
**World Bank's
ENTERPRISE SURVEY

UNDERSTANDING
THE QUESTIONNAIRE**

January, 2011

Global version of this instrument also available at www.enterprisesurveys.org

INTRODUCTION

The World Bank's Enterprise Surveys (ES) collect data from key manufacturing and service sectors in every region of the world. The Surveys use standardized survey instruments and a uniform sampling methodology to minimize measurement error and to yield data that are comparable across the world's economies. Most importantly, the Enterprise Surveys are designed to provide panel data sets. Because panel data is one of the best ways to pinpoint how and which of the changes in the business environment affect firm-level productivity over time and across countries, the Enterprise Survey Initiative has made panel data a top priority.

The use of properly designed survey instruments and a uniform sampling methodology enhances the credibility of World Bank analysis and the recommendations that stem from this analysis. The Enterprise Survey team aims to achieve the following objectives:

- To provide statistically significant business environment indicators that are comparable across all of the world's economies;
- To assess the constraints to private sector growth and enterprise performance;
- To build a panel of establishment-level data that will make it possible to track changes in the business environment over time, thus allowing, for example, impact assessments of reforms and policy changes; and
- To stimulate policy dialogue on the business environment and to help shape the agenda for reform.

The purpose of this document is to provide information and guidance to the implementing contractor, researchers, field managers, field supervisors and enumerators on how to understand the questions in the surveys. Two complementary notes, the Implementation Note and the Sampling Note complete the documentation for these surveys. The Implementation Note is geared to a wider audience including field managers, field supervisors and enumerators. The Sampling Note is a technical document of more interest to researchers and final users of the data.

1. What is in an Enterprise Survey questionnaire

The survey is implemented in two stages. In the first stage the Screener questionnaire is applied typically on via phone and the eligibility of firm is determined. Some additional control information is collected as well as the contact information. In the second stage one of the two versions of the questionnaire (*Manufacturing* or *Services*) is applied following the eligibility type determined in the first stage.

The two versions of the instrument, *Manufacturing* and *Services* are comprised of thirteen sections organized by topic:

- Section A – *Control Information*: information collected in the first stage of implementation
- Section B – *General information*: characteristics of the establishment.
- Section C – *Infrastructure and Services*: power, water, transport, and communication technologies.
- Section D – *Sales and Supplies*: imports, exports, supply and demand conditions.
- Section E – *Degree of Competition*: number of competitors and technology
- Section F – *Capacity*.
- Section G – *Land*: land ownership, land access issues.

- Section I – *Crime*: extent of crime and losses due to crime.
- Section K – *Finance*: sources of finance, access to credit.
- Section J – *Business-Government Relations*: quality of public services, consistency of policy, regulatory compliance costs (management time, bribes).
- Section L – *Labor* employment, training, skills.
- Section M – *Business Environment*: ranking of general obstacles.
- Section N – *Performance*: numbers and figures needed to estimate performance or productivity.

Section F, *Capacity*: use of production capacity, hours of operation, is a section only included in the *Manufacturing Module*.

The primary sampling unit of the study is the establishment. An establishment is a physical location where business is carried out and where industrial operations take place or services are provided. A firm may be composed of one or more establishments. For ex., a brewery may have several bottling plants and several establishments for distribution. For the purposes of this survey an establishment must *make its own financial decisions and have its own financial statements separate from those of the firm*. An establishment must also have its *one management and control over its payroll*.

a. How to ask questions

Tables are to be read one category at a time. For example, when asking the following question:

C.22a	At the present time, does this establishment use e-mail to communicate with clients or suppliers?
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Yes	1
No	2
Don't know (spontaneous)	-9

c22a

The first question to be asked should be “At the present time is e-mail used to communicate with clients or suppliers?”, solicit a response, and then continue by asking “At the present time does this establishment use its own website?”. The point is not to confuse the respondent by asking him or her two questions at once.

There are particularly difficult questions to implement that we point out here. For example, when asking the following question:

D.3	In fiscal year [insert last complete fiscal year] , what percent of this establishment's sales were:
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INTERVIEWER: THESE MUST BE ASKED IN THE ORDER THEY APPEAR ON THE TABLE

	Percent	
a. National sales	%	IF 100, GO TO QUESTION D.10
b. Indirect exports [sold domestically to third party that exports products]	%	IF 100, GO TO QUESTION D.8
c. Direct exports	%	IF 0, GO TO QUESTION D.8

	100%

INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%

This is a difficult question to implement because the responses must be given in the order of the table, from top to bottom, for the skip patterns to work. The best way to ask this question is by reading each category, from top to bottom, one by one and solicit a response from each before moving on to the next category.

b. Instructions for Interviewers

The questionnaires are visually coded to facilitate implementation. Instructions for interviewers appear in **BOLD AND UPPERCASE LETTERS**. The interviewer should not read these instructions out loud; they only operate as guidelines. At times, some questions require special instructions before being posed:

READ ONLY IF A7=1 (yes)

I want to proceed by asking you about this establishment only.

B.5 In what year did this establishment begin operations?

	Year
Year establishment began operations	b5
Don't know (spontaneous)	-9

INTERVIEWER: PROVIDE FOUR DIGITS FOR YEAR

In general, whatever text that appears in **BOLD AND UPPERCASE** in the questionnaire should not be read aloud; this includes responses to the question like **“DON'T KNOW”**, **“DOES NOT APPLY”**, or **“REFUSED”** when a respondent refuses to answer. Note the following example:

C.22a At the present time, does this establishment use e-mail to communicate with clients or suppliers?

Yes	1
No	2
DON'T KNOW (SPONTANEOUS)	-9

c22a

The text in ***BOLD, UPPERCASE AND ITALICIZED LETTERS*** indicates a skip pattern. When the interviewer sees these letters on the side of an answer given by the interviewee, he or she should proceed according to the instructions given by the skip pattern.

Text appearing in **[bold and in brackets]** indicates a portion of the questionnaire that is modified on a country-by-country or year-by-year basis. For instance, a number of the questions include the text “In fiscal year **[insert last complete fiscal year]**...” and should be read as, say, “In fiscal year **2009**”. These changes are made directly to the text prior to fieldwork.

Finally, text that appears between parentheses is intended as a guideline for the interviewer. For example, in the following question the text in the parentheses gives examples of a specific term in the text (here, “main point of exit”):

D.4	In fiscal year [insert last complete fiscal year] , when this establishment exported goods directly, how many days did it take on average from the time this establishment’s goods arrived at their main point of exit (e.g., port, airport) until the time these goods cleared customs?
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	Days
Average number of days to clear customs	d4
LESS THAN ONE DAY	1
DON’T KNOW (SPONTANEOUS)	-9

c. What are acceptable responses

Many questions ask for percentages or fractions.

In general, all numbers should be recorded in such a way as to **not have decimals**. So, ten percent is recoded as 10 (not .1 nor .10 and certainly not 1/10). In cases where the respondent answers 10.5 percent, for example, the enumerator should **round up** to 11 percent. In cases where the respondent answers 10.25 percent, the enumerator should round down to 10 percent. The point is to **eliminate all decimals even if it sometimes means rounding down to zero**.

With regard to the rounding rule, in terms of measurement of time, where the answer given by the respondent is between 0 and 1, the rule is to record 1 (hour/minute/day, etc.). These cases are clearly indicated in the questionnaires, see examples B7 and C4 below.

For purposes of standardization, the conventions for time conversions are the following:

1 day= calendar day;
1 week= 7 days;
1 month= 4 weeks;
1 month= 30 days.
1 year= 52 weeks; and
1 year= 365 days.

If the question asks for a response in days and the respondent responds in weeks, the enumerator must make the conversion and record the response in days, not in weeks. If in doubt about the conversion, record the answer in the margin for conversion after interview.

If the enumerator hears one and a half days, they should round up and record a two (2).

Some questions have pre-coded answers to facilitate implementation. As an ex., in the following question answers of less than one year should all be coded as one. The questionnaire provides this pre-coded answer.

B.7	How many years of experience working in this sector does the Top Manager have?
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Answer: “Two months”

	Years
Manager’s experience in sector	
Less than one year	1

Or

C.4	In reference to the application for an electrical connection, approximately what was the wait, in days, experienced to obtain that connection from the day this establishment applied for it to the day it received the service?
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Answer: “Two hours”

	Days
Wait for electrical connection	
Less than one day	1
Still in process	-6
Application denied	-5
Don’t know	-9

The only case when the respondent is asked to do the conversion themselves is when they respond in dollars, Euros, or any other currency which is not the local currency. **All questions should have a response in the local currency units (LCUs). The enumerator does not do the conversion himself.** This discussion about currencies should also make it clear that the enumerator should always be aware of the currency units the respondent is referring to in his or her responses.

c. How to minimize enumerator bias

The questionnaire is to be read as it is written. As with any survey enumerators should refrain from introducing any interpretation bias by trying to explain or direct the answer. However, in some cases answers are not provided in the format desired or they do not address the issue in question. To handle these situations, in general, questions can be classified in 2 categories: one, opinion-based or sensitive questions and, second, hard-data questions.

