

# ENTERPRISE SURVEYS

## INDICATOR DESCRIPTIONS

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## ABOUT ENTERPRISE SURVEYS

The Enterprise Surveys focus on the many factors that shape the business environment. These factors can be accommodating or constraining for firms and play an important role in whether a country will prosper or not. An accommodating business environment is one that encourages firms to operate efficiently. Such conditions strengthen incentives for firms to innovate and to increase productivity—key factors for sustainable development. A more productive private sector, in turn, expands employment and contributes taxes necessary for public investment in health, education, and other services. In contrast, a poor business environment increases the obstacles to conducting business activities and decreases a country's prospects for reaching its potential in terms of employment, production, and welfare.

The Enterprise Surveys are conducted by the World Bank and its partners across all geographic regions and cover small, medium, and large companies. The surveys are administered to a representative sample of firms in the non-agricultural formal private economy. The universe of the survey, also known as the population, is consistently defined in all countries and includes the entire manufacturing sector, the services sector, and the transportation and construction sectors. Public utilities, government services, health care, and financial services sectors are not included in the universe. Uniform universe, uniform methodology of implementation, and a core questionnaire are the basis of the Global methodology under which most Enterprise Surveys have been implemented since 2006.

The Enterprise Surveys collect a wide array of qualitative and quantitative information through face to face interviews with firm managers and owners regarding the business environment in their countries and the productivity of their firms. The topics covered in Enterprise Surveys include infrastructure, trade, finance, regulations, taxes and business licensing, corruption, crime and informality, finance, innovation, labor, and perceptions about obstacles to doing business.

The qualitative and quantitative data collected through the surveys connect a country's business environment characteristics with firm productivity and performance. The Enterprise Survey is useful for both policymakers and researchers. The surveys are repeated over time to track changes and benchmark the effects of reforms on firms' performance.

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#### Abbreviations

BEEPS	Enterprise Surveys implemented in Eastern Europe and Central Asian countries are also known as Business Environment and Enterprise Performance Surveys (BEEPS) and are jointly conducted by the World Bank and the European Bank for Reconstruction and Development.
ECA	Eastern European and Central Asia region
LAC	Latin America and the Caribbean region
EAP	East Asia and Pacific region
SAR	South Asia region
AFR	Africa region
MENA	Middle East and North Africa region

#### Notes

\* This indicator is computed using data from manufacturing firms only.

## INTRODUCTION TO ES INDICATORS, BY SUBGROUP

In addition to country-level statistics, Enterprise Survey (ES) indicators are presented by subgroups based on firm characteristics. Indicators from surveys following the **Global** sampling methodology are representative at the country level. However, more care is necessary when interpreting indicators by subgroups.

In the figure below, the drop-down menu on each country page allows the user to select how they wish to view an indicator. The user can view indicator values for the entire sample or by subgroups. Surveys following the **Global** methodology are stratified by business sector, location, and firm size. When analyzing ES indicators in these groupings, the results are representative of the associated populations<sup>1</sup>. However, since the **Global** sampling methodology does not stratify by gender of the top manager, exporter status, or ownership (ex post groupings), the intended level of precision is not guaranteed for indicator values by these groupings.

The screenshot shows a web interface with a navigation bar containing categories like Corruption, Crime, Finance, Firm Characteristics, Gender, Informality, Infrastructure, Innovation and Technology, Regulations and Taxes, Trade, and Workforce. Below the navigation bar is a table with columns for 'Indicator', 'Pakistan', 'South Asia', and 'World'. A dropdown menu is open over the 'View Data by Firm Subgroups' header, listing options: 'No Subgroups', 'Survey Design Strata', 'Location', 'Sector', 'Size', 'Ex post groupings', 'Exporter Type', 'Gender of Top Manager', and 'Ownership Type'. The 'Size' option is currently selected.

Indicator	Pakistan	South Asia	World
Percent of firms expected to give up or stop doing things done"	48.0	41.2	29.4
Percent of firms expected to give up or stop doing things done"	12.7	21.2	18.8
Percent of firms expected to give up or stop doing things done"	0.0	20.8	16.5

Surveys that are Non-Global do not yield results that are representative of the firm population in a country. Please check if a survey is Global or not, as this will greatly affect the interpretation of survey results.

<sup>1</sup> At the country level, and levels of stratification, sample averages are representative of the associated population when calculated with sampling weights.

## **INDICATOR COMPARABILITY**

Indicators are comparable across all the countries and years in surveys that followed the [Enterprise Surveys Global Methodology](#). Some older surveys did not follow the Global methodology, and are not comparable to other surveys. Please refer to the [DataDetails.xls](#) file for a list of Global and Non-Global surveys.

## **COMPUTING REGIONAL AND INCOME GROUP AVERAGES**

Regional and income group averages of indicators are computed by taking a simple average of country-level estimates. For each economy, only the latest available year of survey data is used in this computation. Only surveys posted during the years 2010-2017, and adhering to the [Enterprise Surveys Global Methodology](#), are used to compute these regional and "all countries" averages.

In June 2017, an inconsistency was found and fixed in the computation of regional and income averages found in the Country Highlights and Country Profiles.

## **HANDLING OF OUTLIERS**

For indicators that use questions with potentially unbounded responses, extreme values are identified and turned into missing as follows. The variables are first log-transformed as  $\ln(x + 1)$ , to add symmetry to the distribution, while including zeros. The observations that fall outside the three standard deviations away from the sample mean of the log-transformed variable at the survey-level are treated as extreme and removed from the calculations of the corresponding indicators (i.e., they are turned into missing).

## Definitions of Subgroup

**Table 1. Definition of Subgroups**

Subgroup	Subgroup levels	Description
<p>Note: The cuts below are included in the levels of sampling stratification. The sufficient sample sizes should ensure the intended level of precision for the indicator values analyzed at these levels. Please refer to the Sampling Note on the Methodology page of the website.</p>		
Firm Size	Small: 5-19 workers Medium: 20-99 workers Large: 100+	Firm size is a composite measure of permanent and temporary workers. The number of temporary workers is adjusted by the average number of months worked in a year.
Location	Varies by Survey	Enterprise Surveys covers selected regions within a country that represent the largest centers of production and business enterprise.
Business Sector	Varies by Survey	Surveys are stratified by business sector. At a minimum, the stratification delineates between Manufacturing and Services firms. In larger economies, additional sectors are selected for stratification.
<p>Note: The cuts below are NOT included in the levels of stratification. The resulting sample sizes are not guaranteed to ensure the intended level of precision for the indicator values analyzed at these levels.</p>		
Gender of Top Manager	Male Female	Respondents are asked to report the gender of the top manager. This variable is only available in the latest surveys using the <b>Global</b> methodology.
Exporting Status	Non-exporter Exporter	A firm is an exporter if at least 10 percent of its annual sales is derived from direct exports
Ownership (Domestic vs. Foreign)	Domestic (less than 10% foreign ownership) At least 10% Foreign Ownership	A firm is considered to have foreign ownership if at least 10 percent of ownership is held by foreigners.

## REGULATIONS AND TAXES

Good economic governance in areas such as taxation and regulations and permits and licenses are a fundamental pillar for the creation of a favorable business environment.

The Enterprise Surveys provide qualitative and quantitative measures of taxation and regulations. For example, the Enterprise Surveys approximates the “time tax” imposed by regulations: it measures the time spent by senior management in meetings with public officials. Another indicator, the average number of visits or required meetings with tax officials, measures the average number of tax inspections or meetings with tax inspectors in each year.

Effective regulations address market failures that inhibit productive investment and reconcile private and public interests. The number of permits and approvals that businesses need to obtain, and the time it takes to obtain them, are expensive and time consuming. The existing legislation of a country also determines the mix of legal forms private firms take and determines the level of protection for investors thus affecting the incentives to invest. Those indicators focus on the efficiency of business licensing and permit services. The indicators evaluate the delays faced when demanding these services.

Regulation and Tax

**[reg1] Senior management time spent in dealing with requirements of government regulation (%)**

Description

Average percentage of senior management's time that is spent in a typical week dealing with requirements imposed by government regulations (eg. Taxes, customs, labor regulations, licensing and registration), including dealings with officials, completing forms, et cetera.

Survey Variable Used to Construct Indicator

This indicator is created from the variable J.2.

<b>J.2</b>	In a typical week over the last year, what percentage of total senior management's time was spent on dealing with requirements imposed by government regulations? [By senior management I mean managers, directors, and officers above direct supervisors of production or sales workers. Some examples of government regulations are taxes, customs, labor regulations, licensing and registration, including dealings with officials and completing forms]
------------	---

	Percent
Senior management's time spent on dealing with regulations	<b>j2</b> %
<b>No time was spent</b>	<b>0</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable j2.
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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**[reg2] Average number of visits or required meetings with tax officials**

## Description

Average number of visits or required meetings with tax officials. If the respondent answered "No" to question J.3, a zero is recorded for the average number of visits.

## Survey Variable Used to Construct Indicator

This indicator is created from the variables J.3 and J.4.

<b>J.3</b>	Over the last year, was this establishment visited or inspected by tax officials?
------------	---

Yes	1	<i>GO TO QUESTION J.6a</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

**j3**

<b>J.4</b>	Over the last year, how many times was this establishment either inspected by tax officials or required to meet with them?
------------	--

	Number
Times inspected or met with tax officials	<b>j4</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

## Notes

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable j4
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable j4
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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Regulation and Taxes

**[reg6] Percent of firms that were visited or required to meet with tax officials**

Description

Percentage of firms that were visited or inspected by tax officials or were required to meet with them over the last year.

Survey Variable Used to Construct Indicator

This indicator is created from the variable J.3.

<b>J.3</b>	Over the last year, was this establishment visited or inspected by tax officials or required to meet with them?
------------	---

Yes	1	<b>j3</b>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	

Notes

Indicator Updates

June 26, 2017	First released
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REGULATION AND TAX

**[reg2\_c] If there were visits, Average number of visits or required meetings with tax officials**

Description

If there were a positive number of visits or required meeting with tax officials, what was the average number? The variable J.4 only allows positive number of visits as a response.

Survey Variable Used to Construct Indicator

This indicator is created from the variable J.4.

<b>J.4</b>	Over the last year, how many times was this establishment either inspected by tax officials or required to meet with them?
------------	--

	Number
Times inspected or met with tax officials	<b>j4</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

November 10, 2009	Conditional Indicator Created
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable j4
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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**[reg4] Percent of firms identifying tax rates as major constraint****Description**

Percentage of firms identifying tax rates as a "major" or "very severe" obstacle.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variable J.30a.

<b>J.30</b>	As I list some factors that can affect the current operations of a business, please look at this card and tell me the degree to which you think each factor is an obstacle to the current operations of this establishment. <a href="#">SHOW CARD 21</a>
-------------	---

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	<b>Do Not Know (spontaneous)</b>	<b>Does Not Apply (spontaneous)</b>
Tax rates <b>j30a</b>	0	1	2	3	4	-9	-7

**Notes**

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

**Indicator Updates**

May 2, 2011

[Changes to ECA 2002 & 2005 surveys](#)

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**[reg5] Percent of firms identifying tax administration as major constraint****Description**

Percentage of firms identifying tax administration as a "major" or "very severe" obstacle.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variable J.30b.

<b>J.30</b>	As I list some factors that can affect the current operations of a business, please look at this card and tell me the degree to which you think each factor is an obstacle to the current operations of this establishment. <a href="#">SHOW CARD 21</a>
-------------	---

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Tax administration <b>j30b</b>	0	1	2	3	4	-9	-7

**Notes**

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

**Indicator Updates**

May 2, 2011

[Changes to ECA 2002 & 2005 surveys](#)

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## REGULATION AND TAX

**[bus2] Days to obtain operating license**

## Description

The average wait, in days, to obtain an operating license.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.14.

<b>J.14</b>	Approximately how many days did it take to obtain this operating license from the day of the application to the day it was granted?
-------------	---

	Days
Wait for operating license	<b>j14</b>
<b>Less than one day</b>	<b>1</b>
<b>Still in process</b>	<b>-6</b>
<b>Application denied</b>	<b>-5</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

## Notes

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable j14
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable j14

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**[bus3] Days to obtain construction-related permit**

## Description

Average wait, in days, to obtain construction-related permit.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable G.3.

<b>G.3</b>	In reference to that application for a construction-related permit, approximately how many days did it take to obtain it from the day of the application to the day the permit was granted?
------------	---

	Days
Wait for a construction-related permit	<b>g3</b>
<b>Less than one day</b>	<b>1</b>
<b>Still in process</b>	<b>-6</b>
<b>Application denied</b>	<b>-5</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

## Notes

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable g3
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable g3

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**[bus1] Days to obtain an import license**

## Description

Average wait, in days, to obtain import license.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.11.

<b>J.11</b>	Approximately how many days did it take to obtain this import license from the day of the application to the day it was granted?
-------------	--

	Days
Wait for import license	<b>j11</b>
<b>Less than one day</b>	<b>1</b>
<b>Still in process</b>	<b>-6</b>
<b>Application denied</b>	<b>-5</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

## Notes

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable j11
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable j11

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REGULATION AND TAX

**[bus5] Percent of firms identifying business licensing and permits as major constraint**

Description

Percentage of firms identifying business licensing and permits as "major" or "very severe" obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variable J.30c.

<b>J.30</b>	As I list some factors that can affect the current operations of a business, please look at this card and tell me the degree to which you think each factor is an obstacle to the current operations of this establishment. <a href="#">SHOW CARD 21</a>
-------------	---

**ROTATE OPTIONS**

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Business licensing and permits <b>j30c</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011 [Changes to ECA 2002 & 2005 surveys](#)

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**[reg7] Percent of firms identifying political instability as a major constraint****Description**

Percentage of firms identifying political instability as a "major" or "very severe" obstacle.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variable j30e.

<b>J.30</b>	Using the response options on the card; To what degree is/are <b>[INSERT OPTION]</b> an obstacle to the current operations of this establishment? <b>SHOW CARD 24</b>
-------------	---

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Political instability <b>j30e</b>	0	1	2	3	4	-9	-7

**Notes**

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

**Indicator Updates**

August 7, 2017	First released
----------------	----------------

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**[reg8] Percent of firms identifying access to land as a major constraint**

## Description

Percentage of firms identifying access to land as a "major" or "very severe" obstacle.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable g30a.

<b>J.30</b>	Using the response options on the card; To what degree is <b>Access to Land</b> an obstacle to the current operations of this establishment? <a href="#">SHOW CARD 16</a>
-------------	---

		(SPONTANEOUS)						
		No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	DON'T KNOW	DOES NOT APPLY
Access to land	<b>g30a</b>	0	1	2	3	4	<b>-9</b>	<b>-7</b>

## Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

## Indicator Updates

August 7, 2017	First released
----------------	----------------

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## CORRUPTION

Corruption by public officials may present a major administrative and financial burden on firms. Corruption creates an unfavorable business environment by undermining the operational efficiency of firms and raising the costs and risks associated with doing business.

Inefficient regulations constrain firm efficiency as they present opportunities for soliciting bribes where firms are required to make “unofficial” payments to public officials to get things done. In many countries bribes are common and quite high and they add to the bureaucratic costs in obtaining required permits and licenses. They can be a serious impediment for firms’ growth and development.

The Enterprise Surveys include several indicators for corruption. The Bribery depth reflects the proportion of times a firm was asked or expected to pay a bribe when soliciting six different public services, permits or licenses. Other indicators identify the extent to which specific regulatory and administrative officials require bribe payments during meetings with tax inspectors or to secure a government contract. Another set of indicators focuses on bribes to obtain specific licenses or permits, and shows the share of firms that are expected to make informal payments to secure import and operating licenses and to obtain a construction permit

## CORRUPTION

**[corr4] Percent of firms expected to give gifts to public officials (to get things done)**

## Description

Percentage of establishments that consider that firms with characteristics similar to theirs are making informal payments or giving gifts to public officials to "get things done" with regard to customs, taxes, licenses, regulations, services etc.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.7. If either j7a or j7b is positive, then the firm is considered to pay. If the respondent answers -8, it is also interpreted that the firm pays.

<b>J.7</b>	It is said that establishments are sometimes required to make gifts or informal payments to public officials to "get things done" with regard to customs, taxes, licenses, regulations, services etc. On average, what percentage of total annual sales, or estimated total annual value, do establishments like this one pay in informal payments or gifts to public officials for this purpose?
------------	---

	Percent
Percentage of total annual sales paid as informal payment	<b>j7a</b> %
<b>No payments or gifts are paid</b>	<b>0</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>Refusal (spontaneous)</b>	<b>-8</b>

**PROVIDE EITHER ONE OR THE OTHER, NOT BOTH**

	LCUs
Total annual informal payment	<b>j7b</b>
<b>No payments or gifts are paid</b>	<b>0</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>Refusal (spontaneous)</b>	<b>-8</b>

## Notes

## Indicator Updates

September 7, 2010	Consideration of an answer of -8 (Refusal) as the firm pays informal payments
December 7, 2010	<a href="#">Treatment of -8 Change</a> affected outlier treatment on the variable j7a
December 7, 2010	<a href="#">Treatment of -8 Change</a> affected outlier treatment on the variable j7b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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## CORRUPTION

**[corr3] Value of gift expected to secure government contract (% of contract)**

## Description

Percentage of contract value expected as a gift to secure government contract. Only firms that have confirmed that they have secured or attempted to secure a government contract in the last 12 months were required to answer this question.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.6.

<b>J.6</b>	When establishments like this one do business with the government, what percent of the contract value would be typically paid in informal payments or gifts to secure the contract?
------------	---

	Percent
Percent of the contract value paid as informal payments or gifts	<b>j6</b> %
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>Refusal (spontaneous)</b>	<b>-8</b>
<b>No payments</b>	<b>0</b>

## Notes

For BEEPS surveys conducted prior to 2008, question J.6 was asked to all firms, regardless of whether or not the firm had secured or attempted to secure a government contract (question J.6a which precedes J.6).

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable j6
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable j6
December 7, 2010	<a href="#">Treatment of -8 Change</a> affected j6
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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## CORRUPTION

**[corr5] Percent of firms expected to give gifts to get a phone connection**

## Description

Percentage of firms expected to give gifts or informal payments to get a phone connection.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable C.21.

<b>C.21</b>	In reference to that application for a telephone connection, was an informal gift or payment expected or requested?
-------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>REFUSE (spontaneous)</b>	<b>-8</b>

<b>c21</b>
------------

## Notes

## Indicator Updates

December 7, 2010	<a href="#">Treatment of -8 Change</a> affected c21
May 29, 2014	This indicator was out of date and has been removed from ES website

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## CORRUPTION

**[corr6] Percent of firms expected to give gifts to get an electrical connection**

## Description

Percentage of firms expected to give gifts or informal payments to get an electrical connection.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable C.5.

<b>C.5</b>	In reference to that application for an electrical connection, was an informal gift or payment expected or requested?
------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>REFUSE (spontaneous)</b>	<b>-8</b>

<b>c5</b>
-----------

## Notes

## Indicator Updates

December 7, 2010

[Treatment of -8 Change](#) affected c5

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## CORRUPTION

**[corr7] Percent of firms expected to give gifts to get a water connection**

## Description

Percentage of firms expected to give gifts or informal payments to get a water connection.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable C.14.

<b>C.14</b>	In reference to that application for a water connection, was an informal gift or payment expected or requested?
-------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>REFUSE (spontaneous)</b>	<b>-8</b>

<b>c14</b>
------------

## Notes

## Indicator Updates

December 7, 2010	<a href="#">Treatment of -8 Change</a> affected c14
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## CORRUPTION

**[corr8] Percent of firms expected to give gifts to get a construction permit**

## Description

Percentage of firms expected to give gifts or informal payments to get a construction permit.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable G.4.

