

July 21, 2023





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.

http://www.enterprisesurveys.org enterprisesurveys@worldbank.org

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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

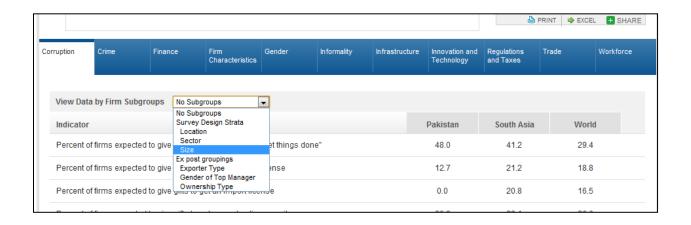
Notes

* 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 populations¹. 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.



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.

 $^{^{1}}$ 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 <u>Enterprise Surveys Global Methodology</u>. Some older surveys did not follow the Global methodology, and are not comparable to other surveys. Please refer to the <u>DataDetails.xls</u> 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.

Definitions of Subgroup

Table 1. Definition of Subgroups

Subgroup	Subgroup levels	Description
Note: The cuts below are included in the levels of sampling stratification. The sufficient sample sizes		
should ensure the in	tended level of precision for the indicator v	values analyzed at these levels. Please
refer to the Samplin	g Note on the Methodology page of the web	osite.
Firm Size	Small: 5-19 workers	Firm size is a composite measure of
	Medium: 20-99 workers	permanent and temporary workers.
	Large: 100+	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	Vanica by Cumray	Cumrous and atmatified has been as
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.
Note: The gute heler	l w are NOT included in the levels of stratifica	
	re the intended level of precision for the ind	• •
Gender of Top	Male	Respondents are asked to report the
Manager	Female	gender of the top manager. This
Manager	remate	variable is only available in the latest
		surveys using the Global methodology.
		surveys using the Grobal methodology.
Exporting Status	Non-exporter	A firm is an exporter if at least 10
	Exporter	percent of its annual sales is derived
		from direct exports
Ownership	Domestic (less than 10% foreign	A firm is considered to have foreign
(Domestic vs.	ownership)	ownership if at least 10 percent of
Foreign)	At least 10% Foreign Ownership	ownership is held by foreigners.
	-	

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.

J.2	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	j2 %
No time was spent	0
Don't know (spontaneous)	-9

Notes

Indicator Updates	
November 18, 2010 Outlier Program Change #2 affected outlier treatment on the variable j2.	
May 2, 2011	Changes to ECA 2002 & 2005 surveys

[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.

J.3 Over the last year, was this establishment visited or inspected by tax officials?

Yes	1		
No	2	GO TO	QUESTION J.6a
Don't know (spontaneous)	-9	GO TO QUESTION J.6a	
		j3	

J.4 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	j4
Don't know (spontaneous)	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable j4
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable j4
May 2, 2011	Changes to ECA 2002 & 2005 surveys

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. J.3 Over the last year, was this establishment visited or inspected by tax officials or required to meet with them? Yes No 2 DON'T KNOW (SPONTANEOUS) -9 Notes **Indicator Updates** First released June 26, 2017

[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.

J.4 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	j4
Don't know (spontaneous)	-9

Notes

Indicator Updates	
November 10, 2009	Conditional Indicator Created
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable j4
May 2, 2011	Changes to ECA 2002 & 2005 surveys

[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.

J.30	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.
	SHOW CARD 21

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Tax rates j30a	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

[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.

J.30	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.
	SHOW CARD 21

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Tax administration j30b	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	

[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.

J.14	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	j14
Less than one day	1
Still in process	-6
Application denied	-5
Don't know (spontaneous)	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable j14
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable j14

[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.

G.3 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	g3
Less than one day	1
Still in process	-6
Application denied	-5
Don't know (spontaneous)	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable g3
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable g3

REGULATION AND TAX [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. J.11 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 j11 Less than one day 1 Still in process -6 **Application denied** -5 Don't know (spontaneous) Notes

Back to List of Indicators

Indicator Updates

November 18, 2010

Summer 2009

Outlier Program Change #1 affected outlier treatment on the variable j11

Outlier Program Change #2 affected outlier treatment on the variable j11

[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.

J.30	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
	SHOW CARD 21

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 j30c	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	

[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.

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

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Political instability j30e	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

[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.

J.30	Using the response options on the card; To what degree is Access to Land an obstacle to the current operations of this
	establishment? SHOW CARD 16

							(SPONTA	NEOUS)
		No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	DON'T KNOW	DOES NOT APPLY
Access to land	g30a	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

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

[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.

J.7 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	j7a %
No payments or gifts are paid	0
Don't know (spontaneous)	-9
Refusal (spontaneous)	-8

PROVIDE EITHER ONE OR THE OTHER, NOT BOTH

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

Notes

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

[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.