Opinion-based or sensitive questions are those where the actual opinion of the respondent is requested or where a sensitive issue is being addressed such as payment of informal gifts or the degree of obstacle questions. In these cases enumerators should just read the question. When asked for the meaning of any term or when faced with a respondent who is confused or does not understand the question enumerators should read again the full question as it is written. They should not attempt to change the wording or explain using synonyms or commonly used terms. If the respondent cannot understand the question, write **-9** (don’t know). If the respondent refuses to respond, write **-8** (refuse to respond). If the respondent puts the enumerator under pressure to explain, as a last resort, the enumerator can indicate that he or she has been instructed NOT to explain this question because it elicits an opinion. **In this manual and in the questionnaire, opinion-based and sensitive questions are identified with shaded background.**

Hard-data questions are those directed to get objective facts including quantitative data. In some cases the questions are quite specific and they require identifying the appropriate answer from the sometimes “narrative stories” provided by the respondent. In these cases enumerators are allowed to probe the respondent using standard techniques: re-ask the question emphasizing the key concept, for ex. “In a TYPICAL month how many”; ask a question that completes an incomplete answer already provided, for ex. if the respondent provides an answer for one given month but the question refers to the whole year, enumerators can ask what happened in the other 11 months; when the respondent provides the answer in ranges such as, between a and b, enumerators can ask “Could you be more specific?” or “Is it more a or more b?”. Notice that in the latter case enumerators that assume the answer is the average of a and b introduce a bias through their own interpretation. **In this manual and in the questionnaire hard-data questions are differentiated by not having a shaded background.**

d. Explanation of terms

The instructions below provide explanations of the terms used, definitions applied and the intent of the questions that comprise the Enterprise Survey 2011 instruments.

For purposes of distinguishing between *Manufacturing* and *Services* questions, in the question number column *Services* and *Manufacturing* specific questions will be identified with (S) and (M) respectively. Color coding is used in the table below: *Manufacturing* only questions are colored in blue. *Services* only questions are in green. Opinion questions that should not be explained, but just re-read are shaded in gray. Questions without these references are *Core* questions which are common to all two questionnaires.

Section	Number	Instructions
Control Information	a0	Questionnaire used in the interview. It is defined according to the screener sector of activity of the interviewee
Control Information	a1	Country: self-explanatory
Control Information	a1a	Language used for the interview. Questionnaires should be translated into the language used for the interview. Under no circumstances interviews should take place with simultaneous translation.
Control Information	a2	Sampling region defines the region stratum of the establishment It is defined by the regional classification of the establishment in the sample frame
Control Information	a3	Locality is defined country by country
Control Information	a3x	Physical location of the establishment as determined with the screener questionnaire
Control Information	a3b	Official capital city: self-explanatory
Control Information	a3c	Main business city: self-explanatory
Control Information	a3a	Codification of a3x into regions of homogeneous regulation and or business environment conditions, for ex. into regional clusters

Section	Number	Instructions
Control Information	a4a	Classification of the establishment's activity as defined in the sample frame. This variable should match the strata in the sample frame.
Control Information	a4b	Classification of the establishment's activity as defined by the screener questionnaire. This variable should correspond to the activity identified during screening.
Control Information	a5	<u>Self-explanatory</u>
Control Information	a6a	Size of the establishment taken from the sample frame
Control Information	a6b	Size of the establishment as determined with the screener questionnaire
Control Information	a7	Identifies establishments that are part of a larger firm. Taken from screener questionnaire.
Control Information	a7a	<u>Self-explanatory</u> . Identifies the number of establishments in the firm. For all questions beginning after B.4 the questions only refer to the largest establishment if the firm has multiple establishments.
Control Information	a8	Identifies type of establishment for those that are part of larger firms
Control Information	a9	Information taken from the screener questionnaire
Control Information	a10	Information taken from the screener questionnaire
Control Information	a11	Information taken from the screener questionnaire
Control Information	a12	Information taken from the screener questionnaire
Control Information	a13	Information taken from the screener questionnaire
Control Information	a14	<u>Self-explanatory</u>
General Information	b1 b1x	<p>A firm's legal status is information well known for the target respondent: CEO, General Manager or owner of the firm. ENUMERATORS DO NO NEED TO KNOW THE DEFINITION OF EACH TYPE OF LEGAL STATUS.</p> <p>A firm's legal status is first determined by whether participation on ownership is by shares (first 2 options) or not (options 3 and 4). The fifth option is a combination of the previous ones.</p> <p>If a firm's shares are publicly traded, it is a <i>shareholding company with shares traded in the stock market</i>. If the shares are not traded or they are traded only privately it is a <i>shareholding company with shares traded privately</i>. A <i>shareholding company with shares traded privately</i> is a firm that is owned by partners or shareholders for whom their claims over the firm are not publicly traded. They may or may not be traded privately. In both of</p>

Section	Number	Instructions
		<p>these categories firms have limited liability.</p> <p>A <u>sole proprietorship</u> is a business owned and operated by one individual natural person. A natural person is a real human being, as opposed to an artificial legal entity such as a corporation or organization that the law treats for some purposes as if it were a person distinct from its members or owner(s).</p> <p>A firm's legal status defines the extent of the liability which defines the level of responsibility of the owner over the firm's obligations. Under limited liability each owner is only responsible for the proportion of his/her shares.</p> <p>A <u>partnership</u> allows two or more people to share profits and liabilities, with or without privately held shares. In a partnership, the parties could be individuals, corporations, trusts, other partnerships, or a combination of all of the above. The essential characteristic of this partnership is the unlimited liability of every partner.</p> <p><u>Limited partnership</u> is a legal form that includes one or several general partners and one or more limited partners who invest capital into the partnership, but do not take part in the daily operation or management of the business. The limited partners limit their amount of liability to the amount of capital invested in the partnership. The general partners personally shoulder all debts and obligations of the partnership. Business operations are governed, unless otherwise specified in a written agreement, by majority vote of voting partners. Limited liability partnerships are separate legal entities that provide liability protection for all general partners as well as management rights in the business.</p> <p>When other is chosen, the actual form of legal status must be specified in writing by the enumerator on the survey instrument. This variable should be codified after field work is finished to make sure that "other" does not include establishments that can be included in forms 1-5.</p>

Section	Number	Instructions
General Information	b2a b2b b2c b2d	<p><u>Foreign</u> ownership refers to the nationality of the owners. If the primary owner is a foreign national resident in the country, it is still a foreign owned firm. If the owner is another company or institution owned by individuals who are foreign nationals, then it is foreign owned.</p> <p><u>Domestic</u> are nationals of the country in which the establishment is located. (Follow the same rule for companies)</p> <p>A firm that is a subsidiary of a government-owned firm should be considered <u>government-owned</u>.</p> <p>Firms that operate under a franchise agreement should be classified according to the nationality of those awarded the franchise.</p>
General Information	b3	<u>Self-explanatory</u>
General Information	b4	<u>Self-explanatory</u>
General Information	b5	<p>The objective of this question is to obtain the year in which operations started regardless of who was the owner at the time.</p> <p>The year when the establishment began operation refers to the year in which the establishment actually started producing (or providing services), not to the year in which it was registered for the first time.</p> <p>If the establishment was privatized, then the date provided should refer to when the original government-owned establishment began operations.</p> <p>If the establishment changed its production significantly to change <u>sector</u> classification, then the year when that took place should be provided.</p>
General Information	b6	The number of permanent, full-time employees for the time that the enterprise began operations should be provided. All employees and managers (including respondent) should be included. This refers to both paid and unpaid workers.
General Information	b6a	<p><u>Registering</u> refers to registration with [to be defined on a country by country basis, choosing the most imp. for registration for tax purposes].</p> <p>The question is designed to be answered as is without explanation of “registration”. If and only if the respondent asks what formal registration means explain that it’s when the establishment registered with: XXXXXXXX as defined in the brackets above.</p>
General Information	b6b	<u>Year of registration</u> refers to the year in which the establishment completed the registration as explained in B.6a.
General Information	b7	The question refers to years of <i>Top Manager’s</i> (defined as in B.7a) managerial experience in the type of sector that the establishment presently operates.