<b>G.4</b>	In reference to that application for a construction-related permit, was an informal gift or payment expected or requested?
------------	--

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>REFUSE (spontaneous)</b>	<b>-8</b>

<b>g4</b>
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## Notes

## Indicator Updates

December 7, 2010	<a href="#">Treatment of -8 Change</a> affected g4
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## CORRUPTION

**[corr9] Percent of firms expected to give gifts to get an import license**

## Description

Percentage of firms expected to give gifts or informal payments to get an import license.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.12.

<b>J.12</b>	In reference to that application for an import license, was an informal gift or payment expected or requested?
-------------	--

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>REFUSE (spontaneous)</b>	<b>-8</b>

**j12**

## Notes

## Indicator Updates

December 7, 2010

[Treatment of -8 Change](#) affected j12

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## CORRUPTION

**[corr10] Percent of firms expected to give gifts to get an operating license**

## Description

Percentage of firms expected to give gifts or informal payments to get an operating license. Spontaneous refusals to the question are treated as a “Yes”.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.15.

<b>J.15</b>	In reference to that application for an operating license, was an informal gift or payment expected or requested?
-------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>Refusal (spontaneous)</b>	<b>-8</b>

<b>j15</b>
------------

## Notes

## Indicator Updates

December 7, 2010

[Treatment of -8 Change](#) affected j15

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## CORRUPTION

**[corr1] Percent of firms expected to give gifts in meetings with tax officials**

## Description

Percentage of firms expected to give gifts or informal payments during meetings with tax officials.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.5.

<b>J.5</b>	In any of these inspections or meetings was a gift or informal payment expected or requested?
------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>Refusal (spontaneous)</b>	<b>-8</b>

<b>j5</b>
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## Notes

## Indicator Updates

December 7, 2010	<a href="#">Treatment of -8 Change</a> affected j5
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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## CORRUPTION

**[corr2] Percent of firms expected to give gifts to secure a government contract**

## Description

Percentage of establishments that consider that firms with characteristics similar to theirs are making informal payments or giving gifts to public officials to secure government contract.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.6 and J.6a.

<b>J.6a</b>	Over the last year, has this establishment secured or attempted to secure a government contract?
-------------	--

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**GO TO QUESTION J.7**

**GO TO QUESTION J.7**

**j6a**

<b>J.6</b>	When establishments like this one do business with the government, what percent of the contract value would be typically paid in informal payments or gifts to secure the contract?
------------	---

	Percent
Percent of the contract value paid as informal payments or gifts	<b>j6</b> %
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>Refusal (spontaneous)</b>	<b>-8</b>
<b>No payments</b>	<b>0</b>

## Notes

## Indicator Updates

November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable j6
December 7, 2010	<a href="#">Treatment of -8 Change</a> affected j6
December 7, 2010	<a href="#">Treatment of -9 Change</a> affected j6a
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 1, 2014	<a href="#">Refusals to j6 erroneously not incorporated</a>

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## CORRUPTION

**[corr11] Percent of firms identifying corruption as a major constraint**

## Description

Percentage of firms identifying corruption as a "major" or "very severe" obstacle.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.30f.

<b>J.30</b>	As I list some factors that can affect the current operations of a business, please look at this card and tell me the degree to which you think each factor is an obstacle to the current operations of this establishment. <a href="#">SHOW CARD 21</a>
-------------	---

## ROTATE OPTIONS

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Corruption <b>j30f</b>	0	1	2	3	4	-9	-7

## Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

## Indicator Updates

May 2, 2011

[Changes to ECA 2002 & 2005 surveys](#)

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## CORRUPTION

**[corr12] Percent of firms believing the court system is fair, impartial and uncorrupted**

## Description

Percentage of firms believing the court system is fair, impartial and uncorrupted.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable J.1

<b>J.1</b>	I am going to read some statements that describe the courts system and how it could affect business. For each statement, please tell me if you Strongly disagree, Tend to disagree, Tend to agree, or Strongly agree. <a href="#">SHOW CARD 20</a>
------------	---

	Strongly disagree	Tend to disagree	Tend to agree	Strongly agree	<b>Don't know (spontaneous)</b>
"The court system is fair, impartial and uncorrupted." <b>H7a</b>	1	2	3	4	-9

## Notes

## Indicator Updates

May 29, 2014

This indicator was out of date and had been removed from ES website

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## CORRUPTION

**[graft2] Bribery depth (% of public transactions where a gift or informal payment was requested)**

## Description

The depth of Bribery is the percentage of instances in which a firm was either expected or requested to provide a gift or informal payment during solicitations for public services, licenses or permits. This measure uses data from 6 survey questions for each firm. For purposes of computation, a refusal to answer a particular survey question is considered an affirmative answer.

## Survey Variable Used to Construct Indicator

This indicator is created from the variables C.5., C.14, G.4, J.5, J.12, J.15

**C.5** In reference to that application for an electrical connection, was an informal gift or payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

c5

**C.14** In reference to that application for a water connection, was an informal gift or payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

c14

**G.4** In reference to that application for a construction-related permit, was an informal gift or payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

g4

**J.5** In any of these inspections or meetings (with tax officials) was a gift or informal payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

j5

**J.12** In reference to that application for an import license, was an informal gift or payment expected or requested?

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>REFUSE (spontaneous)</b>	<b>-8</b>

**j12**

**J.15** In reference to that application for an operating license, was an informal gift or payment expected or requested?

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>Refusal (spontaneous)</b>	<b>-8</b>

**j15**

#### Notes

#### Indicator Updates

August 18, 2011

Indicator Created. Bribery depth is computed similarly as the Graft Index from A. Gonzalez et al. 2007. World Bank Policy Research Working Paper #4394. Unlike the Graft Index, Bribery depth does not include telephone connections transactions and does include transactions conducted during meetings with tax officials. Another difference is that Bribery depth is calculated at the firm-level unlike the Graft Index which is calculated at the country-level.

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## CORRUPTION

**[graft3] Bribery incidence (% of firms experiencing at least one bribe payment request)**

## Description

The percent of firms experiencing at least one bribe payment request across 6 public transactions dealing with utilities access, permits, licenses, and taxes. The six public transaction questions are listed below. For purposes of computation, a refusal to answer a particular survey question is considered an affirmative answer.

## Survey Variable Used to Construct Indicator

This indicator is created from the variables C.5., C.14, G.4, J.5, J.12, J.15

C.5 In reference to that application for an electrical connection, was an informal gift or payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

c5

C.14 In reference to that application for a water connection, was an informal gift or payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

c14

G.4 In reference to that application for a construction-related permit, was an informal gift or payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

g4

J.5 In any of these inspections or meetings (with tax officials) was a gift or informal payment expected or requested?

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

j5

J.12	In reference to that application for an import license, was an informal gift or payment expected or requested?
------	--

Yes	1
No	2
Don't know (spontaneous)	-9
REFUSE (spontaneous)	-8

j12
-----

J.15	In reference to that application for an operating license, was an informal gift or payment expected or requested?
------	---

Yes	1
No	2
Don't know (spontaneous)	-9
Refusal (spontaneous)	-8

j15
-----

Notes

Indicator Updates

April 18, 2012	Indicator Created
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CRIME

**[crime9] Percent of firms identifying the courts as a major constraint**

Description

Percentage of firms identifying functioning of the courts as major constraint. The computation of the indicator is based on the rating of the obstacle as a potential constraint to the current operations of the establishment.

Survey Variable Used to Construct Indicator

This indicator is created from the variable J.30.

<b>J.30</b>	As I list some factors that can affect the current operations of a business, please look at this card and tell me the degree to which you think each factor is an obstacle to the current operations of this establishment. <a href="#">SHOW CARD 21</a>
-------------	---

**ROTATE OPTIONS**

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Courts <b>h30</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates


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## CRIME

Crime imposes costs on firms when they are forced to divert resources from productive uses to cover security costs. Both foreign and domestic investors perceive crime as an indication of social instability, and crime drives up the cost of doing business. Also, commercial disputes between firms and their clients occur regularly while doing business. Resolving these disputes can be challenging when legal institutions are weak or nonexistent.

The Enterprise Surveys capture key dimensions of the effect of crime on firm sales, the extent to which entrepreneurs identify courts as fair and more. For example, the set of indicators measures the direct costs of security incurred by firms as well as their direct losses due to crime. These resources represent an opportunity cost since they could have been invested in productive activities. Another indicator (Perceptions about the Courts) shows the share of firms that recognize the functioning of the courts as being fair, impartial, and uncorrupted.

CRIME

**[crime1] Percent of firms paying for security**

Description

Percentage of firms paying for security, for example equipment, personnel, or professional security services.

Survey Variable Used to Construct Indicator

This indicator is created from the variable I.1.

<b>I.1</b>	In fiscal year <b>[insert last complete fiscal year]</b> , did this establishment pay for security, for example equipment, personnel, or professional security services?
------------	--

Yes	1	
No	2	<i>GO TO QUESTION I.3</i>
<b>Don't know (spontaneous)</b>	<b>-9</b>	<i>GO TO QUESTION I.3</i>

**i1**

Notes

Indicator Updates

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CRIME

**[crime3] Losses due to theft and vandalism against the firm (% of annual sales)**

Description

Estimated losses as a result of theft, robbery, vandalism or arson that occurred on establishment's premises calculated as a percentage of annual sales.

Survey Variable Used to Construct Indicator

This indicator is created from the variables I.3 and I.4. If the respondent answered I4b, then the value is divided by annual sales (D2).

**I.3** In fiscal year [\[insert last complete fiscal year\]](#), did this establishment experience losses as a result of theft, robbery, vandalism or arson?

Yes	1	
No	2	<i>GO TO QUESTION I.30</i>
<b>Don't know (spontaneous)</b>	<b>-9</b>	<i>GO TO QUESTION I.30</i>
		<b>13</b>

**I.4** In fiscal year [\[insert last complete fiscal year\]](#), what were the estimated losses as a result of theft, robbery, vandalism or arson that occurred on this establishment's premises either as a percentage of total annual sales or as total annual losses?

	Percent
Losses as percentage of total annual sales	<b>i4a</b> %
<b>Don't know (spontaneous)</b>	<b>-9</b>

**PROVIDE EITHER ONE OR THE OTHER, NOT BOTH**

	LCUs
Total annual value of losses	<b>i4b</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables d2, i4b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables d2, i4a, i4b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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CRIME

**[crime3\_c] If there were losses, average losses due to theft and vandalism (% of annual sales)**

Description

If there were losses, estimated losses as a result of theft, robbery, vandalism or arson that occurred on establishment's premises calculated as a percentage of annual sales.

Survey Variable Used to Construct Indicator

This indicator is created from the variable I.4. If the respondent answered I4b, then the value is divided by annual sales (D2).

<b>I.4</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , what were the estimated losses as a result of theft, robbery, vandalism or arson that occurred on this establishment's premises either as a percentage of total annual sales or as total annual losses?
------------	---

Percent	
Losses as percentage of total annual sales	<b>i4a</b> %
<a href="#">Don't know (spontaneous)</a>	<b>-9</b>

**PROVIDE EITHER ONE OR THE OTHER, NOT BOTH**

LCUs	
Total annual value of losses	<b>i4b</b>
<a href="#">Don't know (spontaneous)</a>	<b>-9</b>

Notes

Indicator Updates

November 10, 2009	Indicator created.
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables d2, i4a, i4b

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CRIME

**[crime2] Security costs (% of annual sales)**

Description

Average security costs as a percentage of total annual sales for all firms.

Survey Variable Used to Construct Indicator

This indicator is created from the variables I.1 and I.2. If the respondent answered I2b, then the total cost is divided by annual sales (D2).

**I.1** In fiscal year **[insert last complete fiscal year]**, did this establishment pay for security, for example equipment, personnel, or professional security services?

Yes	1	
No	2	<i>GO TO QUESTION I.3</i>
<b>Don't know (spontaneous)</b>	<b>-9</b>	<i>GO TO QUESTION I.3</i>

**i1**

**I.2** In fiscal year **[insert last complete fiscal year]**, what percentage of this establishment's total annual sales was paid for security, or what was the total annual cost of security?

	Percent
Percentage of total annual sales for security	<b>i2a</b> %
<b>Don't know (spontaneous)</b>	<b>-9</b>

**PROVIDE EITHER ONE OR THE OTHER, NOT BOTH**

	LCUs
Total annual cost of security	<b>i2b</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables d2, i2a, i2b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables d2, i2a, i2b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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CRIME

**[crime2\_c] If the establishment pays for security, average security costs (% of annual sales)**

Description

Average security costs as a percentage of total annual sales for firms that pay for security.

Survey Variable Used to Construct Indicator

This indicator is created from the variable I.2. If the respondent answered I2b, then the total cost is divided by annual sales (D2).

<b>I.2</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , what percentage of this establishment's total annual sales was paid for security, or what was the total annual cost of security?
------------	--

	Percent
Percentage of total annual sales for security	<b>i2a</b> %
<b>Don't know (spontaneous)</b>	<b>-9</b>

**PROVIDE EITHER ONE OR THE OTHER, NOT BOTH**

	LCUs
Total annual cost of security	<b>i2b</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

November 10, 2009	Indicator Created
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables d2, i2a, i2b

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CRIME

**[crime5] Products shipped to supply domestic markets that were lost due to theft (% of product value)\***

Description

Value of losses of products, due to theft, while in transit to domestic markets.

Survey Variable Used to Construct Indicator

This indicator is created from the variable D.10.

<b>D.10</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of the value of products this establishment shipped to supply domestic markets was lost while in transit because of theft?
-------------	---

	Percent
Losses due to theft as percentage of the value of the products	<b>d10</b> %
<b>No losses</b>	<b>0</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>
<b>No internal shipments made</b>	<b>-7</b>

Notes

Indicator Updates

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CRIME

**[crime8] Percent of firms identifying crime, theft and disorder as a major constraint**

Description

Percentage of firms identifying crime, theft and disorder as a "major" or "very severe" obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variable I.30.

**I.30** Using the response options on the card; To what degree is **Crime, Theft and Disorder** an obstacle to the current operations of this establishment? [SHOW CARD 15](#)

	No obstacle	Minor obstacle	Moderate obstacle	Major Obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Crime, theft and disorder <b>i30</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011

[Changes to ECA 2002 & 2005 surveys](#)

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CRIME

**[crime10] Percent of firms experiencing losses due to theft and vandalism**

Description

Percent of firms experiencing losses due to theft, robbery, vandalism or arson that occurred on the establishment's premises

Survey Variable Used to Construct Indicator

This indicator is created from the variables I.3.

<b>I.3</b>	In fiscal year <b>[insert last complete fiscal year]</b> , did this establishment experience losses as a result of theft, robbery, vandalism or arson?
------------	--

Yes	1	<i><b>GO TO QUESTION I.30</b></i> <i><b>GO TO QUESTION I.30</b></i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	
		<b>13</b>

Notes

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## INFORMALITY

A large informal sector has serious consequences for the formal private sector. The informal sector may pose unfair competition for formal firms. The Enterprise Surveys capture key dimensions the degree of informality in an economy. For example, the set of indicators (unregistered start-ups) shows the percentage of firms that started operation without being formally registered. It approximates the prevalence of informality in the private economy.

INFORMALITY	
<b>[infor3] Percent of firms expressing that a typical firm reports less than 100% of sales for tax purposes</b>	
<b>Description</b>	
Percentage of firms expressing that a typical firm reports less than 100 percent of sales for tax purposes.	
<b>Survey Variable Used to Construct Indicator</b>	
<i>Note that this question is no longer asked in the global roll out of the Enterprise Surveys.</i>	
<b>Notes</b>	
<b>Indicator Updates</b>	
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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INFORMALITY

**[infor1] Percent of firms competing against unregistered or informal firms**

Description

Percentage of firms competing against unregistered or informal firms.

Survey Variable Used to Construct Indicator

This indicator is created from the variable E.11.

**E.11** Does this establishment compete against unregistered or informal firms?

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**e11**

Notes

Indicator Updates

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INFORMALITY

**[infor2] % of firms identifying practices of competitors in the informal sector as a major constraint**

Description

Percentage of firms identifying practices of competitors in the informal sector as major constraint. The computation of the indicator is based on the rating of the obstacle as a potential constraint to the current operations of the establishment.

Survey Variable Used to Construct Indicator

This indicator is created from the variable E.30.

**E.30** Using the response options on the card; To what degree are **Practices of Competitors in the Informal Sector** an obstacle to the current operations of this establishment? [SHOW CARD 10](#)

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Practices of competitors in the informal sector <b>e30</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

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INFORMALITY

**[infor4] Percent of firms formally registered when started operations in the country**

Description

Percentage of firms formally registered when they started operations in the country.

Survey Variable Used to Construct Indicator

This indicator is created from the variable B.6a.

<b>B.6a</b>	Was this establishment formally registered when it began operations?
-------------	--

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**b6a**

Notes

Indicator Updates

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INFORMALITY

**[infor5] Number of years firms operated without formal registration**

Description

Average number of years firms operated without formal registration. This indicator is computed only for the firms that did not have a formal registration when they started their operations in the country.

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.5, B.6a, and B.6b.

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

	Year	Answer from previous round
Year establishment began operations	<b>b5</b>	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

**INTERVIEWER: PROVIDE FOUR DIGITS FOR YEAR**

**B.6a** Was this establishment formally registered when it began operations?

Yes	1	
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

**b6a**

**B.6b** In what year was this establishment formally registered?

	Year	Answer from previous round
Year establishment formally registered	<b>b6b</b>	
<b>Don't know (spontaneous)</b>	<b>-9</b>	
<b>Never registered (spontaneous)</b>	<b>-7</b>	

**INTERVIEWER: PROVIDE FOUR DIGITS FOR YEAR.**

Notes

Indicator Updates

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## GENDER

The Enterprise Surveys provide indicators that describe several dimensions of gender composition in the workforce. It also collects information on the characteristics of the workforce employed in the non-agricultural private economy. The set of indicators presents the composition of the firm's workforce by type of contract and gender. Labor regulations have a direct effect on the type of employment favored by firms and they may have a different impact by gender. Other indicators present the composition of the workforce classified into temporary and permanent workers and reflect the participation of women in regular full time employment.

GENDER							
<b>[gend1] Percent of firms with female participation in ownership</b>							
<b>Description</b>							
Percentage of firms with females among the owners.							
<b>Survey Variable Used to Construct Indicator</b>							
This indicator is created from the variable B.4.							
<b>B.4</b>	Amongst the owners of the firm, are there any females?						
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Yes</td> <td style="text-align: center;">1</td> </tr> <tr> <td>No</td> <td style="text-align: center;">2</td> </tr> <tr> <td><b>Don't know (spontaneous)</b></td> <td style="text-align: center;"><b>-9</b></td> </tr> </tbody> </table>		Yes	1	No	2	<b>Don't know (spontaneous)</b>	<b>-9</b>
Yes	1						
No	2						
<b>Don't know (spontaneous)</b>	<b>-9</b>						
<table border="1" style="margin-left: auto;"> <tbody> <tr> <td style="color: red; font-weight: bold;">b4</td> </tr> </tbody> </table>		b4					
b4							
<b>Notes</b>							
<b>Indicator Updates</b>							
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>						

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GENDER

**[gend2] Proportion of permanent full-time workers that are female**

Description

Percentage of full-time workers that are female.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.5a, L.5b and L.5.