J.6 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	j6 %
Don't know (spontaneous)	-9
Refusal (spontaneous)	-8
No payments	0

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	Outlier Program Change #1 affected outlier treatment on the variable j6
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable j6
December 7, 2010	Treatment of -8 Change affected j6
May 2, 2011	Changes to ECA 2002 & 2005 surveys

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. C.21 In reference to that application for a telephone connection, was an informal gift or payment expected or requested? Yes 1 2 No Don't know (spontaneous) -9 **REFUSE (spontaneous)** -8 c21 Notes **Indicator Updates** December 7, 2010 Treatment of -8 Change affected c21 May 29, 2014 This indicator was out of date and has been removed from ES website

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. **C.5** In reference to that application for an electrical connection, was an informal gift or payment expected or requested? Yes 2 Don't know (spontaneous) **REFUSE (spontaneous)** -8 **c5** Notes **Indicator Updates** Treatment of -8 Change affected c5 December 7, 2010

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. In reference to that application for a water connection, was an informal gift or payment expected or requested? C.14 Yes 2 No Don't know (spontaneous) -9 **REFUSE (spontaneous)** -8 c14 Notes **Indicator Updates** December 7, 2010 Treatment of -8 Change affected c14

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. **G.4** In reference to that application for a construction-related permit, was an informal gift or payment expected or requested? Yes 1 2 -9 Don't know (spontaneous) **REFUSE (spontaneous)** -8 g4 Notes **Indicator Updates** Treatment of -8 Change affected g4 December 7, 2010

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. In reference to that application for an import license, was an informal gift or payment expected or requested? J.12 Yes 1 2 No Don't know (spontaneous) -9 **REFUSE (spontaneous)** -8 j12 Notes **Indicator Updates** December 7, 2010 Treatment of -8 Change affected j12

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. In reference to that application for an operating license, was an informal gift or payment expected or requested? J.15 Yes 1 No 2 Don't know (spontaneous) -9 Refusal (spontaneous) -8 j15 Notes **Indicator Updates** December 7, 2010 Treatment of -8 Change affected j15

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. In any of these inspections or meetings was a gift or informal payment expected or requested? Yes No 2 -9 Don't know (spontaneous) Refusal (spontaneous) -8 j5 Notes **Indicator Updates** December 7, 2010 <u>Treatment of -8 Change</u> affected j5 May 2, 2011 Changes to ECA 2002 & 2005 surveys

[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.

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

Yes	1	1	
No	2	GO TO	QUESTION J.7
Don't know (spontaneous)	-9	GO TO QUESTION J.7	
		j6a	

J.6 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	j6 %
Don't know (spontaneous)	-9
Refusal (spontaneous)	-8
No payments	0

Notes

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

[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.

J.30 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.

SHOW CARD 21

ROTATE OPTIONS	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Corruption <mark>j30f</mark>	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

[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

J.1 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.

SHOW CARD 20

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

Notes

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

[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?

1
2
-9
-8

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	

Jo

J.12 In referer	e to that application for an import license, was an informal gift or payment expected or requeste
	Yes 1
	No 2
	Don't know (spontaneous) -9
	REFUSE (spontaneous) -8
	<u>j12</u>
15 In reference	to that application for an operating license, was an informal gift or payment expected or reques
	Yes 1
	No 2
	Don't know (spontaneous) -9
	Refusal (spontaneous) -8
	Refusal (spontaneous) -8
	Refusal (spontaneous) -8
otes	Refusal (spontaneous) -8
otes dicator Updates	Refusal (spontaneous) -8
dicator Updates	Refusal (spontaneous) -8 j15
dicator Updates	Refusal (spontaneous) j15 Indicator Created. Bribery depth is computed similarly as the Graft Index for the computed similarly as the
dicator Updates	Indicator Created. Bribery depth is computed similarly as the Graft Index for A. Gonzalez et al. 2007. World Bank Policy Research Working Paper #4394
	Indicator Created. Bribery depth is computed similarly as the Graft Index for A. Gonzalez et al. 2007. World Bank Policy Research Working Paper #4394 Unlike the Graft Index, Bribery depth does not include telephone connection.
dicator Updates	Indicator Created. Bribery depth is computed similarly as the Graft Index for A. Gonzalez et al. 2007. World Bank Policy Research Working Paper #4394

[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	
		c.