Section	Number	Instructions
General Information	b7a	<i>Top Manager</i> refers to the highest management individual. This person may be the owner if he/she works as the Manager of the firm.
General Information	b8	The question refers exclusively to internationally recognized certifications. Examples are: ISO (International Organization for Standardization) for manufacturing and services, HACCP (Hazard Analysis and Critical Control Point) for food (especially, but not exclusively, for seafood and juices), and AATCC (American Association of Textiles Chemists and Colorists) for textiles. Certificates granted only nationally not recognized in international markets are not included.
Infrastructure and Services	c3	<i>Application for electrical connection.</i> Electrical connection refers to a new connection or to an increase in voltage of an existing connection that requires an application.
Infrastructure and Services	c4	<i>Wait for electrical connection.</i> Self-explanatory
Infrastructure and Services	c5	<i>Bribe for electrical connection.</i> Self-explanatory
Infrastructure and Services	c6	A <i>power outage</i> occurs when there is equipment malfunction from the failure of adequate supply of power. Brownouts that cause some, but not all, equipment to malfunction are also considered power outages.
Infrastructure and Services	c7	If power outages are seasonal the interviewer should ask the respondent to calculate the <i>number of outages on a typical month</i> , neither from months in which outages are most frequent nor from months where outages are most infrequent. The concept of typical month must be well understood since it is used several times throughout the questionnaire: it is the most common type of month in the year regarding the characteristic being asked. Thus, for answers such as “electrical outages once every 3 months” in a typical month there are 0 outages (since there will be outages only in 4 months of the year and in the rest 8 months there will be no outages). For the answer “once every other month” write 1 since there will be 6 months with outages and 6 months without them.
Infrastructure and Services	c8	This refers to the duration of the power outages in a typical month. The respondent should calculate <i>average duration of power outages</i> in the typical month.
Infrastructure and Services	c9a c9b	<i>Losses because of power outages</i> The Manager should estimate the amount of production lost because of power outages.
Infrastructure and Services	c10	<i>Establishment owns or shares a generator.</i> Self-explanatory
Infrastructure and Services	c11	<i>Percent electricity from own or shared generator.</i> Self-explanatory
Infrastructure and Services	c12	<i>Application for water connection.</i> Self-explanatory
Infrastructure	c13	<i>Wait for water connection.</i> Self-explanatory

Section	Number	Instructions
and Services		
Infrastructure and Services	c14	<u>Bribe for water connection.</u> Self-explanatory
Infrastructure and Services	c15 (M)	<u>Insufficient water supply:</u> whenever there is equipment failure or cessation of production operations due to the lack or reduction of water supply.
Infrastructure and Services	c16 (M)	<u>Incidents of insufficient water supply per month</u> can be estimated by considering the number of times water insufficiencies took place per month. The respondent should be asked not to make the calculation from months when water insufficiencies are rare or from months when water insufficiencies are extreme. The calculation should be made based on a typical month. Zero is the answer only if no insufficiencies occurred in a typical month.
Infrastructure and Services	c17 (M)	<u>Duration of water shortage</u> can be estimated by considering the average duration of water insufficiencies that took place in a typical month.
Infrastructure and Services	c18 (M)	<u>Percent of water from public sources.</u> Percent of water used in production that is obtained from government-owned utility services or from public wells and other public water sources
Infrastructure and Services	c19	<u>Application for telephone connection.</u> Self-explanatory
Infrastructure and Services	c20	<u>Wait for telephone connection.</u> Self-explanatory
Infrastructure and Services	c21	<u>Bribe for telephone connection.</u> Self-explanatory
Infrastructure and Services	c22a c22b	<u>E-mail.</u> Self-explanatory <u>Website use</u> includes cases when the establishment has its own website but does not actually do any direct communication with clients or suppliers via the website.
Infrastructure and Services	c23	<u>High-speed, Internet connection</u> is defined as Internet connection that is faster than using a telephone line with a modem.
Infrastructure and Services	c24b c24f c24d	<u>How is Internet connection used.</u> Self-explanatory
Infrastructure and Services	c28	<u>Cell phone use</u> refers to use for operations of the establishment. It refer to systematic use of cell phones not to occasional use of personal cell phones
Infrastructure and Services	c30a c30a	The manager should be given a card with the different alternatives for ‘degree of obstacle’ (from 0 to 4).
Sales and Supplies	d1a1x	<u>Establishment’s main product</u> The purpose of this question is to determine what the company produces. The description should be written down exactly as provided by the respondent. <i>The main product is defined in terms of sales in monetary value not volume.</i>
Sales and Supplies	d1a2	Categorize the products according to standard industry classification codes. The enumerator should show the respondent the list of codes

Section	Number	Instructions
		<p>that correspond to the products identified to ensure agreement with the categorization. The respondent should be directed to look at the card only after he has provided the answer to D.1a1.</p> <p>It may be that all major products fall into one category or that the establishment has only one main product. If the interviewee does not know the code, the enumerator should write the sector and look for the corresponding code in the list of codes before submitting the completed questionnaire.</p> <p>For the codes use United Nations ISIC Rev.3.1. http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17</p>
Sales and Supplies	d1a3	The main product is defined in terms of sales in monetary value not volume.
Sales and Supplies	d2	<p><i>Total sales</i> include the value of all annual sales counting manufactured goods and goods the establishment has bought for trading. For ex. if an establishment makes blue jeans and also imports blue jeans to resell, total sales is the value of all blue jeans sold, both produced and imported. Revenue or receipts for all services rendered and any sales of merchandise for the year, even if the payment may have been received at a later date, are included in total sales.</p> <p>For services total sales refer to the total value of all the services provided during the year.</p> <p>In manufacturing and services the amount should include sales with and without invoices (reported and unreported sales).</p>
Sales and Supplies	d2x	<i>Total sales</i> please write out the answer to d2 in words. For example, 132,000 should be written as “One hundred thirty two thousand”
Sales and Supplies	n3	<i>Total sales</i> three complete fiscal years ago include the value of all annual sales counting manufactured goods and goods the establishment has bought for trading. If an establishment makes blue jeans and also imports blue jeans to sell, total sales is the value of all blue jeans sold, both produced and imported. Revenue or receipts for all services rendered and any sales of merchandise for the year even though payment may have been received at a later date are included in total sales. Firms operating on a commission basis should report commissions, fees, and other operating income, not gross billings or sales.
Sales and Supplies	d3a d3b d3c	<p><i>Where sales are made.</i> The purpose of this question is to determine where the establishment’s customers are located. Please note that some establishments, such as hotels, may cater to foreigners at their domestic locations. Sales to these foreigners constitute exporting.</p> <p><i>Domestic sales</i> are when goods or services are sold inside the borders of the country.</p> <p><i>An indirect export</i> is when the manufacturer sells its goods to a trader or another agent who then exports the product without modifications.</p>

Section	Number	Instructions
		<p>Products that the manager knows are smuggled abroad should be counted as indirect exports.</p> <p><u>Direct export</u> is the sale of goods where the immediate recipient is outside the borders of the country.</p>
Sales and Supplies	d4	<p><u>Clearing customs for direct exports.</u> The purpose of this question is to determine the efficiency of customs in clearing goods for export.</p> <p><u>Main point of exit</u> is the last domestic location (e.g. port, border crossing, airport, or internal custom) from which the goods leave the country. Whenever different ports of exit are used this question refers to the port where “most goods” exit defined in terms of consignment value (not physical units).</p> <p><u>Goods cleared customs</u> They refer to the time it takes to obtain all clearances required from the moment the goods arrived at their point of exit until the moment they satisfy the requirements of the clearance procedures at the custom office. This includes transit procedures.</p> <p><u>Average number of days</u> to clear customs. Prompt the respondent to think of all shipments sent to the main point of exit and estimate an average time it took from the time the shipments arrived to the time they left that point of exit.</p>
Sales and Supplies	d6 d7	<p><u>Theft, breakage or spoilage for direct export.</u> The purpose of this question is to determine the extent of losses that stem from theft, breakage or spoilage as goods are transported for export, independently of whether the cost is borne by the establishment or a third party that is hired to transport the goods.</p> <p>Value of the products exported refers to the value paid when goods are delivered to the receiver.</p> <p><u>Theft</u> refers to robbery that occurred outside the premises of the establishment.</p> <p><u>Breakage</u> refers to the inoperability or usability of the good. A broken good is inoperable or unusable in its current state.</p>
Sales and Supplies	d8	<p><u>First exported directly or indirectly.</u> The purpose of this question is self-explanatory.</p>
Sales and Supplies	d10 + d11 (M)	<p><u>Theft, breakage and spoilage when supplying domestic markets.</u> See definitions in D.6</p> <p>“No internal shipments to supply domestic markets” applies only when direct exports represent 100% of the establishment’s sales.</p>
Sales and Supplies	d12a (M) d12b (M)	<p>The purpose of this question is to determine from where the inputs for production are obtained and purchased.</p>