<b>L.1</b>	At the end of fiscal year <a href="#">[insert last complete fiscal year]</a> , how many permanent, full-time individuals worked in this establishment? Please include all employees and managers (Permanent, full-time employees 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 8 or more hours per day) <b>(INTERVIEWER: include interviewee if applicable).</b>
------------	---

	Number
Permanent, full-time workers end of last fiscal year	<b>11</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

<b>L.5</b>	At the end of fiscal year <a href="#">[insert last complete fiscal year]</a> , how many permanent full-time individuals working in this establishment in the following categories were female?
------------	--

	Number	Don't know (spontaneous)
Female permanent full-time production workers	<b>15a</b>	<b>-9</b>
Female permanent full-time non-production workers	<b>15b</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables 11,15a, 15b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables 11,15a, 15b

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GENDER

**[gend3] Proportion of permanent full-time non-production workers that are female \***

Description

Percentage of permanent full-time non-production workers that are female.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.3b and L.5b.

**L.3** At the end of the last complete fiscal year, how many permanent, full-time individuals in this establishment were  
**(INTERVIEWER: READ EACH CATEGORY)**

	Number	Don't know (spontaneous)
Non-production workers [e.g., managers, administration, sales]	<b>l3b</b>	<b>-9</b>

**L.5** At the end of fiscal year **[insert last complete fiscal year]**, how many permanent full-time individuals working in this establishment in the following categories were female?

	Number	Don't know (spontaneous)
Female permanent full-time non-production workers	<b>l5b</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables l1, l5b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables l1, l5b
February 3, 2014	Replace l1 with l3b

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GENDER								
<b>[gend4] Percent of firms with a female top manager</b>								
<b>Description</b>								
Percentage of firms with females as the top manager.								
<b>Survey Variable Used to Construct Indicator</b>								
This indicator is created from the variable B.7a.								
<b>B.7a</b>	Is the Top Manager female?							
<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Yes</td> <td>1</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td><b>DON'T KNOW (SPONTANEOUS)</b></td> <td><b>-9</b></td> </tr> </tbody> </table>	Yes	1	No	2	<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td style="color: red;"><b>b7a</b></td> </tr> </tbody> </table>	<b>b7a</b>
Yes	1							
No	2							
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>							
<b>b7a</b>								
<b>Notes</b>								
<b>Indicator Updates</b>								
June 17, 2009	Indicator created							

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GENDER

**[gend5] Proportion of permanent full-time production workers that are female \***

Description

Percentage of permanent full-time production workers that are female.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.3a and L.5a.

<b>L.3</b>	At the end of the last complete fiscal year, how many permanent, full-time individuals in this establishment were: <b>(INTERVIEWER: READ EACH CATEGORY)</b>
------------	--

	Number	Don't know (spontaneous)
Production workers	<b>l3a</b>	<b>-9</b>

<b>L.5</b>	At the end of fiscal year <b>[insert last complete fiscal year]</b> , how many permanent full-time individuals working in this establishment in the following categories were female?
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	Number	Don't know (spontaneous)
Female permanent full-time production workers	<b>l5a</b>	<b>-9</b>

Notes

Indicator Updates

February 3, 2014	Indicator created

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## GENDER

**[gend6] Percent of firms with majority female ownership**

## Description

Percentage of firms with majority female ownership

## Survey Variable Used to Construct Indicator

This indicator is created from the variable B.4 and B.4a. Exceptions are made for African surveys conducted between 2009 and 2011, where B.3a (or equivalently Afb.3a for certain surveys) was used instead. For B.3a (or Afb.3a) values of 3 (majority are women) and 4 (all women) are considered to be majority female-owned.

**B.4** Amongst the owners of the firm, are there any females?

Yes	1
No	2
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**b4**

**B.4a** What percentage of the firm is owned by females?

	Percentage
Percentage of female ownership	<b>b4a%</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

*[For 24 African countries surveyed between 2009 and 2011]*

**B.3a** Are the owners of the firm:

All men	1
Majority are men	2
Majority are women	3
All women	4
Equally divided between men and women	5
<b>Does not apply</b>	<b>-7</b>
<b>Don't know</b>	<b>-9</b>

**b3a**

## Notes

## Indicator Updates

August 20 2015      Indicator created

## FINANCE

The Enterprise Surveys provide indicators of how firms finance their operations and of the characteristics of their financial transactions. For example, Enterprise Surveys provide indicators that compare the relative use of various sources to finance investment. Excessive reliance on internal funds is a sign of potentially inefficient financial intermediation. Another set of indicators measures the use of financial markets by individual firms. It presents the percentage of working capital that is financed by external sources to the firm, and a measure of the burden imposed by loan requirements measured by collateral levels relative to the value of the loans. Additional indicators focus on the use of financial services by private firms both on the credit side, by measuring the percentage of firms with bank loans or lines of credit, and on the deposit mobilization side, by measuring the percentage of firms with checking or savings accounts.

**[fin23] Percent of firms that are fully credit constrained****Description**

Indicators fin23, fin24, and fin25 are based on Islam and Rodriguez Meza (2023, Islam, Asif Mohammed and Jorge Luis Rodriguez Meza. "How Prevalent Are Credit-Constrained Firms in the Formal Private Sector? Evidence Using Global Surveys". World Bank Policy Research Working Paper; no. WPS 10502). Firms are categorized into fully credit constrained, partially credit constrained, or credit unconstrained as illustrated in the appendix figure. Four sets of survey questions are used for the categorization: (i) whether the firm applied for a loan or line of credit (k16); (ii) if so, what was the outcome of this application (k17); (iii) if it did not apply, the reason for not applying (k20a1); and (iv) whether the firm has access to external finance (variables k3 and k5).

Firms are categorized as fully credit constrained if they do not have access to external finance, and any of the following two conditions are met: (1) the firm did not apply for a loan for any reason other than the lack of need for it; or (2) the firm applied for a loan but the application was rejected, even when it has access to equity financing.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variables: K.3a, K.5a, K.5i, K.16, K.17, K.20a1.

<b>K.3</b>	Over fiscal year <b>[Insert last complete fiscal year]</b> , please estimate the proportion of this establishment's working capital, that is the funds available for day-to-day operations, that were financed from each of the following sources? <b>SHOW CARD 17</b>
------------	---

	Percent	DON'T KNOW (SPONTANEOUS)
Internal funds or retained earnings	<b>k3a</b> %	-9
Borrowed from banks: private and state-owned	<b>k3bc</b> %	-9
Borrowed from non-bank financial institutions, which include microfinance institutions, credit cooperatives, credit unions, or finance companies	<b>k3e</b> %	-9
Purchases on credit from suppliers and advances from customers	<b>k3f</b> %	-9
Other, moneylenders, friends, relatives, etc.	<b>k3hd</b> %	-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
UNLESS RESPONDENT DOES NOT KNOW**

<b>K.5</b>	Over fiscal year <b>[Insert last complete fiscal year]</b> , please estimate the proportion or <b>[Insert LCU]</b> amount of this establishment's total purchases of fixed assets that were financed from the following sources: <b>SHOW CARD 18</b>
------------	---

	Percent	OR	Amount [Insert LCUs]	DON'T KNOW (SPONTANEOUS)
Internal funds or retained earnings	<b>k5a</b> %		<b>k5a1</b>	-9
Owners' contribution or issued new equity shares	<b>k5i</b> %		<b>k5i1</b>	-9
Borrowed from banks: private and state-owned	<b>k5bc</b> %		<b>k5bc1</b>	-9
Borrowed from non-bank financial institutions, which include microfinance institutions, credit cooperatives, credit unions, or finance companies	<b>k5e</b> %		<b>k5e1</b>	-9

Purchases on credit from suppliers and advances from customers	k5f %	k5f1	-9
Other, moneylenders, friends, relatives, bonds, etc.	k5hdj %	k5hdj1	-9
	100%	n5a+n5b	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100% OR THAT TOTAL SUM EQUALS TOTAL PURCHASES IN N5 UNLESS RESPONDENT DOES NOT KNOW**

<b>K.16</b>	Referring again to the last fiscal year [insert last complete fiscal year], did this establishment apply for any loans or lines of credit?
-------------	--

Yes	1	<i>GO TO QUESTION K.20</i>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	-9	<i>GO TO QUESTION K.21</i>
		<b>k16</b>

<b>K.17</b>	What was the <b>main</b> reason why this establishment did not apply for any line of credit or loan? <b>SHOW CARD 18</b>
-------------	---

No need for a loan – establishment had sufficient capital	1
Application procedures were complex	2
Interest rates were not favorable	3
Collateral requirements were too high	4
Size of loan and maturity were insufficient	5
Did not think it would be approved	6
Other	7
<b>Don't know (spontaneous)</b>	<b>-9</b>
	<b>k17</b>

<b>K.20</b>	Referring only to this most recent application for a line of credit or loan, what was the outcome of that application?
-------------	--

Application was approved in full	1
Application was approved in part	2
Application was rejected	3
Application was withdrawn	4
<b>APPLICATION STILL IN PROCESS</b>	<b>-6</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
	<b>k20a1</b>

Notes

Indicator Updates

June 26, 2023	First released
---------------	----------------

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**[fin24] Percent of firms that are partially credit constrained****Description**

Indicators fin23, fin24, and fin25 are based on Islam and Rodriguez Meza (2023, Islam, Asif Mohammed and Jorge Luis Rodriguez Meza. "How Prevalent Are Credit-Constrained Firms in the Formal Private Sector? Evidence Using Global Surveys". World Bank Policy Research Working Paper; no. WPS 10502). Firms are categorized into fully credit constrained, partially credit constrained, or credit unconstrained as illustrated in the appendix figure. Four sets of survey questions are used for the categorization: (i) whether the firm applied for a loan or line of credit (k16); (ii) if so, what was the outcome of this application (k17); (iii) if it did not apply, the reason for not applying (k20a1); and (iv) whether the firm has access to external finance (variables k3 and k5).

Firms are categorized as partially credit constrained if any of the following conditions are met: (1) the firm applied for a loan and the application was partially approved; (2) the firm applied for a loan and the application was rejected, but the firm has access to external sources of finance excluding any equity finance (k5i); or (3) the firm has external finance but did not apply for a loan due to any reason other than no need for it.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variables: K.3a, K.5a, K.4, K.5i, K.16, K.17, K.20a1

<b>K.3</b>	Over fiscal year <b>[Insert last complete fiscal year]</b> , please estimate the proportion of this establishment's working capital, that is the funds available for day-to-day operations, that were financed from each of the following sources? <b>SHOW CARD 17</b>
------------	---

	<b>Percent</b>	<b>DON'T KNOW (SPONTANEOUS)</b>
Internal funds or retained earnings	<b>k3a</b> %	-9
Borrowed from banks: private and state-owned	<b>k3bc</b> %	-9
Borrowed from non-bank financial institutions, which include microfinance institutions, credit cooperatives, credit unions, or finance companies	<b>k3e</b> %	-9
Purchases on credit from suppliers and advances from customers	<b>k3f</b> %	-9
Other, moneylenders, friends, relatives, etc.	<b>k3hd</b> %	-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
UNLESS RESPONDENT DOES NOT KNOW**

**K.5** Over fiscal year **[Insert last complete fiscal year]**, please estimate the proportion or **[Insert LCU]** amount of this establishment's total purchases of fixed assets that were financed from the following sources:  
**SHOW CARD 18**

	Percent	OR	Amount [Insert LCUs]	DON'T KNOW (SPONTANEOUS)
Internal funds or retained earnings	<b>k5a</b> %		<b>k5a1</b>	-9
Owners' contribution or issued new equity shares	<b>k5i</b> %		<b>k5i1</b>	-9
Borrowed from banks: private and state-owned	<b>k5bc</b> %		<b>k5bc1</b>	-9
Borrowed from non-bank financial institutions, which include microfinance institutions, credit cooperatives, credit unions, or finance companies	<b>k5e</b> %		<b>k5e1</b>	-9
Purchases on credit from suppliers and advances from customers	<b>k5f</b> %		<b>k5f1</b>	-9
Other, moneylenders, friends, relatives, bonds, etc.	<b>k5hdj</b> %		<b>k5hdj1</b>	-9
	<b>100%</b>		<b>n5a+n5b</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100% OR THAT TOTAL SUM EQUALS TOTAL PURCHASES IN N5 UNLESS RESPONDENT DOES NOT KNOW**

**K.4** In fiscal year **[insert last complete fiscal year]**, did this establishment purchase any new or used fixed assets, such as machinery, vehicles, equipment, land, or buildings?

Yes	1	
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	
		<b>k4</b>

**K.16** Referring again to the last fiscal year **[insert last complete fiscal year]**, did this establishment apply for any loans or lines of credit?

Yes	1	<b>GO TO QUESTION K.20</b>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<b>GO TO QUESTION K.21</b>
		<b>k16</b>

**K.17** What was the **main** reason why this establishment did not apply for any line of credit or loan?  
**SHOW CARD 18**

No need for a loan – establishment had sufficient capital	1
Application procedures were complex	2
Interest rates were not favorable	3
Collateral requirements were too high	4
Size of loan and maturity were insufficient	5
Did not think it would be approved	6
Other	7
<b>Don't know (spontaneous)</b>	<b>-9</b>
	<b>k17</b>

<b>K.20</b>	Referring only to this most recent application for a line of credit or loan, what was the outcome of that application?
-------------	--

Application was approved in full	1
Application was approved in part	2
Application was rejected	3
Application was withdrawn	4
<b>APPLICATION STILL IN PROCESS</b>	<b>-6</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**k20a1**

Notes

Indicator Updates

June 26, 2023	First released
---------------	----------------

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**[fin25] Percent of firms that are credit unconstrained****Description**

Indicators fin23, fin24, and fin25 are based on Islam and Rodriguez Meza (2023, Islam, Asif Mohammed and Jorge Luis Rodriguez Meza. "How Prevalent Are Credit-Constrained Firms in the Formal Private Sector? Evidence Using Global Surveys". World Bank Policy Research Working Paper; no. WPS 10502). Firms are categorized into fully credit constrained, partially credit constrained, or credit unconstrained as illustrated in the appendix figure. Four sets of survey questions are used for the categorization: (i) whether the firm applied for a loan or line of credit (k16); (ii) if so, what was the outcome of this application (k17); (iii) if it did not apply, the reason for not applying (k20a1); and (iv) whether the firm has access to external finance (variables k3 and k5).

Firms are categorized as credit unconstrained if any of the following conditions are met: (1) the firm applied for a loan and the application was approved in full; or (2) the firm did not apply for a loan because it did not need it.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variables: K.16, K.17 and K.20a1.

<b>K.16</b>	Referring again to the last fiscal year <b>[insert last complete fiscal year]</b> , did this establishment apply for any loans or lines of credit?
-------------	--

Yes	1	<i>GO TO QUESTION K.20</i>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<i>GO TO QUESTION K.21</i>
		<b>k16</b>

<b>K.17</b>	What was the <b>main</b> reason why this establishment did not apply for any line of credit or loan? <b>SHOW CARD 18</b>
-------------	---

No need for a loan – establishment had sufficient capital	1
Application procedures were complex	2
Interest rates were not favorable	3
Collateral requirements were too high	4
Size of loan and maturity were insufficient	5
Did not think it would be approved	6
Other	7
<b>Don't know (spontaneous)</b>	<b>-9</b>
	<b>k17</b>



<b>K.20</b>	Referring only to this most recent application for a line of credit or loan, what was the outcome of that application?
-------------	--

Application was approved in full	1
Application was approved in part	2
Application was rejected	3
Application was withdrawn	4
<b>APPLICATION STILL IN PROCESS</b>	<b>-6</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**k20a1**

Notes

Indicator Updates

June 26, 2023	First released
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FINANCE

**[fin14] Percent of firms with a bank loan/line of credit**

Description

Percentage of firms with bank loans or line of credit.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.8.

<b>K.8</b>	At this time, does this establishment have a line of credit or a loan from a financial institution?
------------	---

Yes	1	<i>GO TO QUESTION K.15d</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

*GO TO QUESTION K.15d*

**k8**

Notes

Indicator Updates

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**[fin1] Proportion of investments financed by internal funds (%)**

## Description

Estimated proportion of purchases of fixed assets that was financed from internal funds/retained earnings.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable K.5a.

<b>K.5</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , please estimate the proportion of this establishment's total purchase of fixed assets that was financed from each of the following sources: <b>SHOW CARD 17</b>
------------	---

	Percent	Don't know (spontaneous)
Internal funds or retained earnings	k5a%	-9
Owners' contribution or issued new equity shares		-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions		-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, bonds, etc		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
-------------	--

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FINANCE

**[fin2] Proportion of investments financed by banks (%)**

Description

Estimated proportion of purchases of fixed assets that was financed from bank loans.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.5bc.

<b>K.5</b>	Over fiscal year <a href="#">[insert last complete fiscal year]</a> , please estimate the proportion of this establishment's total purchase of fixed assets that was financed from each of the following sources: <a href="#">SHOW CARD 17</a>
------------	---

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Owners' contribution or issued new equity shares		-9
Borrowed from banks: private and state-owned	k5bc%	-9
Borrowed from non-bank financial institutions		-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, bonds, etc		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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FINANCE

**[fin3] Proportion of investments financed by supplier credit (%)**

Description

Estimated proportion of purchases of fixed assets that was financed by suppliers credit and advances from customers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.5f.

<b>K.5</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , please estimate the proportion of this establishment's total purchase of fixed assets that was financed from each of the following sources: <b>SHOW CARD 17</b>
------------	---

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Owners' contribution or issued new equity shares		-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions		-9
Purchases on credit from suppliers and advances from customers	<b>k5f%</b>	-9
Other, moneylenders, friends, relatives, bonds, etc		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
-------------	--

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FINANCE

**[fin4] Proportion of investments financed by equity or stock sales (%)**

Description

Estimated proportion of purchases of fixed assets that was financed by owners' contribution or issue of new equity shares.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.5i.

<b>K.5</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , please estimate the proportion of this establishment's total purchase of fixed assets that was financed from each of the following sources: <b>SHOW CARD 17</b>
------------	---

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Owners' contribution or issued new equity shares	k5i%	-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions		-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, bonds, etc		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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FINANCE

**[fin5] Proportion of investments financed by other financing sources (%)**

Description

Estimated proportion of purchases of fixed assets that was financed by other sources, i.e. loans from non-bank financial institutions; issued new debt; moneylenders, friends, relatives, etc.

Survey Variable Used to Construct Indicator

This indicator is created from the variables K.5e and K.5hdj.

<b>K.5</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , please estimate the proportion of this establishment's total purchase of fixed assets that was financed from each of the following sources: <b>SHOW CARD 17</b>
------------	---

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Owners' contribution or issued new equity shares		-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions	k5e%	-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, bonds, etc	k5hdj%	-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

February, 4 2011	Updated fin5 for ECA 2008/2009 countries using k5hdej.
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
Aug.28.2014	This indicator was out of date and had been removed from ES website

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FINANCE

**[fin6] Proportion of working capital financed by internal funds (%)**

Description

Proportion of the working capital that was financed by internal financing.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.3a.

<b>K.3</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , please estimate the proportion of this establishment's working capital that was financed from each of the following sources?  <b>INTERVIEWER: SHOW CARD 12</b>
------------	---

	Percent	Don't know (spontaneous)
Internal funds or retained earnings	<b>k3a</b> %	-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies		-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, etc.		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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FINANCE

**[fin7] Proportion of working capital financed by banks (%)**

Description

Proportion of the working capital that was financed by bank loans.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.3bc.

