southern	Small (5-19)	1280	158	1071	6280	504	320	7308	19,516
Davao and Southern	Medium (20-99)	164	34	177	645	91	37	1165	
Davao and Southern	Large (100 or more)	45	2	41	59	5	4	126	
		5483	1300	8558	33617	2926	2836	45096	99815

Table 11: Item Response Rates

	Screeners/Interview	d2	l1	n2a	all TFP variables
Panel	Fresh	96.4%	99.6%	91.3%	47.5%
	Panel	98.5%	98.8%	92.8%	52.2%
Size	Small (5-19)	99.1%	99.8%	92.5%	53.1%
	Medium (20-99)	96.7%	98.2%	91.4%	51.4%
	Large (100+)	94.2%	100.0%	91.3%	45.6%
Region	National Capital Region	97.4%	99.1%	90.4%	52.6%
	Central Luzon and Northern	98.2%	100.0%	95.3%	54.1%
	Calabarzon and Bicol	93.2%	99.2%	91.5%	45.5%
	Cebu and Central Eastern	97.9%	98.4%	93.7%	50.0%
	Davao and Southern	100.0%	100.0%	88.8%	48.5%
Sector	Food	95.4%	100.0%	90.8%	55.0%
	Fabricated Metal Products	96.6%	96.6%	94.3%	43.7%
	Other Manufacturing	95.3%	99.6%	92.7%	49.6%
	Retail	97.1%	100.0%	90.7%	NA
	Hotels	100.0%	100.0%	89.1%	NA
	Professional Activities	100.0%	100.0%	95.7%	NA
	Other Services	97.4%	98.7%	90.8%	NA
Overall	Philippines 2023	97.1%	99.3%	91.8%	49.8%

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).