Section	Number	Instructions
		<p>The calculation is done as a percent of all purchases of supplies and inputs purchased by the establishment for the fiscal year.</p> <p><u>Inputs</u> are materials that go through a mechanical, physical, or chemical transformation that will ultimately make up some portion of the final good produced. Lumber in a furniture factory is a good example of an input.</p> <p><u>Supplies</u> are materials or products that are used, expended, consumed, but will not comprise the final good produced. Pencils and writing paper are good examples of a supply.</p>
Sales and Supplies	d13 (M)	The purpose of this question is to determine if the establishment has any interaction with customs when importing inputs and other materials.
Sales and Supplies	d14 (M)	<p>The purpose of these questions is to measure the efficiency of customs clearance of imports.</p> <p><u>Goods cleared customs</u> includes all clearances required from the moment the goods arrived at their point of entry (e.g., port, airport) until the moment they satisfy the requirement of the clearance procedures at the customs office and can be picked up. It does not include time spent on transportation to reach the point of entry.</p> <p><u>Average number of days</u> to clear customs. Prompt respondent to think of various shipments destined to the establishment that originated from abroad, and to estimate an average of the time it took when the shipment arrived to the country's point of entry to the time the establishment was allowed to claim them and begin domestic transport.</p>
Sales and Supplies	d16 (M)	<p><u>Days of inventory of main input.</u> The purpose of this question is to assess the efficiency in the supply chain. When firms have to maintain a high level of stock, because they cannot rely on a predictable supply of inputs, this is a source of economic inefficiency. Inversely, if supplies of the main input can be relied upon to be easily available, firms will keep low levels of stock on hand.</p> <p>The <u>main input</u> is the input that accounts for the highest value among all inputs. It is not the input for which stock is maintained the longest. For example, if a company makes shirts, the most important input is the cloth, not the buttons and thread, though the establishment may actually keep a 90 day supply of buttons on hand and only a 30 day stock of cloth.</p> <p><u>Days of inventory</u> should be calculated as the number of days of normal production capacity before running out of stock.</p>
Sales and Supplies	d17 (S)	<u>Days of inventory of main sales item</u> The purpose of this question is to assess the efficiency in the supply chain. When firms have to maintain a high level of sales items in stock, because they cannot rely on a predictable

Section	Number	Instructions
		<p>supply, this is a source of economic inefficiency. Inversely, if supplies of the main sales can be relied upon to be easily available, firms will keep low levels of stock on hand.</p> <p><u>The main sales item</u> is the item that accounts for the highest percent of sales among all items that the establishment sells. It is not the item for which stock is maintained the longest.</p> <p><u>Days of inventory</u> should be calculated by how many days, under normal sales conditions, it would take to deplete the main sales item held in supply at the establishment's premises.</p>
Sales and Supplies	d30a d30b	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Degree of Competition	e1 (M)	<p>The purpose of this question is to get the establishment to define what it considers to be its main market.</p> <p>The main product is defined by the output that generates the highest proportion of sales. The establishment's main market is defined by the market that generates the most sales for the main product as defined above.</p> <p>It could be the case that an establishment's main product is sold in smaller proportions in a greater number of markets and that the main product is never the greatest total annual share of revenue in any one market. For example, 51 percent of revenue comes from selling nails, but that is distributed equally in the local, national, and international markets, 33 percent in each. Bolts make up 49 percent of total annual revenues. However, half of the revenue for bolts comes from selling in the international market and half in the local market.</p> <p>It is clear that bolts sell more in its respective market with respect to nails, but does not generate as much revenue as nails do for the establishment. In such a case, nails should be used as the main product. Whenever local, national and international markets have equal shares choose the national market and do not follow the skip pattern.</p>
Degree of Competition	e2 (M)	<u>Number of competitors in establishment's market.</u> Self-explanatory
Degree of Competition	e6 (M)	<u>Technology licensed from a foreign owned company:</u> it measures access to foreign technology. The license may be held by the establishment's parent company. The answer is "no" if the establishment uses foreign technology without a license or a formal agreement.
Degree of Competition	e11	<u>Competition from unregistered or informal firms</u>
Degree of Competition	e30	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).

Section	Number	Instructions
Capacity	f1 (M)	<p><u>A capacity utilization estimate</u> should be compared to a full production capacity capability.</p> <p>This question only references the production facility and not the administrative offices.</p> <p>Full production capacity is the maximum level of production that this establishment could reasonably expect to attain under normal and realistic operating conditions fully utilizing the machinery, equipment and employees in place</p>
Capacity	f2 (M)	<p><u>Hours per week of operation</u> are the hours per week in which machines and employees are engaged in some type of mechanical, physical, or chemical transformation of materials into new products or in which the assembly of components into new products takes place, including maintenance.</p> <p>This question only references the production facility and not the administrative offices.</p>
Land	g1	Self-explanatory
Land	g2	<p><u>Application for construction permit.</u> Self-explanatory</p> <p>Note: When interviewing construction businesses, these permits refer to both those permits related to the expansion or construction of the establishment's premises and to permits required in order to carry out construction work for clients.</p>
Land	g3	<u>Wait for construction permit.</u> Self-explanatory
Land	g4	<u>Bribe for construction permit.</u> Self-explanatory
Land	g5a (S) g5bx (S) g5b (S)	<u>Total selling area</u> refers to the space where sales take place. It does not include warehouses. Whenever the establishment is composed of several locations the selling areas of each location should be added.
Land	g6a (S) g6b (S) g6c (S)	If establishment occupies several buildings the percentages should be computed for the summation of buildings.
Land	g30a	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Crime	i1	<u>Pay for security.</u> Self-explanatory
Crime	i2a i2b	<u>How much pay for security.</u> Self-explanatory
Crime	i3	<u>Experienced losses from theft, robbery, vandalism, arson.</u> Self-explanatory
Crime	i4a i4b	<u>Extent of losses from theft, robbery, vandalism, arson.</u> Self-explanatory
Crime	i30	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Finance	k1c + k2c	<p>The questions refer to an establishment's ability to provide and be provided trade credit arrangements with suppliers and customers.</p> <p><u>Paid for after delivery</u> means that the payment was made at some period after the shipment had arrived.</p>

Section	Number	Instructions
Finance	k3	<p><u>Working capital</u> refers to financing of short term production activities. Working capital is necessary for businesses to cover short term liquidity issues, such as purchases of inputs, covering wage bills, etc. It does not refer to larger investments, such as in machinery or equipment. Since investment financing is covered under question K.5, working capital can be understood as financing of all operations, excluding investment in fixed assets</p> <p>Working capital sources are likely to be diverse. It is important for the enumerator to make sure that the various sources do add up to 100%.</p> <p><u>Both domestic and foreign banks are included in k3bc</u></p>
Finance	k4	<u>Purchase of fixed assets, investments, etc.</u> Self-explanatory
Finance	n5a n5b	<p>The category <u>machinery, vehicles and equipment</u> is the annual investment of anything used directly by this establishment to produce. Vehicles include transport and loading and unloading vehicles. It should include not only the purchase cost but also all other costs involved in the investment such as transport of the item and installation cost. Computer hardware should be considered under equipment</p> <p><u>Land, buildings</u> is the annual investment in land, buildings and structures used directly or indirectly by this establishment to produce goods and services. Included are expenditures for new and used structures (including those under construction at the end of last complete fiscal year), fixtures and equipment, additions, major alterations and improvements to existing facilities, and capitalized repairs.</p>
Finance	k5a k5i k5bc k5e k5f k5hdj	<p><u>Fixed assets</u> include any indivisible purchase made by the establishment as described in K.4. Examples include machinery/equipment, land, buildings, building improvements, etc.</p> <p><u>The source of funds for these purchases may be diverse, so it is important for the enumerator to make sure that the various sources do add up to 100%.</u></p>
Finance	k6	<u>Checking/savings account.</u> In many countries, a checking account is known as a “current account”
Finance	k7	<u>An overdraft facility</u> is a flexible account that allows firms to draw upon in the event their account balance becomes negative. The firm will incur fees or are subject to interest payments if they exercise this option.
Finance	k8	<p><u>A line of credit</u> is an available amount of credit that the establishment can draw upon or leave untapped. Lines of credit usually carry monthly interest rates, and are repaid quickly (as soon as the establishment’s cash flow allows for repayment). They may or may not have a defined date of expiration.</p> <p><u>A loan</u> is generally a much less flexible form of finance. It comes in fixed amounts (rather than ranges), carry annual interest rates (either fixed or floating), and they carry a determined term to maturity (finite period for</p>