<b>K.3</b>	Over fiscal year <a href="#">[insert last complete fiscal year]</a> , please estimate the proportion of this establishment's working capital that was financed from each of the following sources?  <b>INTERVIEWER: SHOW CARD 12</b>
------------	--

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Borrowed from banks: private and state-owned	<b>k3bc</b> %	-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies		-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, etc.		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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FINANCE

**[fin8] Proportion of working capital financed by supplier credit (%)**

Description

Proportion of the working capital that was financed by supplier credit and advances from customers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.3f.

<b>K.3</b>	Over fiscal year <a href="#">[insert last complete fiscal year]</a> , please estimate the proportion of this establishment's working capital that was financed from each of the following sources?  <b>INTERVIEWER: SHOW CARD 12</b>
------------	--

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies		-9
Purchases on credit from suppliers and advances from customers	k3f %	-9
Other, moneylenders, friends, relatives, etc.		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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FINANCE

**[fin9] Proportion of working capital financed by other financing sources (%)**

Description

Estimated proportion of the working capital that was financed by other financing, i.e. non-bank financial institutions; moneylenders, friends, relatives, etc.

Survey Variable Used to Construct Indicator

This indicator is created from the variables K.3e and K.3hd.

**K.3** Over fiscal year **[insert last complete fiscal year]**, please estimate the proportion of this establishment's working capital that was financed from each of the following sources?

**INTERVIEWER: SHOW CARD 12**

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies	<b>k3e</b> %	-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, etc.	<b>k3hd</b> %	-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
Aug 28, 2014	This indicator was out of date and had been removed from ES website

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FINANCE

**[fin19] Proportion of working capital financed by external sources (%)**

Description

Proportion of the working capital that was financed by banks, suppliers, or other sources. This is the total of 3 indicators: fin7, fin8, and fin9.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.3bc, K.3e, K.3f, and K.3hd.

**K.3** Over fiscal year **[insert last complete fiscal year]**, please estimate the proportion of this establishment's working capital that was financed from each of the following sources?

**INTERVIEWER: SHOW CARD 12**

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Borrowed from banks: private and state-owned	<b>k3bc</b> %	-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies	<b>k3e</b> %	-9
Purchases on credit from suppliers and advances from customers	<b>k3f</b> %	-9
Other, moneylenders, friends, relatives, etc.	<b>k3hd</b> %	-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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**[fin12] Percent of firms using banks to finance investments**

## Description

Percentage of firms using banks to finance purchases of fixed assets.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable K.5bc

<b>K.5</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , please estimate the proportion of this establishment's total purchase of fixed assets that was financed from each of the following sources: <b>SHOW CARD 17</b>
------------	---

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Owners' contribution or issued new equity shares		-9
Borrowed from banks: private and state-owned	k5bc%	-9
Borrowed from non-bank financial institutions		-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, bonds, etc		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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**[fin13] Percent of firms using banks to finance working capital**

## Description

Percentage of firms using bank loans to finance working capital.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable K.3bc

<b>K.3</b>	Over fiscal year <a href="#">[insert last complete fiscal year]</a> , please estimate the proportion of this establishment's working capital that was financed from each of the following sources?  <b>INTERVIEWER: SHOW CARD 12</b>
------------	--

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Borrowed from banks( private and state-owned	<b>k3bc</b> %	-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies		-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, etc.		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
-------------	--

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Finance

**[fin22] Percent of firms using supplier/customer credit to finance working capital**

Description

Percentage of firms using credit from suppliers and advances from customers to finance working capital.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.3f

<b>K.3</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , please estimate the proportion of this establishment's working capital, which is the funds available for day-to-day operations, that was financed from each of the following sources? <b>SHOW CARD 18</b>
------------	--

	Percent	DON'T KNOW (SPONTANEOUS)
Internal funds or retained earnings		-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies		-9
Purchases on credit from suppliers and advances from customers	<b>k3f</b> %	-9
Other, moneylenders, friends, relatives, etc.		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

June 26, 2017	First released
---------------	----------------

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**[fin10] Value of collateral needed for a loan (% of the loan amount)**

## Description

Value of collateral needed for a loan or line of credit as a percentage of the loan value or the value of the line of credit.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable K.11 and K.15a.

**K.11** What was its value at the time of approval?

	LCUs
Size of most recent line of credit or loan approved	<b>k11</b>
<b>REFUSAL (SPONTANEOUS)</b>	-8
<b>DON'T KNOW (SPONTANEOUS)</b>	-9

**K.15a** What was the approximate value of the collateral required?

	LCUs
Value of collateral	<b>k15a</b>
<b>Don't know (spontaneous)</b>	-9

## Notes

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables k15
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables k15
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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FINANCE

**[fin11] Proportion of loans requiring collateral (%)**

Description

Loans requiring collateral in order to get the financing.

Survey Variable Used to Construct Indicator

This indicator is created from the variables K.8 and K.13.

<b>K.8</b>	At this time, does this establishment have a line of credit or a loan from a financial institution?
------------	---

Yes	1	<i>GO TO QUESTION K.15d</i> <i>GO TO QUESTION K.15d</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

**k8**

<b>K.13</b>	Referring only to this most recent loan or line of credit, did the financing require collateral?
-------------	--

Yes	1	<i>GO TO QUESTION K.15b</i> <i>GO TO QUESTION K.15b</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

**k13**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
-------------	--

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FINANCE

**[fin16] Percent of firms identifying access to finance as a major constraint**

Description

Percentage of firms identifying access/cost of finance as a "major" or "very severe" obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.30

**K.30** Using the response options on the card; To what degree is **Access to Finance** an obstacle to the current operations of this establishment? [SHOW CARD 19](#)

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Access to finance <b>k30</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011 [Changes to ECA 2002 & 2005 surveys](#)

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FINANCE

**[fin15] Percent of firms with a checking or savings account**

Description

Percentage of firms with a checking or savings account.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.6.

<b>K.6</b>	Now let's talk about the establishment's current situation. At this time, does this establishment have a checking or savings account?
------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**k6**

Notes

Indicator Updates

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FINANCE

**[fin17] Proportion of sales that are pre-paid (%)**

Description

Percentage of total annual sales of goods or services paid for before the delivery.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.2 (k2a). Only created for global surveys before 2010.

	Percent	Don't know (spontaneous)
Paid for before the delivery?	K2a %	-9

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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FINANCE

**[fin18] Proportion of sales sold on credit (%)**

Description

Percentage of total annual sales of goods or services sold on credit.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.2

<b>K.2</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of this establishment's total annual sales of its goods or services were paid for after delivery?
------------	--

	Percent	Don't know (spontaneous)
Paid for after delivery?	K2c %	-9

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
Aug 28, 2014	This indicator was out of date and has been removed from ES website.

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FINANCE

**[fin20] Percent of firms not needing a loan**

Description

Percent of firms that did not apply for a loan in the last fiscal year because they did not need a loan. The denominator is the number of firms who did and did not apply for a loan. The numerator is the number of firms who did not apply for a loan and also stated that they did not need a loan.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.16 and K.17

**K.16** Referring again to the last fiscal year **[insert last complete fiscal year]**, did this establishment apply for any loans or lines of credit?

Yes	1	<i>GO TO QUESTION K.20</i>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<i>GO TO QUESTION K.21</i>
		<b>k16</b>

**K.17** What was the **main** reason why this establishment did not apply for any line of credit or loan?  
**SHOW CARD 18**

No need for a loan – establishment had sufficient capital	1
Application procedures were complex	2
Interest rates were not favorable	3
Collateral requirements were too high	4
Size of loan and maturity were insufficient	5
Did not think it would be approved	6
Other	7
<b>Don't know (spontaneous)</b>	<b>-9</b>
	<b>k17</b>

Notes

Indicator Updates

May 1, 2012      Indicator Created

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**[fin21] Percent of firms whose recent loan application was rejected****Description**

Percent of firms whose recent loan application was rejected.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variable K.16 and K.20

<b>K.16</b>	Referring again to the last fiscal year <b>[insert last complete fiscal year]</b> , did this establishment apply for any loans or lines of credit?
-------------	--

Yes	1	<b>GO TO QUESTION K.20</b>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<b>GO TO QUESTION K.21</b>
		<b>k16</b>

<b>K.20</b>	Referring only to this most recent application for a line of credit or loan, what was the outcome of that application?
-------------	--

Application was approved in full	1	
Application was approved in part	2	
Application was rejected	3	
Application was withdrawn	4	
<b>APPLICATION STILL IN PROCESS</b>	<b>-6</b>	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	
		<b>k20a1</b>

**Notes****Indicator Updates**

April 17, 2012	Indicator Created
June 26, 2017	Variable k20 was revised and replaced with k20a1, which provided more specific options on the loan application.

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FINANCE

**[t2] Percent of firms with annual financial statement reviewed by external auditor**

Description

Percentage of firms with their annual financial statement reviewed by an external auditor.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.21.

<b>K.21</b>	In fiscal year <b>[insert last complete fiscal year]</b> , did this establishment have its annual financial statements checked and certified by an external auditor?
-------------	--

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**k21**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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## INFRASTRUCTURE

A strong infrastructure enhances the competitiveness of an economy and generates a business environment conducive to firm growth and development. Good infrastructure efficiently connects firms to their customers and suppliers, and enables the use of modern production technologies. Conversely, deficiencies in infrastructure create barriers to productive opportunities and increase costs for all firms, from micro enterprises to large multinational corporations.

The Enterprise Surveys capture the dual challenge of providing a strong infrastructure for electricity, water supply, telephone connections, etc., and the development of institutions that effectively provide and maintain public services. These indicators show the extent to which firms are faced with failures in the provision of electricity and the effect of these failures on sales. Inadequate electricity supply can increase costs, disrupt production, and reduce profitability. Additionally, these indicators measure the efficiency of the water supply for the manufacturing sector. Many manufacturing sectors depend on reliable and efficient sources of water for their operations. The indicators can also be used to evaluate the efficiency of infrastructure services by quantifying the delays in obtaining electricity, water, and telephone connections. Service delays impose additional costs on firms and may act as barriers to entry and investment.

INFRASTRUCTURE

**[in1] Delay in obtaining an electrical connection (upon application)**

Description

Average wait, in days, experienced to obtain electrical connection from the day this establishment applied for it to the day it received the service.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.4

<b>C.4</b>	In reference to that application for an electrical connection, approximately how many days did it take to obtain it from the day of the application to the day the service was received?
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	Days
Wait for electrical connection	<b>c4</b>
<b>Less than one day</b>	<b>1</b>
<b>Still in process</b>	<b>-6</b>
<b>Application denied</b>	<b>-5</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c4
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c4
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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INFRASTRUCTURE

**[in2] Number of electrical outages in a typical month**

Description

Average number of power outages in a typical month.

Survey Variable Used to Construct Indicator

This indicator is created from the variables C.6 and C.7. If the answer to C.6 is "No", then a zero is recorded for the number of power outages.

**C.6** Over fiscal year **[insert last complete fiscal year]**, did this establishment experience power outages?

Yes	1	<i>GO TO QUESTION C.10</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

**c6**

**C.7** In a typical month, over fiscal year **[insert last complete fiscal year]**, how many power outages did this establishment experience?

	Number	
Average number of power outages per month	<b>c7</b>	<i>IF 0, GO TO QUESTION C.10</i>
<b>Don't know (spontaneous)</b>	<b>-9</b>	

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c7
July 6, 2009	For Congo 2009 survey, replaced in2 as missing if the number of power outages reported is over 150, or the duration is over 24 hours.
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c7

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Infrastructure							
<b>[in16] Percent of firms experiencing electrical outages</b>							
<b>Description</b>							
Percentage of firms that experienced power outages over the last complete fiscal year.							
<b>Survey Variable Used to Construct Indicator</b>							
This indicator is created from the variable C.6							
<b>C.6</b>	Over fiscal year <a href="#">[insert last complete fiscal year]</a> , did this establishment experience power outages?						
	<table border="1"> <tbody> <tr> <td>Yes</td> <td>1</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td><b>DON'T KNOW (SPONTANEOUS)</b></td> <td><b>-9</b></td> </tr> </tbody> </table>	Yes	1	No	2	<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
Yes	1						
No	2						
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>						
	<b>c6</b>						
<b>Notes</b>							
.							
<b>Indicator Updates</b>							
June 26, 2017	First released						

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INFRASTRUCTURE

**[in3] Duration of a typical electrical outages (hours)**

Description

Average duration of power outages (hours).

Survey Variable Used to Construct Indicator

This indicator is created from the variables C.7 and C.8. If the respondent answered c7=0, then average duration of power outages is recorded as 0.

C.7	In a typical month, over fiscal year <a href="#">[insert last complete fiscal year]</a> , how many power outages did this establishment experience?
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	Number
Average number of power outages per month	<b>c7</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

**IF 0, GO TO QUESTION C.10**

C.8	How long did these power outages last on average?
-----	---

	Hours	Minutes
Average duration of power outages	<b>c8a</b>	<b>c8b</b>
<b>LESS THAN ONE MINUTE</b>		<b>1</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c8
November 10, 2009	Replace indicator value for in3 to be zero if the average number of power outages per month is zero.
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c8
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
June 26, 2017	Variable C8 was broken into hours and minutes with c8a and c8b.

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INFRASTRUCTURE

**[in3\_c] If there were outages, average duration of a typical electrical outages (hours)**

Description

Average duration of power outages (hours) conditional on having a power outage.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.8

<b>C.8</b>	How long did these power outages last on average?
------------	---

	Hours	Minutes
Average duration of power outages	<b>c8a</b>	<b>c8b</b>
<b>LESS THAN ONE MINUTE</b>		<b>1</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<b>-9</b>

Notes

Indicator Updates

November 10, 2009	Indicator Created
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c8
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
June 26, 2017	Variable C8 was broken into hours and minutes with c8a and c8b.

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INFRASTRUCTURE

**[in15] Average total time of power outages per month**

Description

Average total time of power outages per month and includes zero values.

Survey Variable Used to Construct Indicator

This indicator is created from the variables C.7 and C.8

C.7	In a typical month, over fiscal year <a href="#">[insert last complete fiscal year]</a> , how many power outages did this establishment experience?
-----	---

	Number
Average number of power outages per month	<b>c7</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

*IF 0, GO TO QUESTION C.10*

C.8	How long did these power outages last on average?
-----	---

	Hours
Average duration of power outages	<b>c8</b>
<b>Less than one hour</b>	<b>1</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c7
August 20, 2009	Replace indicator in15 as 720 if the answers are more than 720 hours.
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c7

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INFRASTRUCTURE

**[in4] Losses due to electrical outages (% of annual sales)**

Description

Losses due to electrical outages, as percentage of total annual sales.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.9. If the respondent answered C.9B, then the value was divided by sales (D.2).

<b>C.9</b>	Please estimate the losses that resulted from power outages either as a percentage of total annual sales or as total annual losses.
------------	---

	Percent
Loss as percentage of total annual sales due to power outages	<b>c9a</b> %
<b>None</b>	<b>0</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

**PROVIDE EITHER ONE OR THE OTHER, NOT BOTH**

	LCUs
Annual losses due to power outages	<b>c9b</b>
<b>None</b>	<b>0</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables d2, c9b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables d2, c9a, c9b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
April 18, 2012	Indicator is altered to include all firms not just those who experienced at least one power outage. See indicator <a href="#">[in4 c]</a> for losses among firms who experienced at least one power outage.

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INFRASTRUCTURE

**[in4\_c] If there were outages, average losses due to electrical outages (% of annual sales)**

Description

If there were outages, average losses due to electrical outages, as percentage of total annual sales.

Survey Variable Used to Construct Indicator

This indicator is calculated only for firms who responded yes to question C.6. This indicator is created from the variable C.9. If the respondent answered C.9B, then the value was divided by sales (D.2).

**C.6** Over fiscal year **[insert last complete fiscal year]**, did this establishment experience power outages?

Yes	1	
No	2	<i>GO TO QUESTION C.10</i>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	<i>GO TO QUESTION C.10</i>
		<b>c6</b>

**C.9** Please estimate the losses that resulted from power outages either as a percentage of total annual sales or as total annual losses.

	Percent
Loss as percentage of total annual sales due to power outages	c9a %
None	0
Don't know (spontaneous)	-9

**PROVIDE EITHER ONE OR THE OTHER, NOT BOTH**

	LCUs
Annual losses due to power outages	c9b
None	0
Don't know (spontaneous)	-9

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables d2, c9b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables d2, c9a, c9b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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INFRASTRUCTURE

**[in5] Delay in obtaining a water connections (days)**

Description

Average wait, in days, experienced to obtain a water connection from the day this establishment applied for it to the day it received the service.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.13.

<b>C.13</b>	In reference to that application for a water connection, approximately how many days did it take to obtain it from the day of the application to the day the service was received?
-------------	--

	Days
Wait for water connection	<b>c13</b>
<b>Less than one day</b>	<b>1</b>
<b>Still in process</b>	<b>-6</b>
<b>Application denied</b>	<b>-5</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c13
December 15, 2009	For Cameroon 2006 and Cape Verde 2006 surveys, c13 was replaced with missing if c13 is larger than 180.
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c13
May 29, 2014	This indicator was out of date and has been removed from ES website.

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INFRASTRUCTURE

**[in6] Number of water insufficiencies in a typical month\***

Description

Average number of water shortages in a typical month in the last fiscal year.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.15 and C.16. If the answer to C.15 is "No", then a zero is recorded for the number of water insufficiencies in a typical month.

<b>C.15</b>	Over fiscal year <a href="#">[insert last complete fiscal year]</a> , did this establishment experience insufficient water supply for production?
-------------	---

Yes	1
No	2
<a href="#">The establishment does not use water for production</a>	-7
<a href="#">DON'T KNOW (SPONTANEOUS)</a>	-9

**c15**

<b>C.16</b>	In a typical month, over fiscal year <a href="#">[insert last complete fiscal year]</a> , how many incidents of insufficient water supply did this establishment experience?
-------------	--

	Number
Average number of incidents of water insufficiency per month	<b>c16</b>
<a href="#">Don't know (spontaneous)</a>	-9

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c16
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c16
July 12, 2015	The indicator is updated to use c15 as a screener variable and the got corrected in following surveys: Afghanistan2014, Bangladesh2013, India2014, Nepal2013, Pakistan2013, China2012, and Malawi2014.

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Infrastructure									
<b>[in17] Percent of firms experiencing water insufficiencies *</b>									
<b>Description</b>									
Percentage of firms that experienced insufficient water supply for production over the last complete fiscal year.									
<b>Survey Variable Used to Construct Indicator</b>									
This indicator is created from the variable C.15									
<b>C.15</b>	Over fiscal year <b>[insert last complete fiscal year]</b> , did this establishment experience insufficient water supply for production?								
	<table border="1"> <tbody> <tr> <td>Yes</td> <td>1</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td>The establishment does not use water for production</td> <td>-7</td> </tr> <tr> <td><b>DON'T KNOW (SPONTANEOUS)</b></td> <td><b>-9</b></td> </tr> </tbody> </table>	Yes	1	No	2	The establishment does not use water for production	-7	<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
Yes	1								
No	2								
The establishment does not use water for production	-7								
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>								
	<b>c15</b>								
<b>Notes</b>									
<b>Indicator Updates</b>									
June 26, 2017	First released								

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INFRASTRUCTURE

**[in7] Duration of insufficient water supplies (hours)\***

Description

Average duration of the water shortage in hours.