Section	Number	Instructions
		repayment).
		<i>In case of more than one loan outstanding, consider the most recent acquired loan.</i>
Finance	k9	<u>Institutions that granted loan.</u> Self-explanatory
Finance	k10	<u>Self-explanatory</u>
Finance	k11	<u>Value of the loan.</u> This question refers to the term to maturity of the loan, as it was specified in the credit agreement. The respondent should answer according to what was specified in the loan contract, not what happened in practice (e.g. if they paid off the loan early or later than the term of the loan).
Finance	k13 + k14a-e	<u>Collateral</u> refers to property of the business or personal property of the manager or owners that is used to secure the loan in the event that the establishment defaults on its payment obligations. Collateral only refers to real property or financial assets, not to personal guarantees by third parties.
Finance	k15a	<u>Value of collateral as percent of loan value.</u> This question gets to the relative value of the property used to secure the loan with respect to the actual value of the loan contract. If the value of the collateral pledged is greater than the value of the loan, the answer should be greater than 100%.
Finance	k15b	<u>Total Number of outstanding loans or lines of credit.</u> An <i>outstanding loan</i> is the portion of the loan or line of credit that has not been paid. As payments are applied towards the loan balance, the amount outstanding decreases.
Finance	k15c	<u>Total value of all outstanding loans or lines of credit.</u> Self-explanatory
Finance	k15d	<u>Personal loans used for business financing</u> This question asks whether an owner has taken out any personal loans in his/her name and is using those personal loans to finance the business. This does not include loans made to the establishment where the owner is a signatory.
Finance	k16	<u>Apply for new loans in last year.</u> Self-explanatory
Finance	k17	<u>Reasons for not applying for loan last year.</u> Self-explanatory
Finance	k20	<u>Outcome of loan application:</u> Self-explanatory
Finance	k21	<u>Certification of financial statements by external auditor.</u> Self-explanatory
Finance	k30	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Business-Government Relations	h7a	<u>Self-explanatory</u>
Business-Government Relations	j2	<u>Percent of total senior management's time.</u> Ask managers to estimate what percentage of their time senior managers spend dealing with government regulations, inspections, negotiations and other bureaucratic burden. This is time that would otherwise be spent on business matters. It should not include time spent negotiating procurement contracts with the government - only time dealing with red tape and bureaucracy.
Business-	j3	<u>Visitations and inspections from tax inspectorate officials.</u> Self-explanatory

Section	Number	Instructions
Government Relations		
Business-Government Relations	j4	Self-explanatory
Business-Government Relations	j5	<u>Bribes from tax inspectors.</u> Self-explanatory
Business-Government Relations	j6a	Self-explanatory
Business-Government Relations	j6	<p><u>Percent of the contract value.</u> The question is designed to get at the size of the unaudited or unreported payment that is made to a government official that directly aided in granting a government contract, in part or in whole, or expanded the size of the contract to include the establishment's business.</p> <p>Again, notice the wording (phrasing) of the question: it asks for the respondent to answer for the “typical” establishment, rather than the establishment being interviewed.</p>
Business-Government Relations	j7a j7b	<p><u>Size of informal payments/gifts</u> Informal payments are payments made to government officials that are unaudited and unreported. They are generally given to an official with the expectation that a service will be performed (such as granting a business license), a violation overlooked (such as violation of health regulation), or because the official threatens the business.</p> <p>Notice the wording (phrasing) of the question: it asks for the respondent to answer for establishments “like this one” rather than the establishment being interviewed.</p>
Business-Government Relations	j10	<u>Application for import license</u> Self-explanatory
Business-Government Relations	j11	<u>Wait for import license</u> Self-explanatory
Business-Government Relations	j12	<u>Bribe for import license</u> Self-explanatory
Business-Government Relations	j13	<u>Application for operating license</u> Self-explanatory
Business-Government Relations	j14	<u>Wait for operating license</u> Self-explanatory—Includes renewals of operating licenses

Section	Number	Instructions
Business-Government Relations	j15	<u>Self-explanatory</u>
Business-Government Relations	j30a j30b j30c j30e j30f h30	The manager should be given a card with the different alternatives for 'degree of obstacle' (from 0 to 4).
Labor	11	<p><u>Number of permanent, full-time employees last complete fiscal year</u> are defined as all paid employees that are contracted for a term of one or more fiscal years and/or have a guaranteed renewal of their employment contract and that work up to 8 or more hours per day.</p> <p>All employees and managers (including respondent) should be counted.</p>
Labor	12	<u>Number of permanent, full-time employees three complete fiscal years ago.</u> See definition of <u>permanent, full-time employees</u> above.
Labor	13a (M) 13b (M)	<p><u>Number of permanent, full-time production workers</u> are workers (up through the line supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations. Employees above the working-supervisor level are excluded from this item.</p> <p><u>Number of permanent, full-time non-production workers</u> are those workers not engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations. Managers and other supervisory personnel with responsibilities for the performance of shop floor supervisors and below are included. Do not include shop floor supervisors.</p> <p>Employees in sales (including driver-salespersons), sales delivery (highway truck drivers and their helpers), janitorial and guard services, advertising, credit, collection, installation and servicing of own products, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.) are included. Also included are employees on the payroll of the manufacturing establishment engaged in the construction of major additions or alterations utilized as a separate work force. Professional, and technical employees are included in this category.</p>
Labor	14a (M)	<u>Numbers of different types of permanent, full-time skilled production workers</u> are

Section	Number	Instructions
	14b (M)	<p>workers (up through the line supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations. Employees above the working-supervisor level are excluded from this item. Also, these workers are <u>skilled</u> in that they have some special knowledge or (usually acquired) ability in their work. A skilled worker may have attended a college, university or technical school. Or, a skilled worker may have learned his skills on the job.</p> <p><u>Unskilled production workers</u> are workers (up through the line supervisor level) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations. Employees above the working-supervisor level are excluded from this item. Also, these workers are <u>unskilled</u> in that it is not required that they have special training, education, or skill to perform their job.</p>
Labor	15 (S) 15a (M) 15b (M)	<p><u>Number of permanent, full-time workers that are female. Self-explanatory</u></p> <p><u>Number of permanent, full-time skilled production workers that are female. Self-explanatory</u></p> <p><u>Number of permanent, full-time unskilled production workers that are female. Self-explanatory</u></p>
Labor	16	<u>Full-time temporary or seasonal employees</u> are defined as all paid short-term (i.e. for less than a fiscal year) employees with no guarantee of renewal of employment contract) and work 40 hours or more per week for the term of their contract.
Labor	18	<u>Average length of employment of all full-time temporary or seasonal employees</u> refers to the number of months that the worker was contracted for work that occupied employees for 40 hours or more per week. If average full-time temporary or seasonal employment was for less than one month, enumerator should write 1.
Labor	19a (M) 19a2 (M)	<u>Levels of education for average production worker. Self-explanatory</u>
Labor	19b (M)	<p><u>Self-explanatory</u></p> <p>“Secondary school” is considered the level of education prior to university.</p> <p>To be clarified on a country-by-country basis.</p>
Labor	110	<u>Formal training</u> that has a structured and defined curriculum. Formal training may include classroom work, seminars, lectures, workshops, and audio-visual presentations and demonstrations. This does not include

Section	Number	Instructions
		training to familiarize employees with equipment and machinery on the shop floor, training aimed at familiarizing employees with the establishment's standard operation procedures, or employee orientation at the beginning of an employee's tenure. <u>In-house training</u> may be conducted by other non-supervisory employees of the establishment, the establishment's supervisors or managers, or the establishments training centers.
Labor	l11a (M) l11b (M)	<u>Percentage of production vs. non-production employees that were trained.</u> Self-explanatory
Labor	l30a l30b	<u>Self-explanatory</u>
Business Environment	m1a m1d	<u>Self-explanatory</u>
Performance	n2a n2e (M) n2f (M) n2i (S) n2b n2j (M)	<p><u>Total cost of labor, including wages, salaries and benefits</u> is the total annual wages and all annual benefits, including food, transport, social security (i.e. pensions, medical insurance, and unemployment insurance).</p> <p><u>Raw materials and intermediate goods:</u> (M) is the cost of all inputs in the production activity. This is usually an item directly taken from the financial statements.</p> <p><u>Finished goods and materials purchased to resell:</u> (S) is the cost of all finished goods and materials purchased to be resold. This is usually an item directly taken from the financial statements.</p> <p><u>Electricity</u> is the total annual cost of electric energy purchased from public or private utility companies or received from other establishments that belong to the same firm. Exclude the value of electricity generated and used at this establishment.</p> <p><u>Communication services</u> includes annual cost of telephone, data transmission, telegraph, telex, teletype and all other communication services purchased in the last complete fiscal year.</p> <p><u>Fuel</u> (M) is the total annual cost of all fuels consumed for heat, power, transportation, or the generation of electricity. Do not include the estimated costs of fuels, such as sawdust or blast furnace gas, produced as a byproduct of your manufacturing activities. Include anthracite and bituminous coal, coke, natural and manufactured gas, fuel oil, liquefied petroleum gas, gasoline, and all other fuels, including purchased steam. Be sure to include fuel used to power delivery trucks, forklifts, or other motor vehicles associated with the establishment.</p> <p><u>Other costs of production not included above:</u> this should be computed as total costs of production minus the items included above.</p>
Productivity	n6a (M)	<u>Net book value</u> equals the purchase value minus depreciation.