Survey Variable Used to Construct Indicator

This indicator is created from the variables C.16 and C.17

<b>C.16</b>	In a typical month, over fiscal year <a href="#">[insert last complete fiscal year]</a> , how many incidents of insufficient water supply did this establishment experience?
-------------	--

	Number	
Average number of incidents of water insufficiency per month	<b>c16</b>	<i>IF 0, GO TO QUESTION C.18</i>
<a href="#">Don't know (spontaneous)</a>	<b>-9</b>	

<b>C.17</b>	How long did these incidents of insufficient water supply last on average?
-------------	--

	Hours
Average duration of insufficient water supply	<b>c17</b>
<a href="#">Less than one hour</a>	<b>1</b>
<a href="#">Don't know (spontaneous)</a>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c16
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c16
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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INFRASTRUCTURE

**[in7\_c] If there were shortages, average duration of the water shortage (hours)\***

Description

If there were shortages, average duration of the water shortage in hours. Zero hours are not included.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.17

<b>C.17</b>	How long did these incidents of insufficient water supply last on average?
-------------	--

	Hours
Average duration of insufficient water supply	<b>c17</b>
<b>Less than one hour</b>	<b>1</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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INFRASTRUCTURE

**[in8] Delay in obtaining a mainline telephone connection (days)**

Description

Average wait, in days, experienced to obtain a mainline telephone connection from the day this establishment applied for it to the day it received the service.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.20.

<b>C.20</b>	In reference to that application for a telephone connection, approximately how many days did it take to obtain it from the day of the application to the day the service was received?
-------------	--

	Days
Wait for telephone connection	<b>c20</b>
<b>Less than one day</b>	<b>1</b>
<b>Still in process</b>	<b>-6</b>
<b>Application denied</b>	<b>-5</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable c20
December 15, 2009	For Cameroon 2006 and Cape Verde 2006 surveys, c20 was replaced to missing if c20 is larger than 180..
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c20
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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INFRASTRUCTURE

**[in9] Percent of firms owning or sharing a generator**

Description

Percentage of firms owning or sharing a generator.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.10.

**C.10** Over the course of fiscal year [\[insert last complete fiscal year\]](#), did this establishment own or share a generator?

Yes	1	<i>GO TO QUESTION C.12</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

*GO TO QUESTION C.12*

**c10**

Notes

Indicator Updates

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INFRASTRUCTURE

**[in10] Proportion of electricity from a generator (%)**

Description

Percentage of electricity supplied from a generator or generators that the establishment owned or shared.

Survey Variable Used to Construct Indicator

This indicator is created from the variables C.10 and C.11.

**C.10** Over the course of fiscal year [\[insert last complete fiscal year\]](#), did this establishment own or share a generator?

Yes	1	<i>GO TO QUESTION C.12</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	

*GO TO QUESTION C.12*

<b>c10</b>
------------

**C.11** In fiscal year [\[insert last complete fiscal year\]](#), what percentage of this establishment's electricity came from a generator or generators that the establishment owned or shared?

	Percent
Percentage electricity from generators	<b>c11</b> %
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

June 26, 2014	Indicator was only being calculated for manufacturing firms. Now indicator is calculated for both Manufacturing and Service firms.
November 10,2009	Replace indicator in10 as zero if the establishment did not own or share a generator.
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c11

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INFRASTRUCTURE

**[in10\_c] If a generator is used, average proportion of electricity from generator (%)**

Description

If a generator is used, what percentage of electricity comes from a generator

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.11

<b>C.11</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , what percentage of this establishment's electricity came from a generator or generators that the establishment owned or shared?
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	Percent
Percentage electricity from generators	<b>c11</b> %
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

June 26, 2014	Indicator was only being calculated for manufacturing firms. Now indicator is calculated for both Manufacturing and Service firms.
November 10, 2009	Indicator Created
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable c11

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INFRASTRUCTURE

**[in11] Percent of firms identifying transportation as a major constraint**

Description

Percentage of firms identifying transportation as a major constraint. The computation of the indicator is based on the rating of the obstacle as a potential constraint to the current operations of the establishment.

Survey Variable Used to Construct Indicator

This indicator is created from the variables D.30.

<b>D.30</b>	Using the response options on the card; To what degree is <b>Transport</b> an obstacle to the current operations of this establishment? <a href="#">SHOW CARD 8</a>
	Using the response options on the card; To what degree is <b>Customs and Trade Regulation</b> an obstacle to the current operations of this establishment? <a href="#">SHOW CARD 8</a>

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Don't Know (spontaneous)	Does Not Apply (spontaneous)
Transport <b>d30a</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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INFRASTRUCTURE

**[in12] Percent of firms identifying electricity as a major constraint**

Description

Percentage of firms identifying electricity as a major constraint. The computation of the indicator is based on the rating of the obstacle as a potential constraint to the current operations of the establishment.

Survey Variable Used to Construct Indicator

This indicator is created from the variables C.30.

<b>C.30</b>	Using the response options on the card; To what degree is <b>Electricity</b> an obstacle to the current operations of this establishment? <a href="#">SHOW CARD 4</a>
	Using the response options on the card; To what degree is <b>Telecommunications</b> an obstacle to the current operations of this establishment? <a href="#">SHOW CARD 4</a>

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Don't Know (spontaneous)	Does Not Apply (spontaneous)
Electricity <b>c30a</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011 [Changes to ECA 2002 & 2005 surveys](#)

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INFRASTRUCTURE

**[in14] Proportion of products lost to breakage or spoilage during shipping to domestic markets (%)\***

Description

Percentage of products shipped to supply domestic markets lost due to breakage or spoilage.

Survey Variable Used to Construct Indicator

This indicator is created from the variables D.11.

<b>D.11</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , what percentage of value of products this establishment shipped to supply domestic markets was lost while in transit because of breakage or spoilage?
-------------	---

	Percent
Losses due to breakage or spoilage as percentage of the value of the products	<b>d11</b> %
<a href="#">No losses</a>	0
<a href="#">Don't know (spontaneous)</a>	-9
<a href="#">No internal shipments made</a>	-7

Notes

Indicator Updates

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## MANAGEMENT PRACTICES

The Enterprise Surveys provide indicators that describe several dimensions of management practices. These indicators measure the extent to which firms implement better practices such as taking long-term actions to fix and avoid problems in production or service-delivery; number, time-horizon, and other features of production or service-provision targets; use of bonuses or promotion to reward better performance, and demotion to limit under-performance. A subset of survey questions developed by Bloom and Van Reenen (2007, Bloom, Nicholas, and John Van Reenen. "Measuring and explaining management practices across firms and countries." The quarterly journal of Economics 122, no. 4 (2007): 1351-1408) were adapted and implemented as part of the Enterprise Surveys across countries. An important change in the survey methodology was avoiding double-barrelled questions by adding filters. Double-barrelled questions can lead to over reporting if the topic being measured is prone to desirability bias; better management practices are arguably more desirable for good managers. For example, the number of production or service-provision targets is asked in two parts in the Enterprise Surveys: the firms are first asked if they have such targets, and those that say Yes are then asked a follow-up question on the number of such targets. This is methodologically different from asking about this in one question, with "No target" being a response category among the range of targets. The Enterprise Surveys team is documenting the important repercussion this methodological change has on the estimates of management practices in an upcoming research paper.

For the Enterprise Surveys indicators on management practices, the response categories were mapped into the values of the indicator following the coding conventions given in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" American Economic Review 109, no. 5 (2019): 1648-1683. In this mapping, the responses that suggest the most structured management practice are normalized to 100, and the ones suggesting the least structured are normalized to zero. Bloom et al. (2019) define more structured management practices as those that are more specific, formal, frequent or explicit. It is thus expected that higher levels of these indicators mean better management practices. Note that the management practices indicators are calculated for firms with at least 20 employees, and uninformative responses (i.e., "don't know") are treated as missing.

Management Practices	
<b>[mgmt1] Management practices index</b>	
<b>Description</b>	
<p>Composite index that combines information from eight management practices indicators that are described below (please see mgmt2 through mgmt9 starting on the next page). It is calculated as follows:</p> $mgmt1_i = \frac{\sum_{j=2}^9 mgmtj_i}{8}$ <p>where <math>mgmtj_i = [0,100]</math> is management practice <math>j</math> (2 through 9) by business <math>i</math>, averaged over all 8 components. Observations for which all 8 components are available are used. Due to this structure, mgmt1 varies between 0 and 100. This composite index and all its 8 components are calculated only for establishments with 20 or more employees.</p>	
<b>Survey Variable Used to Construct Indicator</b>	
This composite indicator is created from the following variables: R.1, R.2, R.3, R.4, R.5, R.6, R.7, R.8, R.9, R.10, R.11.	
<b>Notes</b>	
<b>Indicator Updates</b>	
May 15, 2023	First released
June 26, 2023	Correction to handle r10 = -7 as described, instead of as missing

**Back to [List of Indicators](#)**

Management Practices

**[mgmt2] Score on action when a problem arose**

Description

What best describes what happens at your firm when a problem in the production process arises? Examples of problems include: finding a quality defect in a service, product, or a piece of equipment breaks down. To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r1==3 is coded as 100; r1==2 is coded as 66.67; r1==1 is coded as 33.33; r1==4 is coded as 0.

Survey Variable Used to Construct Indicator

This indicator is created from the variable R.1.

<b>R.1</b>	<p><b>ASK IF MANUFACTURING</b> Over fiscal year [Insert last complete fiscal year], what best describes what happened at this establishment when a problem in the production process arose?</p> <p><b>ASK IF SERVICES</b> Over fiscal year [Insert last complete fiscal year], What best describes what happened at this establishment when a problem in the provision of services arose?</p>
------------	---

**INTERVIEWER: SELECT "DOES NOT APPLY" (-7) IF THERE WERE NO PROBLEMS IN THE PRODUCTION PROCESS IN THE LAST COMPLETE FISCAL YEAR**

We fixed it but did not take further action	1
We fixed it and took action to make sure it did not happen again	2
We fixed it and took action to make sure that it did not happen again, and had a continuous improvement process to anticipate problems like these in advance	3
No action was taken	4
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

**r1**

Notes

Indicator Updates

May 15, 2023	First released
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Management Practices

**[mgmt3] Score on number of performance indicators monitored**

Description

Over the last complete fiscal year, how many key performance indicators are monitored in this firm? Examples of key performance indicators include: metrics on service quality, customer satisfaction, production, cost, waste, quality, inventory, and absenteeism. To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r3==3 is coded as 100; r3==2 is coded as 66.67; r3==1 is coded as 33.33; r2==2 is coded as 0. As mentioned in the introduction, this is an example of when a double-barrelled survey question from Bloom et al. (2019) was split in two, by adding a filer. Repercussions of this methodological change is being investigated by the Enterprise Surveys team in an upcoming working paper.

Survey Variable Used to Construct Indicator

This indicator is created from variables R.2 and R.3.

<b>R.2</b>	Over fiscal year [Insert last complete fiscal year], did this establishment monitor any performance indicators?
------------	---

Yes	1
No	2
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r2**

<b>R.3</b>	How many performance indicators were monitored?
------------	---

1-2 indicators	1
3-9 indicators	2
10 or more indicators	3
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r3**

Notes

Indicator Updates

May 15, 2023	First released
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Management Practices

**[mgmt4] Score on time focus of production/service provision targets**

Description

What best describes the time frame of operational targets at this firm? Examples of operational targets include: customer satisfaction, wait-times, production, quality, efficiency, on-time delivery. To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r5==3 is coded as 1; r5==2 is coded as 66.67; r5==1 is coded as 33.33; r4==2 is coded as 0. As mentioned in the introduction, this is another example of when a double-barrelled survey question from Bloom et al. (2019) was split in two, by adding a filer (R.4). Repercussions of this methodological change is being investigated by the Enterprise Surveys team in an upcoming working paper.

Survey Variable Used to Construct Indicator

This indicator is created from variables R.4 and R.5.

<b>R.4</b>	<b>ASK IF MANUFACTURING</b> Over fiscal year [Insert last complete fiscal year], did this establishment have production targets? Examples of production targets are volume, quality, efficiency, waste, or on-time delivery.
	<b>ASK IF SERVICES</b> Over fiscal year [Insert last complete fiscal year], did this establishment have service provision targets? Examples of production targets are sales, customer satisfaction, efficiency, waste, or on-time delivery.

Yes	1
No	2
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r4**

<b>R.5</b>	<b>ASK IF MANUFACTURING</b> What best describes the time frame of those production targets?
	<b>ASK IF SERVICES</b> What best describes the time frame of those service provision targets?

Main focus was on short term, less than one year	1
Main focus was on long term, one year or more	2
Combination of short-term and long-term targets	3
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r5**

Notes

Indicator Updates

May 15, 2023	First released
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Management Practices

**[mgmt5] Score on achievability of production/service provision targets**

Description

How easy or difficult is it in your firm for people to typically achieve their operational targets? To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r6==4 is coded as 1; r6==3 is coded as 0.75; r6==2 is coded as 0.5; r6==5 and r6==6 are coded as 0.25; r6==1 and r4==2 are coded as 0. Notice that 'Targets not achieved' (r6=6) and 'Only achieved with extraordinary effort' (r6=5) were coded together as 0.25; and 'Achieved without much effort' (r6==1) and 'No targets' (r4=2) were coded together as 0. As mentioned above, this is another example of when a double-barrelled survey question from Bloom et al. (2019) was split in two, by adding a filer (R.4). Repercussions of this methodological change is being investigated by the Enterprise Surveys team in an upcoming working paper.

Survey Variable Used to Construct Indicator

This indicator is created from variables R.4 and R.6.

<b>R.4</b>	<b>ASK IF MANUFACTURING</b> Over fiscal year [Insert last complete fiscal year], did this establishment have production targets? Examples of production targets are volume, quality, efficiency, waste, or on-time delivery.
	<b>ASK IF SERVICES</b> Over fiscal year [Insert last complete fiscal year], did this establishment have service provision targets? Examples of production targets are sales, customer satisfaction, efficiency, waste, or on-time delivery.

Yes	1
No	2
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r4**

<b>R.6</b>	<b>ASK IF MANUFACTURING</b> How easy or difficult was it for this establishment to achieve those production targets overall?
	<b>ASK IF SERVICES</b> How easy or difficult was it for this establishment to achieve those service provision targets overall?

Achieved without much effort	1
Achieved with some effort	2
Achieved with normal amount of effort	3
Achieved with more than normal effort	4
Only achieved with extraordinary effort	5
Targets not achieved	6
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r6**

Notes

Indicator Updates

May 15, 2023	First released
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Management Practices

**[mgmt6] Score on knowledge of production/service provision targets**

Description

Who was aware of the operational targets at this firm? To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r7==4 is coded as 1; r7==3 is coded as 0.67; r7==2 is coded as 0.33; r7==1 and r4==2 are coded as 0. Notice that 'Only senior managers' and 'No targets' (r4=2) were coded together as 0. As mentioned above, this is another example of when a double-barrelled survey question from Bloom et al. (2019) was split in two, by adding a filer (R.4). Repercussions of this methodological change is being investigated by the Enterprise Surveys team in an upcoming working paper.

Survey Variable Used to Construct Indicator

This indicator is created from variables R.4 and R.7.

<b>R.4</b>	<p><b>ASK IF MANUFACTURING</b> Over fiscal year [Insert last complete fiscal year], did this establishment have production targets? Examples of production targets are volume, quality, efficiency, waste, or on-time delivery.</p> <p><b>ASK IF SERVICES</b> Over fiscal year [Insert last complete fiscal year], did this establishment have service provision targets? Examples of production targets are sales, customer satisfaction, efficiency, waste, or on-time delivery.</p>
------------	--

Yes	1
No	2
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r4**

<b>R.7</b>	<p><b>ASK IF MANUFACTURING</b> Who was aware of the production targets at this establishment?</p> <p><b>ASK IF SERVICES</b> Who was aware of the service provision targets at this establishment?</p>
------------	---

Only senior managers	1
Most managers and some production workers	2
Most managers and most production workers	3
All managers and most production workers	4
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r7**

Notes

Indicator Updates

May 15, 2023	First released
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Management Practices

**[mgmt7] Score on basis of managers' performance bonuses**

Description

Over the last completed fiscal year, what were managers' performance bonuses usually based on in this firm? To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r9==1 is coded as 1; r9==2 is coded as 0.75; r9==3 is coded as 0.5; r9==4 is coded as 0.25; r8==2 is coded as 0. As mentioned in the introduction, this is another example of when a double-barrelled survey question from Bloom et al. (2019) was split in two, by adding a filer (R.8). Repercussions of this methodological change is being investigated by the Enterprise Surveys team in an upcoming working paper.

Survey Variable Used to Construct Indicator

This indicator is created from variables R.8 and R.9.

<b>R.8</b>	Over fiscal year [Insert last complete fiscal year], did this establishment have performance bonuses for managers?
------------	--

Yes	1
No	2
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r8**

<b>R.9</b>	What were those managers' performance bonuses mostly based on?
------------	--

Their own performance	1
Their team's performance	2
The establishment's performance	3
The firm's performance	4
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**r9**

Notes

Indicator Updates

May 15, 2023	First released
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Management Practices

**[mgmt8] Score on extent to which non-managers are promoted based on performance**

Description

What is the primary way non-managers are promoted in this firm? To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r10==1 is coded as 1; r10==2 is coded as 0.67; r10==3 is coded as 0.33; r10==4 and r10=-7 are coded as 0.

Survey Variable Used to Construct Indicator

This indicator is created from the variable R.10.

<b>R.10</b>	Over fiscal year [Insert last complete fiscal year], what was the primary way non-managers were promoted at this establishment?
-------------	---

**INTERVIEWER: SELECT "DOES NOT APPLY" (-7) IF THERE WERE NO PROMOTIONS OF NON-MANAGERS IN THE LAST COMPLETE FISCAL YEAR**

Based solely on performance and ability	1
Based partly on performance and ability, and partly on other factors (for example, tenure or family connections)	2
Based mainly on factors other than performance and ability (for example, tenure or family connections)	3
Non-managers are not normally promoted	4
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

**r10**

Notes

Indicator Updates

May 15, 2023	First released
June 26, 2023	Correction to handle r10 = -7 as described, instead of as missing

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Management Practices

**[mgmt9] Score on extent to which under-performing non-managers are reassigned or dismissed**

Description

Over the last fiscal year, within what timeframe was an under-performing non-manager reassigned or dismissed? To map between response categories and values of the indicator, the coding conventions are used as in the Table A2 in Bloom, Nicholas, Erik Brynjolfsson, Lucia Foster, Ron Jarmin, Megha Patnaik, Itay Saporta-Eksten, and John Van Reenen. "What drives differences in management practices?" *American Economic Review* 109, no. 5 (2019): 1648-1683. In particular, the coding conventions are as follows: r11==1 is coded as 1; r11==2 is coded as 0.5; r11==3 is coded as 0.

Survey Variable Used to Construct Indicator

This indicator is created from the variable R.11.

<b>R.11</b>	Over fiscal year [Insert last complete fiscal year], when was an under-performing non-manager reassigned or dismissed?
-------------	--

Within 6 months of identifying under-performance	1
After 6 months of identifying under-performance	2
Rarely or never	3
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

**r11**

Notes

Indicator Updates

May 15, 2023	First released

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## INNOVATION AND TECHNOLOGY

The Enterprise Surveys provide indicators that describe several dimensions of technology use and innovation. These indicators measure the extent to which firms invest in obtaining recognized certificates of production and accounting practices. Obtaining international quality certifications may support creating more efficient or effective operations and improve employee's motivation, awareness, and morale. They also provide a sign of high quality that may help reduce waste and increase productivity. Additionally, these indicators demonstrate the use of information and communications technologies (ICT) in business transactions. ICT, such as the Internet, are important tools for all firms because they provide even the smallest of enterprises with the ability to reach national and international markets at lower cost.