Section	Number	Instructions
	n6b (M)	The net book value represents the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation) minus depreciation accumulated since the date of purchase. Included in the assets are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciation reserves are maintained. Accordingly, the value of assets at the end of the year includes the value of construction in progress.
Productivity	n7a (M) n7b (M)	This question is designed to ascertain the market value of the establishment's capital. Data on equipment is the most important. You can ask the manager to estimate the market value if all of the equipment, land and buildings were sold on the open market. If the respondent states that there is no market, ask how much the respondent would be willing to pay for the capital, knowing what it can produce in its <i>current condition</i> . Estimate how much it would cost to buy machinery in the current market which is similar in terms of age and characteristics. This estimate is to give an indication of the capital intensity of the firm. Keep in mind that it is one of the most important questions on the questionnaire.
Control Information	a15a1a a15a1b a15a2a a15a2b a15a3 a15b3 a15d a15m a15y a15h a15min a16 a17 a17x a18 a19h a19m a19	<u>Self-explanatory</u>

List of questions used in the Core, Core plus Manufacturing, and Core plus Retail Modules

Question	Asked in Global Core? (Yes/No)	No. of variables	Asked in Core plus Manufacturing Module? (Yes/No)	No. of variables	Asked in Core plus Retail Module? (Yes/No)	No. of variables
B.1	Yes	2	Yes	2	Yes	2
B.2	Yes	4	Yes	4	Yes	4
B.3	Yes	1	Yes	1	Yes	1
B.4	Yes	1	Yes	1	Yes	1
B.5	Yes	1	Yes	1	Yes	1
B.6	Yes	1	Yes	1	Yes	1
B.6a	Yes	1	Yes	1	Yes	1
B.6b	Yes	1	Yes	1	Yes	1
B.7	Yes	1	Yes	1	Yes	1
B.7a	Yes	1	Yes	1	Yes	1
B.8	Yes	1	Yes	1	Yes	1
C.3	Yes	1	Yes	1	Yes	1
C.4	Yes	1	Yes	1	Yes	1
C.5	Yes	1	Yes	1	Yes	1
C.6	Yes	1	Yes	1	Yes	1
C.7	Yes	1	Yes	1	Yes	1
C.8	Yes	1	Yes	1	Yes	1
C.9	Yes	2	Yes	2	Yes	2
C.10	Yes	1	Yes	1	Yes	1
C.11	Yes	1	Yes	1	Yes	1
C.12	Yes	1	Yes	1	Yes	1
C.13	Yes	1	Yes	1	Yes	1
C.14	Yes	1	Yes	1	Yes	1
C.15	No	0	Yes	1	No	0
C.16	No	0	Yes	1	No	0
C.17	No	0	Yes	1	No	0
C.18	No	0	Yes	1	No	0
C.19	Yes	1	Yes	1	Yes	1
C.20	Yes	1	Yes	1	Yes	1
C.21	Yes	1	Yes	1	Yes	1
C.22a	Yes	1	Yes	1	Yes	1
C.22b	Yes	1	Yes	1	Yes	1
C.23	Yes	1	Yes	1	Yes	1
C.24	Yes	3	Yes	3	Yes	3
C.28	Yes	1	Yes	1	Yes	1
C.30	Yes	2	Yes	2	Yes	2

D.1a1	Yes	1	Yes	1	Yes	1
D.1a2	Yes	1	Yes	1	Yes	1
D.1a3	Yes	1	Yes	1	Yes	1
D.2	Yes	2	Yes	2	Yes	2
N.3	Yes	1	Yes	1	Yes	1
D.3	Yes	3	Yes	3	Yes	3
D.4	Yes	1	Yes	1	Yes	1
D.6	Yes	1	Yes	1	Yes	1
D.7	Yes	1	Yes	1	Yes	1
D.8	Yes	1	Yes	1	Yes	1
D.10	No	0	Yes	1	No	0
D.11	No	0	Yes	1	No	0
D.12	No	0	Yes	2	No	0
D.13	No	0	Yes	1	No	0
D.14	No	0	Yes	1	No	0
D.16	No	0	Yes	1	No	0
D.17	No	0	No	0	Yes	1
D.30	Yes	2	Yes	2	Yes	2
E.1	No	0	Yes	1	No	0
E.2	No	0	Yes	1	No	0
E.6	No	0	Yes	1	No	0
E.11	Yes	1	Yes	1	Yes	1
E.30	Yes	1	Yes	1	Yes	1
F.1	No	0	Yes	1	No	0
F.2	No	0	Yes	1	No	0
G.1	Yes	3	Yes	3	Yes	3
G.2	Yes	1	Yes	1	Yes	1
G.3	Yes	1	Yes	1	Yes	1
G.4	Yes	1	Yes	1	Yes	1
G.5	No	0	No	0	Yes	3
G.6	No	0	No	0	Yes	3
G.30	Yes	1	Yes	1	Yes	1
I.1	Yes	1	Yes	1	Yes	1
I.2	Yes	2	Yes	2	Yes	2
I.3	Yes	1	Yes	1	Yes	1
I.4	Yes	2	Yes	2	Yes	2
I.30	Yes	1	Yes	1	Yes	1
K.1	Yes	1	Yes	1	Yes	1
K.2	Yes	1	Yes	1	Yes	1
K.3	Yes	5	Yes	5	Yes	5
K.4	Yes	1	Yes	1	Yes	1
N.5	Yes	2	Yes	2	Yes	2
K.5	Yes	6	Yes	6	Yes	6

K.6	Yes	1	Yes	1	Yes	1
K.7	Yes	1	Yes	1	Yes	1
K.8	Yes	1	Yes	1	Yes	1
K.9	Yes	1	Yes	1	Yes	1
K.10	Yes	1	Yes	1	Yes	1
K.11	Yes	1	Yes	1	Yes	1
K.13	Yes	1	Yes	1	Yes	1
K.14	Yes	5	Yes	5	Yes	5
K.15	Yes	1	Yes	1	Yes	1
K.15b	Yes	1	Yes	1	Yes	1
K.15c	Yes	1	Yes	1	Yes	1
K.15d	Yes	1	Yes	1	Yes	1
K.16	Yes	1	Yes	1	Yes	1
K.17	Yes	1	Yes	1	Yes	1
K.20	Yes	1	Yes	1	Yes	1
K.21	Yes	1	Yes	1	Yes	1
K.30	Yes	1	Yes	1	Yes	1
J.1	Yes	1	Yes	1	Yes	1
J.2	Yes	1	Yes	1	Yes	1
J.3	Yes	1	Yes	1	Yes	1
J.4	Yes	1	Yes	1	Yes	1
J.5	Yes	1	Yes	1	Yes	1
J.6a	Yes	1	Yes	1	Yes	1
J.6	Yes	1	Yes	1	Yes	1
J.7	Yes	2	Yes	2	Yes	2
J.10	Yes	1	Yes	1	Yes	1
J.11	Yes	1	Yes	1	Yes	1
J.12	Yes	1	Yes	1	Yes	1
J.13	Yes	1	Yes	1	Yes	1
J.14	Yes	1	Yes	1	Yes	1
J.15	Yes	1	Yes	1	Yes	1
J.30	Yes	6	Yes	6	Yes	6
L.1	Yes	1	Yes	1	Yes	1
L.2	Yes	1	Yes	1	Yes	1
L.3	No	0	Yes	2	No	0
L.4	No	0	Yes	2	No	0
L.5	Yes	1	No	0	Yes	1
L.5a	No	0	Yes	1	No	0
L.5b	No	0	Yes	1	No	0
L.6	Yes	2	Yes	2	Yes	2
L.8	Yes	1	Yes	1	Yes	1
L.9a	No	0	Yes	2	No	0
L.9b	Yes	1	Yes	1	Yes	1

L.10	Yes	1	Yes	1	Yes	1
L.11	No	0	Yes	2	No	0
L.30	Yes	2	Yes	2	Yes	2
M.1	Yes	2	Yes	2	Yes	2
N.2	Yes	1	Yes	5	Yes	3
N.6	No	0	Yes	2	No	0
N.7	No	0	Yes	2	No	0
Total	103	142	125	175	106	151

Appendix A. ISIC Rev.3.1 – Sectors included and excluded from the sample

Please find below the whole ISIC REV.3 structure.

For more information, please see: <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=17>

The following codes correspond to each of the following sectors:

The correspondence between ISIC REV.3.1 and NACE REV.1.1 codes can be found in the following web site: <http://unstats.un.org/unsd/cr/registry/regso.asp?Ci=26&Lq=1>

A.4 Industry		Sampling sector a4a	Screener sector a4b
Manufacturing: Section D	Food	15	15
	Textiles	17	17
	Garments	18	18
	Chemicals	24	24
	Plastics & rubber	25	25
	Non metallic mineral products	26	26
	Basic metals	27	27
	Fabricated metal products	28	28
	Machinery and equipment	29	29
	Electronics (31 & 32)	31	31
	Other manufacturing	2	2
Service	Retail	52	52
Residual (core)	Wholesale	51	51
	IT	72	72
	Hotel and restaurants: section H	55	55
	Services of motor vehicles	50	50
	Construction Section F:	45	45
	Transport Section I: (60-64)	60	60

ISIC REV. 3.1 Rev. – Sectors included and excluded from the sample

In **RED** you will find the sectors excluded from the sample

In **GREEN** you will find all the included sectors. According to their classifications, each of

- **A** - Agriculture, hunting and forestry
 - **01** - Agriculture, hunting and related service activities
 - **02** - Forestry, logging and related service activities
- **B** - Fishing
 - **05** - Fishing, aquaculture and service activities incidental to fishing
- **C** - Mining and quarrying

- 10 - Mining of coal and lignite; extraction of peat
- 11 - Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying
- 12 - Mining of uranium and thorium ores
- 13 - Mining of metal ores
- 14 - Other mining and quarrying
- D - Manufacturing
 - 15 - Manufacture of food products and beverages
 - 16 - Manufacture of tobacco products
 - 17 - Manufacture of textiles
 - 18 - Manufacture of wearing apparel; dressing and dyeing of fur
 - 19 - Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
 - 20 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
 - 21 - Manufacture of paper and paper products
 - 22 - Publishing, printing and reproduction of recorded media
 - 23 - Manufacture of coke, refined petroleum products and nuclear fuel
 - 24 - Manufacture of chemicals and chemical products
 - 25 - Manufacture of rubber and plastics products
 - 26 - Manufacture of other non-metallic mineral products
 - 27 - Manufacture of basic metals
 - 28 - Manufacture of fabricated metal products, except machinery and equipment
 - 29 - Manufacture of machinery and equipment n.e.c.
 - 30 - Manufacture of office, accounting and computing machinery
 - 31 - Manufacture of electrical machinery and apparatus n.e.c.
 - 32 - Manufacture of radio, television and communication equipment and apparatus
 - 33 - Manufacture of medical, precision and optical instruments, watches and clocks
 - 34 - Manufacture of motor vehicles, trailers and semi-trailers
 - 35 - Manufacture of other transport equipment
 - 36 - Manufacture of furniture; manufacturing n.e.c.
 - 37 - Recycling
- E - Electricity, gas and water supply
 - 40 - Electricity, gas, steam and hot water supply
 - 41 - Collection, purification and distribution of water
- F - Construction
 - 45 - Construction
- G - Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
 - 50 - Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
 - 51 - Wholesale trade and commission trade, except of motor vehicles and motorcycles
 - 52 - Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
- H - Hotels and restaurants
 - 55 - Hotels and restaurants
- I - Transport, storage and communications
 - 60 - Land transport; transport via pipelines

- 61 - Water transport
- 62 - Air transport
- 63 - Supporting and auxiliary transport activities; activities of travel agencies
- 64 - Post and telecommunications
- J - Financial intermediation
 - 65 - Financial intermediation, except insurance and pension funding
 - 66 - Insurance and pension funding, except compulsory social security
 - 67 - Activities auxiliary to financial intermediation
- K - Real estate, renting and business activities
 - 70 - Real estate activities
 - 71 - Renting of machinery and equipment without operator and of personal and household goods
 - 72 - Computer and related activities
 - 73 - Research and development
 - 74 - Other business activities
- L - Public administration and defence; compulsory social security
 - 75 - Public administration and defence; compulsory social security
- M - Education
 - 80 - Education
- N - Health and social work
 - 85 - Health and social work
- O - Other community, social and personal service activities
 - 90 - Sewage and refuse disposal, sanitation and similar activities
 - 91 - Activities of membership organizations n.e.c.
 - 92 - Recreational, cultural and sporting activities
 - 93 - Other service activities
- P - Activities of private households as employers and undifferentiated production activities of private households
 - 95 - Activities of private households as employers of domestic staff
 - 96 - Undifferentiated goods-producing activities of private households for own use
 - 97 - Undifferentiated service-producing activities of private households for own use
- Q - Extraterritorial organizations and bodies
 - 99 - Extraterritorial organizations and bodies

ISIC REV. 3.1 Rev. – Detailed structure

1. 15 MANUFACTURE OF FOOD PRODUCTS AND BEVERAGES

- 1511 - Production, processing and preserving of meat and meat products
- 1512 - Processing and preserving of fish and fish products
- 1513 - Processing and preserving of fruit and vegetables
- 1514 - Manufacture of vegetable and animal oils and fats
- 1520 - Manufacture of dairy products
- 1531 - Manufacture of grain mill products
- 1532 - Manufacture of starches and starch products
- 1533 - Manufacture of prepared animal feeds
- 1541 - Manufacture of bakery products
- 1542 - Manufacture of sugar

- [1543](#) - Manufacture of cocoa, chocolate and sugar confectionery
- [1544](#) - Manufacture of macaroni, noodles, couscous and similar farinaceous products
- [1549](#) - Manufacture of other food products n.e.c.
- [1551](#) - Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials
- [1552](#) - Manufacture of wines
- [1553](#) - Manufacture of malt liquors and malt
- [1554](#) - Manufacture of soft drinks; production of mineral waters

2. 16 **DIVISION: 16 - MANUFACTURE OF TOBACCO PRODUCTS**

- [1600](#) - Manufacture of tobacco products

17 **Division: 17 - Manufacture of textiles**

- [1711](#) - Preparation and spinning of textile fibres; weaving of textiles
- [1712](#) - Finishing of textiles
- [1721](#) - Manufacture of made-up textile articles, except apparel
- [1722](#) - Manufacture of carpets and rugs
- [1723](#) - Manufacture of cordage, rope, twine and netting
- [1729](#) - Manufacture of other textiles n.e.c.
- [1730](#) - Manufacture of knitted and crocheted fabrics and articles

3. 18 **DIVISION: 18 - MANUFACTURE OF WEARING APPAREL; DRESSING AND DYEING OF FUR**

- [1810](#) - Manufacture of wearing apparel, except fur apparel
- [1820](#) - Dressing and dyeing of fur; manufacture of articles of fur

4. 19 **DIVISION: 19 - TANNING AND DRESSING OF LEATHER; MANUFACTURE OF LUGGAGE, HANDBAGS, SADDLERY, HARNESS AND FOOTWEAR**

- [1911](#) - Tanning and dressing of leather
- [1912](#) - Manufacture of luggage, handbags and the like, saddlery and harness
- [1920](#) - Manufacture of footwear

20 **Division: 20 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials**

- [2010](#) - Sawmilling and planing of Wood
- [2021](#) - Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board and other panels and boards
- [2022](#) - Manufacture of builders' carpentry and joinery

- [2023](#) - Manufacture of wooden containers
- [2029](#) - Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials

21 Division: 21 - Manufacture of paper and paper products

- [2101](#) - Manufacture of pulp, paper and paperboard
- [2102](#) - Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
- [2109](#) - Manufacture of other articles of paper and paperboard

5. 22 DIVISION: 22 - PUBLISHING, PRINTING AND REPRODUCTION OF RECORDED MEDIA

- [2211](#) - Publishing of books, brochures and other publications
- [2212](#) - Publishing of newspapers, journals and periodicals
- [2213](#) - Publishing of music
- [2219](#) - Other publishing
- [2221](#) - Printing
- [2222](#) - Service activities related to printing
- [2230](#) - Reproduction of recorded media

23 Division: 23 - Manufacture of coke, refined petroleum products and nuclear fuel

- [2310](#) - Manufacture of coke oven products
- [2320](#) - Manufacture of refined petroleum products
- [2330](#) - Processing of nuclear fuel

24 **Division: 24 - Manufacture of chemicals and chemical products**

- [2411](#) - Manufacture of basic chemicals, except fertilizers and nitrogen compounds
- [2412](#) - Manufacture of fertilizers and nitrogen compounds
- [2413](#) - Manufacture of plastics in primary forms and of synthetic rubber
- [2421](#) - Manufacture of pesticides and other agrochemical products
- [2422](#) - Manufacture of paints, varnishes and similar coatings, printing ink and mastics
- [2423](#) - Manufacture of pharmaceuticals, medicinal chemicals and botanical products
- [2424](#) - Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
- [2429](#) - Manufacture of other chemical products n.e.c.
- [2430](#) - Manufacture of man-made fibres

6. 25 DIVISION: 25 - MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS

- [2511](#) - Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
- [2519](#) - Manufacture of other rubber products
- [2520](#) - Manufacture of plastics products

26 **Division: 26 - Manufacture of other non-metallic mineral products**

- [2610](#) - Manufacture of glass and glass products
- [2691](#) - Manufacture of non-structural non-refractory ceramic ware
- [2692](#) - Manufacture of refractory ceramic products
- [2693](#) - Manufacture of structural non-refractory clay and ceramic products
- [2694](#) - Manufacture of cement, lime and plaster
- [2695](#) - Manufacture of articles of concrete, cement and plaster
- [2696](#) - Cutting, shaping and finishing of stone
- [2699](#) - Manufacture of other non-metallic mineral products n.e.c.