**[t1] Percent of firms with internationally-recognized quality certification**

Description

Percentage of firms that have an internationally-recognized quality certification, i.e. ISO 9000, 9002 or 14000.

Survey Variable Used to Construct Indicator

This indicator is created from the variable B.8

<b>B.8</b>	Does this establishment have an internationally-recognized quality certification? <b>(INTERVIEWER: if there is need for clarification, some examples are: ISO 9000 or 14000, or HAPC)</b>
------------	--

Yes	1
No	2
Still in process	-6
Don't know (spontaneous)	-9

**b8**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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INNOVATION AND TECHNOLOGY

**[t4] Percent of firms using technology licensed from foreign companies\***

Description

Percentage of firms using technology licensed from foreign companies.

Survey Variable Used to Construct Indicator

This indicator is created from the variable E.6.

<b>E.6</b>	Does this establishment at present use technology licensed from a foreign-owned company, excluding office software?
------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**e6**

Notes

Indicator Updates

Apr.29.2014	Manufacturing only
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**[t5] Percent of firms having its own website**

**Description**

Percentage of firms using website for business related activities, i.e. sales, product promotion etc.

**Survey Variable Used to Construct Indicator**

This indicator is created from the variable C.22b

<b>C.22b</b>	At the present time, does this establishment use its own website?
--------------	---

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**c22b**

**Notes**

**Indicator Updates**

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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**[t6] Percent of firms using E-mail to communicate with clients/suppliers**

Description

Percentage of firms using email to interact with clients or suppliers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable C.22a.

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

Yes	1
No	2
<b>Don't know (spontaneous)</b>	<b>-9</b>

**c22a**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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Innovation and Technology							
<b>[t7] Percent of firms that introduced a new product/service</b>							
<b>Description</b>							
Percentage of firms that introduced new or significantly improved products or services over the last three years.							
<b>Survey Variable Used to Construct Indicator</b>							
This indicator is created from the variable H.1							
<b>H.1</b>	During the last three years, has this establishment introduced new or significantly improved products or services?						
<table border="1"> <tbody> <tr> <td>Yes</td> <td>1</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td><b>DON'T KNOW (SPONTANEOUS)</b></td> <td><b>-9</b></td> </tr> </tbody> </table>		Yes	1	No	2	<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
Yes	1						
No	2						
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>						
<table border="1"> <tbody> <tr> <td><b>h1</b></td> </tr> </tbody> </table>		<b>h1</b>					
<b>h1</b>							
<b>Notes</b>							
<b>Indicator Updates</b>							
June 26, 2017	First released						

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Innovation and Technology

**[t8] Percent of firms whose new product/service is also new to the main market**

Description

Percentage of firms that introduced new or significantly improved products or services over the last three years that were also new for the firms' main market.

Survey Variable Used to Construct Indicator

This indicator is created from the variables H.1 and H.2

**H.1** During the last three years, has this establishment introduced new or significantly improved products or services?

Yes	1	<i>GO TO QUESTION H.5</i> <i>GO TO QUESTION H.5</i>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	

**h1**

**H.2** Were any of the new or significantly improved products or services also new for the establishment's main market?

Yes	1	<b>h2</b>
No	2	
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	

Notes

Indicator Updates

June 26, 2017 First released

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Innovation and Technology								
<b>[t9] Percent of firms that introduced a process innovation</b>								
<b>Description</b>								
Percentage of firms that introduced any new or significantly improved process.								
<b>Survey Variable Used to Construct Indicator</b>								
This indicator is created from the variable H.5								
<b>H.5</b>	<p>During the last three years, has this establishment introduced any new or significantly improved process? These include:</p> <p style="padding-left: 40px;">methods of manufacturing products or offering services; logistics, delivery, or distribution methods for inputs, products, or services; or supporting activities for processes?</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Yes</td> <td style="text-align: center;">1</td> </tr> <tr> <td>No</td> <td style="text-align: center;">2</td> </tr> <tr> <td><b>DON'T KNOW (SPONTANEOUS)</b></td> <td style="text-align: center;"><b>-9</b></td> </tr> </tbody> </table> <div style="text-align: right; margin-top: 5px;"> <table border="1"> <tr> <td style="color: red; font-weight: bold;">h5</td> </tr> </table> </div>	Yes	1	No	2	<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>	h5
Yes	1							
No	2							
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>							
h5								
<b>Notes</b>								
<b>Indicator Updates</b>								
June 26, 2017	First released							

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Innovation and Technology							
<b>[t10] Percent of firms that spend on R&amp;D</b>							
<b>Description</b>							
Percentage of firms that spent on formal research and development activities during the last fiscal year.							
<b>Survey Variable Used to Construct Indicator</b>							
This indicator is created from the variable H.8							
<b>H.8</b>	During last fiscal year, did this establishment spend on formal research and development activities, either in-house or contracted with other companies, excluding market research surveys?						
<table border="1"> <tr> <td>Yes</td> <td>1</td> </tr> <tr> <td>No</td> <td>2</td> </tr> <tr> <td><b>DON'T KNOW (SPONTANEOUS)</b></td> <td><b>-9</b></td> </tr> </table>		Yes	1	No	2	<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
Yes	1						
No	2						
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>						
<table border="1"> <tr> <td><b>h8</b></td> </tr> </table>		<b>h8</b>					
<b>h8</b>							
<b>Notes</b>							
<b>Indicator Updates</b>							
June 26, 2017	First released						
January 30, 2023	The indicator is restricted to establishments with 20 or more employees						

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## TRADE

Open markets allow firms to expand, raise standards for efficiency on exporters, and enable firms to import low cost supplies. However, trading also forces firms to deal with customs services and trade regulations, obtain export and import licenses, and in some cases, firms also face additional costs due to losses during transport. The Enterprise Surveys collect information on the operational constraints faced by exporters and importers and quantifies the trade activity of firms. Indicators provide a measure of the intensity of foreign trade in the private sector.

## TRADE

**[tr1] Days to clear direct exports through customs\***

## Description

Average number of days to clear direct exports through customs.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.4

<b>D.4</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , 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?
------------	--

	Days
Average number of days to clear customs	<b>d4</b>
<a href="#">Less than one day</a>	<b>1</b>
<a href="#">Don't know (spontaneous)</a>	<b>-9</b>

## Notes

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable d4
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable d4
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
August 21, 2023	Corrected code to exclude services as originally intended

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## TRADE

**[tr2] Days to clear imports from customs\***

## Description

Average number of days to clear imports from customs.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.14.

<b>D.14</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , when this establishment imported material inputs or supplies, how many days did it take on average from the time these goods arrived to their point of entry (e.g. port, airport) until the time these goods could be claimed from customs?
-------------	---

	Days
Average number of days to clear customs	<b>d14</b>
<a href="#">Less than one day</a>	<b>1</b>
<a href="#">Don't know (spontaneous)</a>	<b>-9</b>

## Notes

## Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable d14
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable d14
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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## TRADE

**[tr4] Proportion of total sales that are domestic sales (%)**

## Description

Domestic sales as percentage of total sales.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.3a.

<b>D.3</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of this establishment's sales were: <b>(INTERVIEWER: these must be asked in the order they appear on the table)</b> <b>SHOW CARD 6</b>
------------	---

	Percent	Don't know (spontaneous)	
National sales	<b>d3a</b> %	-9	<b>IF 100, GO TO QUESTION D.10</b>
Indirect exports (sold domestically to third party that exports products)		-9	<b>IF 100, GO TO QUESTION D.8</b>
Direct exports		-9	<b>IF 0, GO TO QUESTION D.8</b>
	<b>100%</b>		

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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TRADE

**[tr5] Proportion of total sales that are exported directly (%)**

Description

Sales exported directly as percentage of total sales.

Survey Variable Used to Construct Indicator

This indicator is created from the variable D.3c.

**D.3** In fiscal year **[insert last complete fiscal year]**, what percentage of this establishment's sales were:  
**(INTERVIEWER: these must be asked in the order they appear on the table)**  
**SHOW CARD 6**

	Percent	Don't know (spontaneous)	
National sales		-9	<i>IF 100, GO TO QUESTION D.10</i>
Indirect exports (sold domestically to third party that exports products)		-9	<i>IF 100, GO TO QUESTION D.8</i>
Direct exports	d3c%	-9	<i>IF 0, GO TO QUESTION D.8</i>
	100%		

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
 (UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011 [Changes to ECA 2002 & 2005 surveys](#)

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**[tr6] Proportion of total sales that are exported indirectly (%)**

## Description

Sales exported indirectly as percentage of total sales.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.3b.

<b>D.3</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of this establishment's sales were: <b>(INTERVIEWER: these must be asked in the order they appear on the table)</b> <b>SHOW CARD 6</b>
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	Percent	Don't know (spontaneous)	
National sales		-9	<i>IF 100, GO TO QUESTION D.10</i>
Indirect exports (sold domestically to third party that exports products)	<b>d3b%</b>	-9	<i>IF 100, GO TO QUESTION D.8</i>
Direct exports		-9	<i>IF 0, GO TO QUESTION D.8</i>
	<b>100%</b>		

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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**[tr15] Percent of firms exporting directly (at least 1% of sales)**

## Description

Percentage of Firms that Export Directly.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.3c.

<b>D.3</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of this establishment's sales were: <b>(INTERVIEWER: these must be asked in the order they appear on the table)</b> <b>SHOW CARD 6</b>
------------	---

	Percent	Don't know (spontaneous)	
National sales		-9	<i>IF 100, GO TO QUESTION D.10</i>
Indirect exports (sold domestically to third party that exports products)		-9	<i>IF 100, GO TO QUESTION D.8</i>
Direct exports	<b>d3c %</b>	-9	<i>IF 0, GO TO QUESTION D.8</i>
	<b>100%</b>		

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

July 29, 2009	Indicator Created.
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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Trade

**[tr16] Percent of firms exporting directly (at least 10% of sales)**

Description

Percentage of firms that export directly at least 10% of their total annual sales.

Survey Variable Used to Construct Indicator

This indicator is created from the variable D.3c.

<b>D.3</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of this establishment's sales were: <b>(INTERVIEWER: these must be asked in the order they appear on the table)</b> <b>SHOW CARD 6</b>
------------	---

	Percent	Don't know (spontaneous)
National sales		-9
Indirect exports (sold domestically to third party that exports products)		-9
Direct exports	<b>d3c %</b>	-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

June 26, 2017	First released
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**[tr10] Percent of firms exporting directly or indirectly (at least 1% of sales)**

## Description

Percentage of firms that export directly or indirectly.

## Survey Variable Used to Construct Indicator

This indicator is created from the variables D.3b and D.3c.

<b>D.3</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of this establishment's sales were: <b>(INTERVIEWER: these must be asked in the order they appear on the table)</b> <b>SHOW CARD 6</b>
------------	---

	Percent	Don't know (spontaneous)	
National sales		-9	<i>IF 100, GO TO QUESTION D.10</i>
Indirect exports (sold domestically to third party that exports products)	<b>d3b</b> %	-9	<i>IF 100, GO TO QUESTION D.8</i>
Direct exports	<b>d3c</b> %	-9	<i>IF 0, GO TO QUESTION D.8</i>
	<b>100%</b>		

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%**

**(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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Trade

**[tr17] Percent of firms exporting directly or indirectly (at least 10% of sales)**

Description

Percentage of firms that export directly or indirectly at least 10% of their total annual sales.

Survey Variable Used to Construct Indicator

This indicator is created from the variables D.3b and D.3c.

**D.3** In fiscal year **[insert last complete fiscal year]**, what percentage of this establishment's sales were:  
**(INTERVIEWER: these must be asked in the order they appear on the table)**  
**SHOW CARD 6**

	Percent	Don't know (spontaneous)
National sales		-9
Indirect exports (sold domestically to third party that exports products)	<b>d3b</b> %	-9
Direct exports	<b>d3c</b> %	-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

June 26, 2017	First released
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## TRADE

**[tr7] Proportion of total inputs that are of domestic origin (%)\***

## Description

Percentage of material inputs and/or supplies of domestic origin.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.12a.

<b>D.12</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , as a proportion of all material inputs or supplies purchased that year, what percentage of this establishment's material inputs or supplies were: <b>SHOW CARD 7</b>
-------------	--

	Percent	Don't know (spontaneous)
Material inputs or supplies of domestic origin	<b>d12a</b> %	-9
Material inputs or supplies of foreign origin		-9
	<b>100%</b>	

**IF 0, GO TO QUESTION D.16**

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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TRADE

**[tr8] Proportion of total inputs that are of foreign origin (%)\***

Description

Percentage of material inputs and/or supplies of foreign origin.

Survey Variable Used to Construct Indicator

This indicator is created from the variable D.12b.

<b>D.12</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , as a proportion of all material inputs or supplies purchased that year, what percentage of this establishment's material inputs or supplies were: <b>SHOW CARD 7</b>
-------------	--

	Percent	Don't know (spontaneous)
Material inputs or supplies of domestic origin		-9
Material inputs or supplies of foreign origin	<b>d12b</b> %	-9
	<b>100%</b>	

**IF 0, GO TO QUESTION D.16**

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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TRADE

**[tr11] Percent of firms using material inputs and/or supplies of foreign origin\***

Description

Percentage of firms that use material inputs and/or supplies of foreign origin.

Survey Variable Used to Construct Indicator

This indicator is created from the variable D.12b.

<b>D.12</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , as a proportion of all material inputs or supplies purchased that year, what percentage of this establishment's material inputs or supplies were: <a href="#">SHOW CARD 7</a>
-------------	---

	Percent	Don't know (spontaneous)
Material inputs or supplies of domestic origin		-9
Material inputs or supplies of foreign origin	<b>d12b</b> %	-9
	<b>100%</b>	

*IF 0, GO TO QUESTION D.16*

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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TRADE

**[tr9] Percent of firms identifying customs and trade regulations as a major constraint**

Description

Percentage of firms identifying customs and trade regulations as a "major" or "very severe" obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variable D.30b.

<b>D.30</b>	Using the response options on the card; To what degree is <b>Transport</b> an obstacle to the current operations of this establishment? <a href="#">SHOW CARD 8</a>
	Using the response options on the card; To what degree is <b>Customs and Trade Regulation</b> an obstacle to the current operations of this establishment? <a href="#">SHOW CARD 8</a>

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Don't Know (spontaneous)	Does Not Apply (spontaneous)
Transport	0	1	2	3	4	-9	-7
Customs and trade regulations <b>d30b</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011 [Changes to ECA 2002 & 2005 surveys](#)

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**[tr14] Days of inventory of main input\***

## Description

Days of inventory of the most important input.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.16.

<b>D.16</b>	At the present time, when this establishment receives delivery of its most important input, on average, how many days of inventory, measured in days of production, does this establishment keep? <b>(INTERVIEWER: if respondent requires clarification, define days of inventory as stock on hand)</b>
-------------	--

	Days
Days of inventory of most important input	<b>d16</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

## Notes

## Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
June 26, 2017	Variable d16 is no longer included in the global questionnaire and has been removed from the website.

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**[tr12] Products exported directly lost due to theft (%)**

## Description

Loses of the products shipped to international markets while in transit because of theft (computed as percentage of the consignment values).

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.6.

**D.6** In fiscal year **[insert last complete fiscal year]**, what percentage of the value of the products exported directly was lost while in transit because of theft?

	Percent
Losses due to theft as percentage of the value of the products	<b>d6</b> %
<b>No losses</b>	<b>0</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

## Notes

## Indicator Updates

May 29, 2014	This indicator was out of date and had been removed from ES website
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**[tr13] Products exported directly lost due to breakage or spoilage (%)**

## Description

Losses of the products shipped to international markets while in transit due to breakage or spoilage, computed as percentage of the consignment values.

## Survey Variable Used to Construct Indicator

This indicator is created from the variable D.7.

<b>D.7</b>	In fiscal year <b>[insert last complete fiscal year]</b> , what percentage of the value of the products exported directly was lost while in transit because of breakage or spoilage?
------------	--

	Percent
Losses due to breakage or spoilage as percentage of the value of the products	d7 %
<b>No losses</b>	0
<b>Don't know (spontaneous)</b>	-9

## Notes

## Indicator Updates

May 29, 2014	This indicator was out of date and had been removed from ES website
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## WORKFORCE

The Enterprise Surveys provide indicators that describe information on the characteristics of the workforce employed in the non-agricultural private economy. The set of indicators presents the composition of the firm's workforce by type of contract and gender, the composition of the workforce classified into temporary and permanent workers, and reflects the participation of women in regular full-time employment. Labor regulations have a direct effect on the type of employment favored by firms and they may have a different impact by gender.

WORKFORCE

**[wk1] Percent of firms offering formal training**

Description

Percentage of firms offering formal training programs for its permanent, full-time employees.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.10.

<b>L.10</b>	Over fiscal year <a href="#">[insert last complete fiscal year]</a> , did this establishment have formal training programs for its permanent full-time employees?
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Yes	1	<i>GO TO QUESTION I30a</i>
No	2	
<b>Don't know (spontaneous)</b>	<b>-9</b>	
		<b>110</b>

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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WORKFORCE

**[wk2] Proportion of workers offered formal training (%)\***

Description

Percentage of permanent, full-time employees that have received formal training.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.3a, L.3b, L.11a, L.11b.

**L.1** At the end of fiscal year **[insert last complete fiscal year]**, how many permanent, full-time individuals worked in the establishment? Please include all employees and managers (Permanent, full-time employees 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 8 or more hours per day)  
**(INTERVIEWER: include interviewee if applicable).**

	Number
Permanent, full-time workers end of last fiscal year	<b>11</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

**L.3** At the end of fiscal year **[insert last complete fiscal year]**, how many permanent, full-time individuals in this establishment were: **INTERVIEWER: READ EACH CATEGORY**

	Number	Don't know (spontaneous)
Production workers	<b>13a</b>	<b>-9</b>
Non-production workers [e.g., managers, administration, sales]	<b>13b</b>	<b>-9</b>

**L.11** Referring to the training programs run over fiscal year **[insert last complete fiscal year]**, what percentage of permanent, full-time employees of the following categories received formal training? If easier please provide the total numbers (provide one or the other but not both)

	Percent	OR	NUMBER	IF NO EMPLOYEES IN A CATEGORY WERE TRAINED	DON'T KNOW (SPONTANEOUS)
Production full-time permanent employees trained	<b>111a</b> %		<b>111a1</b>	<b>0</b>	<b>-9</b>
Non-production full-time permanent employees trained	<b>111b</b> %		<b>111b1</b>	<b>0</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables 11, 13a, 13b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables 11, 13a, 13b

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WORKFORCE

**[wk8] Years of the top manager's experience working in the firm's sector**

Description

Years of experience of the top manager working in the sector.

Survey Variable Used to Construct Indicator

This indicator is created from the variable B.7.

<b>B.7</b>	How many years of experience working in this sector does the Top Manager have?
------------	--

	Years
Manager's experience in sector	<b>b7</b>
<b>Less than one year</b>	<b>1</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

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WORKFORCE

**[wk14] Number of workers**

Description

Number of workers, including permanent and temporary workers. The number of temporary workers is adjusted for the number of months of their employment.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.6, and L.8.