7. 27 DIVISION: 27 - MANUFACTURE OF BASIC METALS

- [2710](#) - Manufacture of basic iron and steel
- [2720](#) - Manufacture of basic precious and non-ferrous metals
- [2731](#) - Casting of iron and steel
- [2732](#) - Casting of non-ferrous metals

8. 28 DIVISION: 28 - MANUFACTURE OF FABRICATED METAL PRODUCTS,
EXCEPT MACHINERY AND EQUIPMENT

- [2811](#) - Manufacture of structural metal products
- [2812](#) - Manufacture of tanks, reservoirs and containers of metal
- [2891](#) - Forging, pressing, stamping and roll-forming of metal; powder metallurgy
- [2892](#) - Treatment and coating of metals; general mechanical engineering on a fee or contract basis
- [2893](#) - Manufacture of cutlery, hand tools and general hardware
- [2899](#) - Manufacture of other fabricated metal products n.e.c.
- [2813](#) - Manufacture of steam generators, except central heating hot water boilers
- [2891](#) - Forging, pressing, stamping and roll-forming of metal; powder metallurgy
- [2892](#) - Treatment and coating of metals; general mechanical engineering on a fee or contract basis
- [2893](#) - Manufacture of cutlery, hand tools and general hardware
- [2899](#) - Manufacture of other fabricated metal products n.e.c.

29 **Division: 29 - Manufacture of machinery and equipment n.e.c.**

- [2911](#) - Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
- [2912](#) - Manufacture of pumps, compressors, taps and valves
- [2913](#) - Manufacture of bearings, gears, gearing and driving elements
- [2914](#) - Manufacture of ovens, furnaces and furnace burners
- [2915](#) - Manufacture of lifting and handling equipment
- [2919](#) - Manufacture of other general-purpose machinery
- [2921](#) - Manufacture of agricultural and forestry machinery
- [2922](#) - Manufacture of machine tools
- [2923](#) - Manufacture of machinery for metallurgy
- [2924](#) - Manufacture of machinery for mining, quarrying and construction
- [2925](#) - Manufacture of machinery for food, beverage and tobacco processing
- [2926](#) - Manufacture of machinery for textile, apparel and leather production
- [2927](#) - Manufacture of weapons and ammunition
- [2929](#) - Manufacture of other special-purpose machinery
- [2930](#) - Manufacture of domestic appliances n.e.c.

9. 30 **DIVISION: 30 - MANUFACTURE OF OFFICE, ACCOUNTING AND COMPUTING MACHINERY**

- [3000](#) - Manufacture of office, accounting and computing machinery

31 **Division: 31 - Manufacture of electrical machinery and apparatus n.e.c.**

- [3110](#) - Manufacture of electric motors, generators and transformers
- [3120](#) - Manufacture of electricity distribution and control apparatus
- [3130](#) - Manufacture of insulated wire and cable
- [3140](#) - Manufacture of accumulators, primary cells and primary batteries
- [3150](#) - Manufacture of electric lamps and lighting equipment
- [3190](#) - Manufacture of other electrical equipment n.e.c.

32 Division: 32 - Manufacture of radio, television and communication equipment and apparatus

- [3210](#) - Manufacture of electronic valves and tubes and other electronic components
- [3220](#) - Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy
- [3230](#) - Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods

33 Division: 33 - Manufacture of medical, precision and optical instruments, watches and clocks

- [3311](#) - Manufacture of medical and surgical equipment and orthopaedic appliances
- [3312](#) - Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment
- [3313](#) - Manufacture of industrial process control equipment
- [3320](#) - Manufacture of optical instruments and photographic equipment
- [3330](#) - Manufacture of watches and clocks

10. 34 DIVISION: 34 - MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS

- [3410](#) - Manufacture of motor vehicles
- [3420](#) - Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
- [3430](#) - Manufacture of parts and accessories for motor vehicles and their engines

35 Division: 35 - Manufacture of other transport equipment

- [3511](#) - Building and repairing of ships
- [3512](#) - Building and repairing of pleasure and sporting boats
- [3520](#) - Manufacture of railway and tramway locomotives and rolling stock
- [3530](#) - Manufacture of aircraft and spacecraft
- [3591](#) - Manufacture of motorcycles
- [3592](#) - Manufacture of bicycles and invalid carriages
- [3599](#) - Manufacture of other transport equipment n.e.c.

36 Division: 36 - Manufacture of furniture; manufacturing n.e.c.

- [3610](#) - **Manufacture of furniture**
- [3691](#) - Manufacture of jewellery and related articles
- [3692](#) - Manufacture of musical instruments
- [3693](#) - Manufacture of sports goods
- [3694](#) - Manufacture of games and toys
- [3699](#) - Other manufacturing n.e.c.

37 Division: 37 - Recycling.

- [3710](#) - Recycling of metal waste and scrap
- [3720](#) - Recycling of non-metal waste and scrap

45 Division: 45 – Construction

- [4510](#) - Site preparation
- [4520](#) - Building of complete constructions or parts thereof; civil engineering
- [4530](#) - Building installation
- [4540](#) - Building completion
- [4550](#) - Renting of construction or demolition equipment with operator

50 Division: 50 - Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel

- [5010](#) - Sale of motor vehicles
- [5020](#) - Maintenance and repair of motor vehicles
- [5030](#) - Sale of motor vehicle parts and accessories
- [5040](#) - Sale, maintenance and repair of motorcycles and related parts and accessories
- [5050](#) - Retail sale of automotive fuel

51 Division: 51 - Wholesale trade and commission trade, except of motor vehicles and motorcycles

- [5110](#) - Wholesale on a fee or contract basis
- [5121](#) - Wholesale of agricultural raw materials and live animals
- [5122](#) - Wholesale of food, beverages and tobacco
- [5131](#) - Wholesale of textiles, clothing and footwear
- [5139](#) - Wholesale of other household goods
- [5141](#) - Wholesale of solid, liquid and gaseous fuels and related products
- [5142](#) - Wholesale of metals and metal ores
- [5143](#) - Wholesale of construction materials, hardware, plumbing and heating equipment and supplies
- [5149](#) - Wholesale of other intermediate products, waste and scrap
- [5151](#) - Wholesale of computers, computer peripheral equipment and software
- [5152](#) - Wholesale of electronic and telecommunications parts and equipment
- [5159](#) - Wholesale of other machinery, equipment and supplies
- [5190](#) - Other wholesale

11. 52 DIVISION: 52 - RETAIL TRADE, EXCEPT OF MOTOR VEHICLES AND MOTORCYCLES; REPAIR OF PERSONAL AND HOUSEHOLD GOODS

- [5211](#) - Retail sale in non-specialized stores with food, beverages or tobacco predominating
- [5219](#) - Other retail sale in non-specialized stores
- [5220](#) - Retail sale of food, beverages and tobacco in specialized stores
- [5231](#) - Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles
- [5232](#) - Retail sale of textiles, clothing, footwear and leather goods
- [5233](#) - Retail sale of household appliances, articles and equipment
- [5234](#) - Retail sale of hardware, paints and glass
- [5239](#) - Other retail sale in specialized stores
- [5240](#) - Retail sale of second-hand goods in stores
- [5251](#) - Retail sale via mail order houses
- [5252](#) - Retail sale via stalls and markets
- [5259](#) - Other non-store retail sale
- [5260](#) - Repair of personal and household goods

55 Division: 55 - Hotels and restaurants

- [5510](#) - Hotels; camping sites and other provision of short-stay accommodation
- [5520](#) - Restaurants, bars and canteens

60 Division: 60 - Land transport; transport via pipelines

- [6010](#) - Transport via railways
- [6021](#) - Other scheduled passenger land transport
- [6022](#) - Other non-scheduled passenger land transport
- [6023](#) - Freight transport by road
- [6030](#) - Transport via pipelines

61 Division: 61 - Water transport

- [6110](#) - Sea and coastal water transport
- [6120](#) - Inland water transport

62 Division: 62 - Air transport

- [6210](#) - Scheduled air transport
- [6220](#) - Non-scheduled air transport

63 Division: 63 - Supporting and auxiliary transport activities; activities of travel agencies

- [6301](#) - Cargo handling
- [6302](#) - Storage and warehousing
- [6303](#) - Other supporting transport activities
- [6304](#) - Activities of travel agencies and tour operators; tourist assistance activities n.e.c.
- [6309](#) - Activities of other transport agencies

64 Division: 64 - Post and telecommunications

- [6411](#) - National post activities
- [6412](#) - Courier activities other than national post activities

72 Division: 72 - Computer and related activities

- [7210](#) - Hardware consultancy
- [7221](#) - Software publishing
- [7229](#) - Other software consultancy and supply
- [7230](#) - Data processing
- [7240](#) - Database activities and online distribution of electronic content
- [7250](#) - Maintenance and repair of office, accounting and computing machinery
- [7290](#) - Other computer-related activities