<b>L.1</b>	At the end of fiscal year <b>[insert last complete fiscal year]</b> , how many permanent, full-time individuals worked in this establishment? Please include all employees and managers (Permanent, full-time employees are defined as all employees that are employed for a term of one or more fiscal years and/or have a guaranteed renewal of their employment and that work a full shift) <b>(INTERVIEWER: INCLUDE INTERVIEWEE IF APPLICABLE)</b> .
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	Number
Permanent, full-time workers end of last fiscal year	<b>11</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

<b>L.6</b>	How many full-time seasonal or temporary employees did this establishment employ during <b>[insert last complete fiscal year]</b> ? (Full-time, temporary workers are all short-term (i.e. for less than a year) employees with no guarantee of renewal of employment and work full-time)
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	Number
Full-time seasonal or temporary workers employed last fiscal year	<b>16</b>
<b>NO FULL-TIME SEASONAL OR TEMPORARY WORKERS</b>	<b>0</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**GO TO QUESTION L.9b**

**GO TO QUESTION L.9b**

<b>L.8</b>	What was the average length of employment of all full-time temporary employees in fiscal year <b>[insert last complete fiscal year]</b> ?
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	Months
Average length full-time seasonal or temporary employment last fiscal year, in months	<b>18</b>
<b>LESS THAN ONE MONTH</b>	<b>1</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

Notes

Indicator Updates

August 7, 2017	First released
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WORKFORCE

**[wk12] Number of permanent full time workers**

Description

Average number of permanent, full time workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.1.

<b>L.1</b>	At the end of fiscal year <b>[insert last complete fiscal year]</b> , how many permanent, full-time individuals worked in this establishment? Please include all employees and managers (Permanent, full-time employees 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 8 or more hours per day) <b>(INTERVIEWER: include interviewee if applicable).</b>
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	Number
Permanent, full-time workers end of last fiscal year	<b>11</b>
<b>Don't know (spontaneous)</b>	<b>-9</b>

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable l1
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable l1
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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WORKFORCE

**[wk11] Number of temporary workers**

Description

Average number of temporary workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.6.

<b>L.6</b>	How many full-time seasonal or temporary employees did this establishment employ during <a href="#">[insert last complete fiscal year]</a> ? (Full-time, temporary workers are all short-term (i.e. for less than a year) employees with no guarantee of renewal of employment and work full-time)
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	Number
Full-time seasonal or temporary workers employed last fiscal year	<b>16</b>
<b>NO FULL-TIME SEASONAL OR TEMPORARY WORKERS</b>	<b>0</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

*GO TO QUESTION L.9b*

*GO TO QUESTION L.9b*

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable l6
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable l6

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WORKFORCE

**[wk18] Proportion of permanent workers (out of all workers)**

Description

The proportion of permanent workers out of all workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.6, and L.8. Note that it is calculated only if both the number of permanent and the number of temporary workers are available.

**L.1** At the end of fiscal year **[insert last complete fiscal year]**, how many permanent, full-time individuals worked in this establishment? Please include all employees and managers (Permanent, full-time employees are defined as all employees that are employed for a term of one or more fiscal years and/or have a guaranteed renewal of their employment and that work a full shift) **(INTERVIEWER: INCLUDE INTERVIEWEE IF APPLICABLE)**.

	Number
Permanent, full-time workers end of last fiscal year	<b>11</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**L.6** How many full-time seasonal or temporary employees did this establishment employ during **[insert last complete fiscal year]**? (Full-time, temporary workers are all short-term (i.e. for less than a year) employees with no guarantee of renewal of employment and work full-time)

	Number
Full-time seasonal or temporary workers employed last fiscal year	<b>16</b>
<b>NO FULL-TIME SEASONAL OR TEMPORARY WORKERS</b>	<b>0</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**GO TO QUESTION L.9b**

**GO TO QUESTION L.9b**

**L.8** What was the average length of employment of all full-time temporary employees in fiscal year **[insert last complete fiscal year]**?

	Months
Average length full-time seasonal or temporary employment last fiscal year, in months	<b>18</b>
<b>LESS THAN ONE MONTH</b>	<b>1</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

Notes

Indicator Updates

August 7, 2017 First released

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WORKFORCE

**[wk17] Proportion of temporary workers (out of all workers)**

Description

The proportion of temporary workers out of all workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.6, and L.8. Note that it is calculated only if both the number of permanent and the number of temporary workers are available.

**L.1** At the end of fiscal year [\[insert last complete fiscal year\]](#), how many permanent, full-time individuals worked in this establishment? Please include all employees and managers (Permanent, full-time employees are defined as all employees that are employed for a term of one or more fiscal years and/or have a guaranteed renewal of their employment and that work a full shift) **(INTERVIEWER: INCLUDE INTERVIEWEE IF APPLICABLE)**.

	Number
Permanent, full-time workers end of last fiscal year	11
<b>DON'T KNOW (SPONTANEOUS)</b>	-9

**L.6** How many full-time seasonal or temporary employees did this establishment employ during [\[insert last complete fiscal year\]](#)? (Full-time, temporary workers are all short-term (i.e. for less than a year) employees with no guarantee of renewal of employment and work full-time)

	Number
Full-time seasonal or temporary workers employed last fiscal year	16
<b>NO FULL-TIME SEASONAL OR TEMPORARY WORKERS</b>	0
<b>DON'T KNOW (SPONTANEOUS)</b>	-9

*GO TO QUESTION L.9b*  
*GO TO QUESTION L.9b*

**L.8** What was the average length of employment of all full-time temporary employees in fiscal year [\[insert last complete fiscal year\]](#)?

	Months
Average length full-time seasonal or temporary employment last fiscal year, in months	18
<b>LESS THAN ONE MONTH</b>	1
<b>DON'T KNOW (SPONTANEOUS)</b>	-9

Notes

Indicator Updates

August 7, 2017 First released

WORKFORCE

**[wk6] Number of permanent production workers\***

Description

Average number of production workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.3a.

**L.3** At the end of fiscal year [\[insert last complete fiscal year\]](#), how many permanent, full-time individuals in this establishment were: **INTERVIEWER: READ EACH CATEGORY**

	Number	Don't know (spontaneous)
Production workers	<b>13a</b>	-9
Non-production workers [e.g., managers, administration, sales]		-9

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable 13a
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable 13a
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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WORKFORCE

**[wk7] Number of permanent non-production workers\***

Description

Average number of non production workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.3b.

**L.3** At the end of fiscal year [\[insert last complete fiscal year\]](#), how many permanent, full-time individuals in this establishment were: **INTERVIEWER: READ EACH CATEGORY**

	Number	Don't know (spontaneous)
Production workers		-9
Non-production workers [e.g., managers, administration, sales]	<b>13b</b>	-9

Notes

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable 13b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable 13b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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WORKFORCE

**[wk15] Proportion of production workers (out of all permanent workers)\***

Description

Proportion of production workers out of all permanent workers\*.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.3a and L3b. Note that it is calculated only if both the number of production and the number of non-production workers are available.

**L.3** Coming back to fiscal year **[insert last complete fiscal year]**, at the end of the fiscal year, how many permanent, full-time individuals in this establishment were: **(INTERVIEWER: READ EACH CATEGORY)**

	Number	DON'T KNOW (SPONTANEOUS)
Production workers	<b>I3a</b>	<b>-9</b>
Non-production workers [e.g., managers, administration, sales]	<b>I3b</b>	<b>-9</b>

Notes

Indicator Updates

August 7, 2017 First released

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WORKFORCE

**[wk16] Proportion of non-production workers (out of all permanent workers)\***

Description

Proportion of non-production workers out of all permanent workers\*.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.3a and L3b. Note that it is calculated only if both the number of production and the number of non-production workers are available.

**L.3** Coming back to fiscal year **[insert last complete fiscal year]**, at the end of the fiscal year, how many permanent, full-time individuals in this establishment were: **(INTERVIEWER: READ EACH CATEGORY)**

	Number	DON'T KNOW (SPONTANEOUS)
Production workers	<b>I3a</b>	<b>-9</b>
Non-production workers [e.g., managers, administration, sales]	<b>I3b</b>	<b>-9</b>

Notes

Indicator Updates

August 7, 2017 First released

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WORKFORCE

**[wk3] Number of permanent skilled production workers\***

Description

Average number of skilled production workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.4a1, and L.4a2.

<b>L.4</b>	At the end of fiscal year <b>[insert last complete fiscal year]</b> , how many permanent, full-time individuals working in this establishment were: <b>INTERVIEWER: READ EACH CATEGORY</b>
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	Number	DON'T KNOW (SPONTANEOUS)
Workers in highly skilled production jobs, professionals whose tasks require extensive theoretical and technical knowledge	<b>l4a1</b>	<b>-9</b>
Workers in semi-skilled production jobs, technicians whose tasks require some level of mechanical or technical knowledge	<b>l4a2</b>	<b>-9</b>
Workers in unskilled production jobs, whose tasks involve no specialized knowledge		

Notes

The wording of these questions changed slightly to remain consistent with the ILO definitions. This change is effective as of the Bolivia 2017 ES.

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable l4a
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable l4a
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
June 26, 2017	Options for l4 were broken into additional categories.

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WORKFORCE

**[wk4] Number of unskilled production workers \***

Description

Average number of unskilled production workers.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.4b.

<b>L.4</b>	At the end of fiscal year <b>[insert last complete fiscal year]</b> , how many permanent, full-time individuals working in this establishment were: <b>INTERVIEWER: READ EACH CATEGORY</b>
------------	--

	Number	DON'T KNOW (SPONTANEOUS)
Workers in highly skilled production jobs, professionals whose tasks require extensive theoretical and technical knowledge		
Workers in semi-skilled production jobs, technicians whose tasks require some level of mechanical or technical knowledge		
Workers in unskilled production jobs, whose tasks involve no specialized knowledge	<b>l4b</b>	<b>-9</b>

Notes

The wording of these questions changed slightly to remain consistent with the ILO definitions. This change is effective as of the Bolivia 2017 ES.

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variable l4b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variable l4b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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WORKFORCE

**[wk19] Proportion of skilled workers (out of all production workers)\***

Description

Proportion of skilled workers out of all production workers\*.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1, L.4a1, L.4a2 and L4b. Note that it is calculated only if both the number of skilled and the number of unskilled production workers are available.

<b>L.4</b>	At the end of fiscal year <a href="#">[insert last complete fiscal year]</a> , how many permanent, full-time individuals working in this establishment were: <b>INTERVIEWER: READ EACH CATEGORY</b>
------------	---

	Number	DON'T KNOW (SPONTANEOUS)
Workers in highly skilled production jobs, professionals whose tasks require extensive theoretical and technical knowledge	<b>l4a1</b>	-9
Workers in semi-skilled production jobs, technicians whose tasks require some level of mechanical or technical knowledge	<b>l4a2</b>	-9
Workers in unskilled production jobs, whose tasks involve no specialized knowledge	<b>l4b</b>	-9

Notes

The wording of these questions changed slightly to remain consistent with the ILO definitions. This change is effective as of the Bolivia 2017 ES.

Indicator Updates

August 7, 2017	First released
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WORKFORCE

**[wk13] Proportion of unskilled workers (out of all production workers)\***

Description

The proportion of production workers who are unskilled. This indicator is calculated only for manufacturing firms.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.4a1, L.4a2, and L.4b. Note that it is calculated only if both the number of skilled and the number of unskilled production workers are available.

<b>L.4</b>	At the end of fiscal year <a href="#">[insert last complete fiscal year]</a> , how many permanent, full-time individuals working in this establishment were: <b>INTERVIEWER: READ EACH CATEGORY</b>
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	Number	DON'T KNOW (SPONTANEOUS)
Workers in highly skilled production jobs, professionals whose tasks require extensive theoretical and technical knowledge	<b>l4a1</b>	-9
Workers in semi-skilled production jobs, technicians whose tasks require some level of mechanical or technical knowledge	<b>l4a2</b>	-9
Workers in unskilled production jobs, whose tasks involve no specialized knowledge	<b>l4b</b>	-9

Notes

The wording of these questions changed slightly to remain consistent with the ILO definitions. This change is effective as of the Bolivia 2017 ES.

Indicator Updates

Summer 2009	<a href="#">Outlier Program Change #1</a> affected outlier treatment on the variables l4a and l4b
November 18, 2010	<a href="#">Outlier Program Change #2</a> affected outlier treatment on the variables l4a and l4b
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
J, 2017	Options for l4 were broken into additional categories.

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WORKFORCE

**[wk9] Percent of firms identifying labor regulations as a major constraint**

Description

Percentage of firms identifying labor regulations as a "major" or "very severe" obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L.30a.

<b>L.30</b>	Using the response options on the card; To what degree are <b>Labor Regulations</b> an obstacle to the current operations of this establishment?
	Using the response options on the card; To what degree is <b>an Inadequately Educated Workforce</b> an obstacle to the current operations of this establishment? <b>INTERVIEWER: SHOW CARD 22</b>

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Labor regulations <b>I30a</b>	0	1	2	3	4	-9	-7
Inadequately educated workforce	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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WORKFORCE

**[wk10] Percent of firms identifying an inadequately educated workforce as a major constraint**

Description

Percentage of firms identifying labor skill level as a major constraint. The computation of the indicator is based on the rating of the obstacle as a potential constraint to the current operations of the establishment.

Survey Variable Used to Construct Indicator

This indicator is created from the variable L30b.

<b>L.30</b>	Using the response options on the card; To what degree are <b>Labor Regulations</b> an obstacle to the current operations of this establishment?
	Using the response options on the card; To what degree is <b>an Inadequately Educated Workforce</b> an obstacle to the current operations of this establishment? <b>INTERVIEWER: SHOW CARD 22</b>

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Labor regulations	0	1	2	3	4	-9	-7
Inadequately educated workforce <b>L30b</b>	0	1	2	3	4	-9	-7

Notes

For BEEPS surveys conducted prior to 2008, this question used a four-point scale instead of the current five-point answer scale. "Very Severe Obstacle" was not an answer option.

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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## FIRM CHARACTERISTICS

The Enterprise Surveys collect information from a representative sample of the non-agricultural formal private economy. In addition to collecting information on the business environment the surveys collect information on the characteristics of the firms interviewed. Consequently, the data collected provides a description of the representative private firm in the country and an estimate of how some of the attributes of the average firm are distributed across the population of firms.

Indicators show the distribution of firms according to their age measured by the number of years they have been in operation. The effect the business environment can have on the private sector may depend on firms' experience and longevity. Seasoned firms and young firms may differ in their ability to successfully navigate the business environment.

Indicators also quantify the level of female participation in management and firm ownership. These indicators can help assess whether gender influences the level of exposure of the firm to external factors, such as corruption, access to finance, and technology.

Finally, indicators show the participation of the domestic private sector, the government, the foreign sector and other sectors in the ownership of the typical firm. The distribution provides insight into their levels of equity in the private sector of the economy.

FIRM CHARACTERISTICS

**[car1] Age (years)**

Description

Age of the firm based on the year in which the firm began operations.

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.5.

<b>B.5</b>	In what year did this establishment begin operations in this country?
------------	---

	<b>Year</b>
Year establishment began operations	<b>b5</b>

**INTERVIEWER: PROVIDE FOUR DIGITS FOR YEAR**

Notes

Indicator Updates

June 30, 2009	Adjustment: car1 takes only values less than 100
February 28, 2011	Adjustment: car1 can take on any values thus reversing the limitation imposed June 30, 2009. However, car1 is now subject to outliers removal whereby the variable is log-transformed and then trimmed at plus and minus 3 standard deviations from the mean for each survey.
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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FIRM CHARACTERISTICS

**[car2] Proportion of private domestic ownership in a firm (%)**

Description

Percentage of the firm owned by domestic individuals, companies or organizations.

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.2a

<b>B.2</b>	What percent of this firm is owned by each of the following: <b>INTERVIEWER: SHOW CARD 2</b>
------------	---

	Percent
a. Private domestic individuals, companies or organizations	<b>b2a</b> %
b. Private foreign individuals, companies or organizations	
c. Government/State	
d. Other	
	<b>100%</b>

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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FIRM CHARACTERISTICS

**[car3] Proportion of private foreign ownership in a firm (%)**

Description

Percentage of the firm owned by foreign individuals, companies or organizations.

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.2b.

<b>B.2</b>	What percent of this firm is owned by each of the following: <b>INTERVIEWER: SHOW CARD 2</b>
------------	---

	Percent
a. Private domestic individuals, companies or organizations	
b. Private foreign individuals, companies or organizations	<b>b2b</b> %
c. Government/State	
d. Other	
	<b>100%</b>

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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FIRM CHARACTERISTICS

**[car4] Proportion of government/state ownership in a firm (%)**

Description

Percentage of the firm owned by the government or state.

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.2c.

<b>B.2</b>	What percent of this firm is owned by each of the following: <b>INTERVIEWER: SHOW CARD 2</b>
------------	---

	Percent
a. Private domestic individuals, companies or organizations	
b. Private foreign individuals, companies or organizations	
c. Government/State	<b>b2c</b> %
d. Other	
<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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FIRM CHARACTERISTICS

**[car5] Proportion of other ownership in a firm (%)**

Description

Percentage of the firm owned by other interests.

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.2d.

<b>B.2</b>	What percent of this firm is owned by each of the following: <b>INTERVIEWER: SHOW CARD 2</b>
------------	---

	Percent
a. Private domestic individuals, companies or organizations	
b. Private foreign individuals, companies or organizations	
c. Government/State	
d. Other	<b>b2d</b> %
	<b>100%</b>

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%**

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
May 29, 2014	This indicator was out of date and had been removed from ES website

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FIRM CHARACTERISTICS

**[car6] Proportion of a firm held by the largest owner(s) (%)**

Description

Percentage held by largest owner or owners.

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.3.

<b>B.3</b>	What percent of this firm does the largest owner or owner(s) own?
------------	---

	<b>Percent</b>
Percent held by largest owner	<b>b3</b> %

Notes

Indicator Updates

February 28, 2011	Please also note that for all countries, b3 was imputed with 100% when firm's legal status is Sole proprietorship and b3 was missing due to a skip pattern. This is a significant change as in many surveys answering positively to being a Sole Proprietorship caused a skip of question b3.
May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>

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Firm Characteristics

**[car7] Percent of firms with at least 10% of private foreign ownership**

Description

Percentage of firms that have at least 10% owned by private foreign individuals, companies or organizations.

Survey Variable Used to Construct Indicator

This indicator is created from the variable B.2b

**B.2** What percentage of this firm is owned by each of the following: [SHOW CARD 2](#)

	Percent	DON'T KNOW (SPONTANEOUS)
Private domestic individuals, companies or organizations		-9
Private foreign individuals, companies or organizations	<b>b2b</b> %	-9
Government or State		-9
Other		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

June 26, 2017	First released
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Firm Characteristics

**[car8] Percent of firms with at least 10% of government/state ownership**

Description

Percentage of firms where the government or state has at least a 10% share in ownership of the firm.

Survey Variable Used to Construct Indicator

This indicator is created from the variable B.2c

**B.2** | What percentage of this firm is owned by each of the following: [SHOW CARD 2](#)

	Percent	DON'T KNOW (SPONTANEOUS)
Private domestic individuals, companies or organizations		-9
Private foreign individuals, companies or organizations		-9
Government or State	<b>b2c</b> %	-9
Other		-9
	<b>100%</b>	

**INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%  
(UNLESS RESPONDENT DOES NOT KNOW)**

Notes

Indicator Updates

June 26, 2017	First released
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FIRM CHARACTERISTICS

**[form1] Percent of firms with legal status of publicly listed company**

Description

Percentage of firms with legal status of publicly listed company

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.1.

**B.1** What is this firm's current legal status? SHOW CARD 1

Shareholding company with shares trade in the stock market	1
Shareholding company with non-traded shares or shares traded privately	2
Sole proprietorship	3
Partnership	4
Limited partnership	5
OTHER (SPONTANEOUS-SPECIFY) __ b1x__	6
DON'T KNOW (SPONTANEOUS)	-9

**b1**

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FIRM CHARACTERISTICS

**[form2] Percent of firms with legal status of privately held Limited Liability Company**

Description

Percent of firms with legal status of privately held Limited Liability Company

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.1.

**B.1** What is this firm's current legal status? SHOW CARD 1

Shareholding company with shares trade in the stock market	1
Shareholding company with non-traded shares or shares traded privately	2
Sole proprietorship	3
Partnership	4
Limited partnership	5
OTHER (SPONTANEOUS-SPECIFY) __ b1x__	6
DON'T KNOW (SPONTANEOUS)	-9

**b1**

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FIRM CHARACTERISTICS

**[Iform3] Percent of firms with legal status of Sole Proprietorship**

Description

Percent of firms with legal status of Sole Proprietorship

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.1.

**B.1** What is this firm's current legal status? SHOW CARD 1

Shareholding company with shares trade in the stock market	1
Shareholding company with non-traded shares or shares traded privately	2
Sole proprietorship	3
Partnership	4
Limited partnership	5
OTHER (SPONTANEOUS-SPECIFY) __ b1x__	6
DON'T KNOW (SPONTANEOUS)	-9

**b1**

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FIRM CHARACTERISTICS

**[Iform4] Percent of firms with legal status of Partnership**

Description

Percent of firms with legal status of Partnership

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.1.

**B.1** What is this firm's current legal status? SHOW CARD 1

Shareholding company with shares trade in the stock market	1
Shareholding company with non-traded shares or shares traded privately	2
Sole proprietorship	3
Partnership	4
Limited partnership	5
OTHER (SPONTANEOUS-SPECIFY) __ b1x __	6
DON'T KNOW (SPONTANEOUS)	-9

**b1**

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FIRM CHARACTERISTICS

**[Iform5] Percent of firms with legal status of Limited Partnership**

Description

Percent of firms with legal status of Limited Partnership

Survey Variable Used to Construct Indicator

This indicator is created from the variables B.1.

**B.1** What is this firm's current legal status? SHOW CARD 1

Shareholding company with shares trade in the stock market	1
Shareholding company with non-traded shares or shares traded privately	2
Sole proprietorship	3
Partnership	4
Limited partnership	5
OTHER (SPONTANEOUS-SPECIFY) __ b1x __	6
DON'T KNOW (SPONTANEOUS)	-9

**b1**

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## THE BIGGEST OBSTACLE

The Enterprise Surveys collect mostly quantitative and factual information (the actual day-to-day experiences) from business owners and managers on a range of topics regarding the business environment. Towards the end of the survey interview, there is an opinion-based question asked to the survey respondent that pulls together the various survey topics. Firms are asked to consider which element (out of a list of 15) is the Biggest Obstacle to their establishment. The following group of indicators summarizes how many firms chose each of the various 15 elements. These indicators can aid policymakers in setting priorities when creating programs and policies aimed at improving the business-enabling environment.

THE BIGGEST OBSTACLE

**[obst1] Access to finance**

Description

Percentage of establishments that consider access to finance to be the Biggest Obstacle

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

<b>M.1</b>	By looking at card <b>[insert card number]</b> can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment <b>SHOW CARD 25</b> <b>INTERVIEWER: DO NOT READ OUT</b>
------------	---

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst2] Access to land**

Description

Percentage of establishments that consider access to land to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst3] Business licensing and permits**

Description

Percentage of establishments that consider business licensing and permits to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

[obst4] Corruption

Description

Percentage of establishments that consider corruption to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card [insert card number] can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst5] Courts**

Description

Percentage of establishments that consider courts to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst6] Crime, theft and disorder**

Description

Percentage of establishments that consider crime, theft and disorder to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card [**insert card number**] can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst7] Customs and trade regulations**

Description

Percentage of establishments that consider customs and trade regulations to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

<b>M.1</b>	By looking at card <b>[insert card number]</b> can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment <b>SHOW CARD 25</b> <b>INTERVIEWER: DO NOT READ OUT</b>
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1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst8] Electricity**

Description

Percentage of establishments that consider electricity to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst9] Inadequately educated workforce**

Description

Percentage of establishments that consider an inadequately educated workforce to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst10] Labor regulations**

Description

Percentage of establishments that consider labor regulations to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst11] Political instability**

Description

Percentage of establishments that consider political instability to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

<b>M.1</b>	By looking at card [ <b>insert card number</b> ] can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment <b>SHOW CARD 25</b> <b>INTERVIEWER: DO NOT READ OUT</b>
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1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst12] Practices of competitors in the informal sector**

Description

Percentage of establishments that consider practices of competitors in the informal sector to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

<b>M.1</b>	By looking at card <b>[insert card number]</b> can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment <b>SHOW CARD 25</b> <b>INTERVIEWER: DO NOT READ OUT</b>
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1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst13] Tax administration**

Description

Percentage of establishments that consider the tax administration to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

[obst14] Tax rates

Description

Percentage of establishments that consider tax rates to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card [insert card number] can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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THE BIGGEST OBSTACLE

**[obst15] Transport**

Description

Percentage of establishments that consider transport to be the Biggest Obstacle.

Survey Variable Used to Construct Indicator

This indicator is created from the variables M.1.

**M.1** By looking at card **[insert card number]** can you tell me which of the elements of the business environment included in the list, if any, currently represents the biggest obstacle faced by this establishment **SHOW CARD 25**  
**INTERVIEWER: DO NOT READ OUT**

1-Access to finance
2-Access to land
3-Business licensing and permits
4-Corruption
5-Courts
6-Crime, theft and disorder
7-Customs and trade regulations
8-Electricity
9-Inadequately educated workforce
10-Labor regulations
11-Political instability
12-Practices of competitors in the informal sector
13-Tax administration
14-Tax rates
15-Transport

Biggest obstacle	<b>m1a</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>DOES NOT APPLY (SPONTANEOUS)</b>	<b>-7</b>

Rotation (option 1, 2 or 3)	<b>m1d</b>
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## PERFORMANCE

In addition to collecting information on the business environment, Enterprise Surveys collect information on the performance of the firms interviewed. Firms are asked about their annual sales figures and number of permanent full-time employees at the end of the last fiscal year as well as three fiscal years ago.

Indicators show the performance of firms by growth in sales, employment, and labor productivity. All sales data have been converted to 2009 U.S. dollars for global comparability. While different countries will have different growth patterns, comparing performance within a country by firm size or industry or other firm subgroups can yield interesting insights for policymakers and researchers.

PERFORMANCE

[perf1] Real annual sales growth (%)

Description

Real annual sales growth is measured as a percentage change in sales between the last completed fiscal year and a previous period. All sales values are deflated to 2009 using each country's GDP deflators.<sup>2</sup> The formula is:

$$\left(\frac{1}{t}\right) * \frac{d2' - n3'}{(d2' + n3')/2} * (100)$$

where  $t$  is the number of years between the current and previous periods, and  $d2'$  and  $n3'$  are deflated values of  $d2$  and  $n3$  variables. Note that the GDP deflators are weighted by the closing month of each firms' fiscal year. For example, if a firm's last complete fiscal year spans July 2015 through June 2016, then deflator used for  $d2$  is:  $\frac{6}{12} \cdot \text{deflator for year 2015} + \frac{6}{12} \cdot \text{deflator for year 2016}$ .

Survey Variable Used to Construct Indicator

This indicator is created from the variables D.2 and N.3.

**D.2** In fiscal year [insert last complete fiscal year], what were this establishment's total annual sales for ALL products and services?

	LCUs
Last complete fiscal year's total sales	d2
<b>DON'T KNOW (SPONTANEOUS)</b>	-9
<b>PLEASE ALSO WRITE OUT THE NUMBER (i.e. 50,000 as Fifty Thousand)</b>	
	d2x

**N.3** In fiscal year [insert three complete fiscal years ago], three fiscal years ago, what were total annual sales for this establishment?

	LCUs
Total annual sales three years ago	n3
<b>IF ESTABLISHMENT WAS NOT IN BUSINESS THREE YEARS AGO</b>	-7
<b>DON'T KNOW (SPONTANEOUS)</b>	-9

Notes

Indicator Updates

January 3, 2012	Added to ES Indicators
December 15, 2016	Methodology Change: see <a href="#">Descriptions of Indicator Updates</a> at the end of this document
September 11, 2017	Methodology Change: see <a href="#">Descriptions of Indicator Updates</a> at the end of this document

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<sup>2</sup> GDP deflators are from the World Development Indicators, series NY.GDP.DEFL.ZS

PERFORMANCE

**[perf2] Annual employment growth (%)**

Description

Annualized growth of permanent full-time workers expressed as a percentage. Annual employment growth is the change in full-time employment reported in the current fiscal year from a previous period. For most countries the difference between the two fiscal year periods is two years. However, for some countries the interval is three years. Hence, an annualized measure is used. The formula is

$$\left(\frac{1}{t}\right) * \frac{l1 - l2}{(l1 + l2)/2} * (100)$$

where *t* is the number of years between the current and previous periods.

Survey Variable Used to Construct Indicator

This indicator is created from the variables L.1 and L.2.

<b>L.1</b>	At the end of fiscal year <b>[insert last complete fiscal year]</b> , how many permanent, full-time individuals worked in this establishment? Please include all employees and managers (Permanent, full-time employees 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 a full shift) <b>(INTERVIEWER: INCLUDE INTERVIEWEE IF APPLICABLE).</b>
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	Number
Permanent, full-time workers end of last fiscal year	11
<b>DON'T KNOW (SPONTANEOUS)</b>	-9

<b>L.2</b>	Three fiscal years ago, at the end of fiscal year <b>[insert three complete fiscal years ago]</b> , how many permanent, full-time individuals work in this establishment? Please include all employees and managers <b>(INTERVIEWER: INCLUDE INTERVIEWEE IF APPLICABLE).</b>
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	Number
Permanent, full-time workers three fiscal years ago	12
<b>IF ESTABLISHMENT WAS NOT IN BUSINESS THREE YEARS AGO</b>	-7
<b>DON'T KNOW (SPONTANEOUS)</b>	-9

Notes

Indicator Updates

January 3, 2012	Added to ES Indicators
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PERFORMANCE

**[perf3] Annual labor productivity growth (%)**

Description

Annual labor productivity growth is measured by a percentage change in labor productivity between the last completed fiscal year and a previous period, where labor productivity is sales divided by the number of full-time permanent workers. All sales values are deflated to 2009 using each country's GDP deflators.<sup>3</sup> The formula is:

$$\left(\frac{1}{t}\right) * \frac{\left(\frac{d2'}{l1}\right) - \left(\frac{n3'}{l2}\right)}{\left\{\left(\frac{d2'}{l1}\right) + \left(\frac{n3'}{l2}\right)\right\}/2} * (100)$$

where *t* is the number of years between the current and previous periods, *l1* and *l2* are the number of full-time permanent workers, and *d2'* and *n3'* are deflated values of *d2* and *n3* variables. Note that the GDP deflators are weighted by the closing month of each firms' fiscal year. For example, if a firm's last complete fiscal year spans July 2015 through June 2016, then deflator used for *d2* is:  $\frac{6}{12} \cdot$  deflator for year 2015 +  $\frac{6}{12} \cdot$  deflator for year 2016.

Survey Variable Used to Construct Indicator

This indicator is created from the variables D.2, N.3, L.1, and L.2.

**D.2** In fiscal year **[insert last complete fiscal year]**, what were this establishment's total annual sales for **ALL** products and services?

	LCUs
Last complete fiscal year's total sales	<b>d2</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>
<b>PLEASE ALSO WRITE OUT THE NUMBER (i.e. 50,000 as Fifty Thousand)</b>	
	<b>d2x</b>

**N.3** In fiscal year **[insert three complete fiscal years ago]**, three fiscal years ago, what were total annual sales for this establishment?

	LCUs
Total annual sales three years ago	<b>n3</b>
<b>IF ESTABLISHMENT WAS NOT IN BUSINESS THREE YEARS AGO</b>	<b>-7</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

<sup>3</sup> GDP deflators are from the World Development Indicators, series NY.GDP.DEFL.ZS

**L.1** At the end of fiscal year **[insert last complete fiscal year]**, how many permanent, full-time individuals worked in this establishment? Please include all employees and managers (Permanent, full-time employees 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 a full shift)  
**(INTERVIEWER: INCLUDE INTERVIEWEE IF APPLICABLE).**

	Number
Permanent, full-time workers end of last fiscal year	<b>11</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**L.2** Three fiscal years ago, at the end of fiscal year **[insert three complete fiscal years ago]**, how many permanent, full-time individuals work in this establishment? Please include all employees and managers  
**(INTERVIEWER: INCLUDE INTERVIEWEE IF APPLICABLE).**

	Number
Permanent, full-time workers three fiscal years ago	<b>12</b>
<b>IF ESTABLISHMENT WAS NOT IN BUSINESS THREE YEARS AGO</b>	<b>-7</b>
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

Notes

Indicator Updates

January 3, 2012	Added to ES Indicators
December 15, 2016	Methodology Change: see <a href="#">Descriptions of Indicator Updates</a> at the end of this document
September 11, 2017	Methodology Change: see <a href="#">Descriptions of Indicator Updates</a> at the end of this document

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**[t3] Capacity utilization (%) \***

Description

Capacity utilization based on comparison of the current output with the maximum output possible using the current inputs.

Survey Variable Used to Construct Indicator

This indicator is created from the variable F.1.

<b>F.1</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , what was this establishment's output produced as a proportion of the maximum output possible if using all the resources available (capacity utilization)?
------------	---

	Percent
Capacity utilization	<b>f1</b> %
<a href="#">Don't know (spontaneous)</a>	-9

Notes

Indicator Updates

May 2, 2011	<a href="#">Changes to ECA 2002 &amp; 2005 surveys</a>
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**[perf4] Percent of firms buying fixed assets**

Description

Percent of firms buying fixed assets such as machinery, equipment, land or buildings.

Survey Variable Used to Construct Indicator

This indicator is created from the variable K.4.

<b>K.4</b>	In fiscal year <a href="#">[insert last complete fiscal year]</a> , did this establishment purchase any new or used fixed assets, such as machinery, vehicles, equipment, land or buildings?
------------	--

Yes	1
No	2
<b>DON'T KNOW (SPONTANEOUS)</b>	<b>-9</b>

**k4**

Notes

Indicator Updates

Nov.11.2014	<a href="#">New indicator added</a>
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## DESCRIPTIONS OF INDICATOR UPDATES

### **Outlier Program Change 1 (Summer 2009)**

**Background:** Data collected by the Enterprise Surveys Unit is cleaned as it is collected and checked against a number of quality controls. However, not all data presented through the Enterprise Surveys website is collected by the Enterprise Surveys Unit. For a series of variables, outlier values are identified and removed before the variable is used to construct indicators. A conservative approach is used in this analysis and researchers may wish to use their own techniques to identify outliers by accessing the original raw-data files and performing their own analysis. Variables collected with a response scale form 0% to 100% (e.g. Senior management's time spent on dealing with regulations) are subjected to trimming at plus and minus three standard deviations from the mean. Variables collected with unbounded responses (e.g. Total annual sales figures or Days to obtain an import license) are first log-transformed before being trimmed at plus and minus three standard deviations from the mean.

**Change:** For variables affected by this change, outlier analysis is performed on the log transformation of the variable. In previous versions of outlier programs, 0.0001 was added to zero values. After the change, 1 is added to all values before performing outlier analysis on the log value. This change was done to preserve zero values when running outlier analysis on logs. Performing the outlier analysis by survey, log values greater (less) than three times the standard deviation from the mean are considered outliers and replaced with a missing value.

### **Outlier Program Change 2 (November 18, 2010)**

Outlier analysis was previously run at the country level. With the addition of new surveys and multiple surveys in the same country, outlier analysis is now run at the survey level.

### **Indicator Minus Value Change (December 7, 2010)**

For the construction of some corruption indicators, negative values (-8 and -9) are changed to extended missing (.a or .b) and are no longer included in the outlier analysis.

### **Changes to ECA 2002 & 2005 Surveys (May 2, 2011)**

The Enterprise Surveys team has made a change to indicators computed for the 2002 and 2005 rounds of surveys conducted in Europe and Central Asia (ECA). This change reflects the exclusion of observations in some sectors in an effort to improve comparability of these data with the more recent rounds of survey collection.

### **Refusal response incorporation for corr2 indicator (May 1, 2014)**

The Enterprise Surveys team has made a correction to the corr2 indicator. Due to some error in the code corr2 did not include refusals to the variable j6. This has now been corrected.

### **Change of denominator for gend3 indicator (Feb 3, 2014)**

The Enterprise Surveys team has made a correction to the gend3 indicator. Inappropriate denominator was used to calculate gend3. This has now been corrected.

### **Creation of new indicator gend5 (Feb 3, 2014)**

The Enterprise Surveys team has created a new indicator gend5 in topic for gender.

**Removal of out of date indicators (May 29, 2014)**

Indicators that were out of date have been removed from ES website.

**Creation of new indicator perf4 (Nov 11, 2014)**

The Enterprise Surveys team has created a new indicator perf4 in topic for performance.

**Creation of new indicator gend6 (Aug 20, 2015)**

The Enterprise Surveys team has created a new indicator gend6 in topic for gender.

**Methodology change in indicators perf1 and perf3 (Dec 15, 2016)**

The Enterprise Surveys team has decided to deflate sales values using the country-level GDP deflators instead of converting them to USD and then deflating using the US GDP deflator.

**Creation of 12 new indicators (June 26, 2017)**

The Enterprise Surveys team has created 12 new indicators: reg6 for regulation and taxes, fin22 for finance, in16 and in17 for infrastructure, tr17 and tr16 for trade, car7 and car 8 for firm characteristics, and lastly t7, t8, t9, and t10 for innovation and technology.

**Creation of 6 new indicators (August 7, 2017)**

The Enterprise Surveys team has created 6 new indicators: wk14, wk15, wk16, wk17, wk18, and wk19 on the topic of workforce.

**Methodology change in perf1 and perf3 (September 11, 2017)**

GDP deflators are now adjusted for the structure of each firm's fiscal year. In particular, we use the closing month of the firms' fiscal year to weigh the annual deflators from WDI accordingly.

**Methodology change in t10 (January 30, 2023)**

The indicator is restricted to establishments with 20 or more employees.

**Creation of 9 new indicators (May 15, 2023)**

The Enterprise Surveys team has created 9 new indicators: mgmt1-mgmt9 on the topic of management practices.

**Creation of 3 new indicators and a correction (June 26, 2023)**

The Enterprise Surveys team has created 3 new indicators: fin23, fin24, and fin25, on the topic of credit constraints. Also, correction was made to handle r10 = -7 as described above, instead of inadvertently treating it as missing.

**Correction to make an indicator manufacturing-only as originally intended (August 21, 2023)**

The Enterprise Surveys team has made a correction to the tr1 indicator. Due to an error in the code tr1 did not exclude services sector. This has now been corrected.

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# APPENDIX