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	

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

Yes	1	1
No	2	
Don't know (spontaneous)	-9	
REFUSE (spontaneous)	-8	
	•	j5

J.12 In reference to that requested?	application for an import license, was an informal gift or payment expected or
J.15 In reference to that a requested?	pplication for an operating license, was an informal gift or payment expected or
I I	Yes 1 No 2 Don't know (spontaneous) -9 Refusal (spontaneous) -8 j15
Notes	
Indicator Updates	
April 18, 2012	Indicator Created

			Crii	ME			
[crim	e9] Perce	nt of firm	s identifyir	ng the cou	ırts as a m	ajor constraint	
D : .:							
Description Percentage of firms iden	tifring fun	ationing of	the govern	maionaon	atraint The	aamputation of the	a indicator is
based on the rating of th		_				_	
Survey Variable Used to	Construct l	Indicator					
	ne factors th which you	at can affect		-	to the curre	please look at this cent operations of the Do	
	obstacle	obstacle	obstacle	obstacle	Severe Obstacle	Not Know (spontaneous)	Apply (spontaneous)
Courts h30	0	1	2	3	4	-9	-7
Notes							
Notes For BEEPS surveys cond	lucted prior	r to 2008 tl	hic quaction	used a four	-noint scale	instead of the curi	rent five-noint
answer scale. "Very Sev	-		-		-point scale	instead of the curi	rent rive-point
Indicator Updates							

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.

Спіме
[crime1] Percent of firms paying for security
Description Percentage of firms paying for security, for example equipment, personnel, or professional security services.
referringe of firms paying for security, for example equipment, personner, or professional security services.
Survey Variable Used to Construct Indicator
This indicator is created from the variable I.1.
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 Don't know (spontaneous) -9 GO TO QUESTION I.3 i1
Notes
Indicator Updates
Indicator Updates

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	GO TO QUESTION 1.30
Don't know (spontaneous)	-9	GO TO QUESTION 1.30
		i3

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	i4a %
Don't know (spontaneous)	-9

PROVIDE EITHER ONE OR THE OTHER, NOT BOTH

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

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variables d2, i4b
	Outlier Program Change #2 affected outlier treatment on the variables d2, i4a,
November 18, 2010	i4b
May 2, 2011	Changes to ECA 2002 & 2005 surveys

_					
C	D	T	٨	Л	Т

[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).

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	i4a %
Don't know (spontaneous)	-9

PROVIDE EITHER ONE OR THE OTHER, NOT BOTH

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

Notes

Indicator Updates	
November 10, 2009	Indicator created.
	Outlier Program Change #2 affected outlier treatment on the variables d2, i4a,
November 18, 2010	i4b

_				
C	D	۲ħ	Л	I

[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	Ī	
No	2	GO TO Q	UESTION 1.3
Don't know (spontaneous)	-9	GO TO Q	UESTION I.3
		i1	

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	i2a %
Don't know (spontaneous)	-9

PROVIDE EITHER ONE OR THE OTHER, NOT BOTH

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

Notes

I. J II. J	
Indicator Updates	
	Outlier Program Change #1 affected outlier treatment on the variables d2, i2a,
Summer 2009	i2b
	Outlier Program Change #2 affected outlier treatment on the variables d2, i2a,
November 18, 2010	i2b
May 2, 2011	Changes to ECA 2002 & 2005 surveys

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).

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	i2a %
Don't know (spontaneous)	-9

PROVIDE EITHER ONE OR THE OTHER, NOT BOTH

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

Notes

Indicator Updates	
November 10, 2009	Indicator Created
	Outlier Program Change #2 affected outlier treatment on the variables d2, i2a,
November 18, 2010	i2b

	Спіме				
[crime5	[crime5] Products shipped to supply domestic markets that were lost due to theft (% of product value)*				
Description					
Value of lo	sses of products, due to theft, while in transit to domestic markets.				
Survey Var	riable Used to Construct Indicator				
This indicat	or is created from the variable D.10.				
D.10	In fiscal year [insert last complete fiscal year], 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	d10 %			
	No losses	0			
	Don't know (spontaneous) No internal shipments made	-9 -7			
	No internal simplifients made	/			
Notes					
Indicator U	Jpdates				

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 i30	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

Спіме				
[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. In fiscal year [insert last complete fiscal year], did this establishment experience losses as a result of theft, robbery, vandalism or arson? Yes No 2 Go TO QUESTION I.30 GO TO QUESTION I.30 i3				
Notes				
Indicator Updates				

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
[infor3] Percent of firms expressing that a typical firm reports less than 100% of sales for tax
purposes
Description
Percentage of firms expressing that a typical firm reports less than 100 percent of sales for tax purposes.
Survey Variable Used to Construct Indicator
Note that this question is no longer asked in the global roll out of the Enterprise Surveys.
Notes

Changes to ECA 2002 & 2005 surveys May 2, 2011 This indicator was out of date and had been removed from ES website May 29, 2014

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Indicator Updates

Informality				
[infor1] Perce	nt of firms competing against unregistered or informal firms			
Description				
	against unregistered or informal firms.			
Survey Variable Used to Constr	uct Indicator			
This indicator is created from the	variable E.11.			
E.11 Does this establish	nment compete against unregistered or informal firms?			
	Yes 1 No 2 Don't know (spontaneous) -9			
Notes				
Indicator Updates				

-									
- 1	NI	റ	n	7	K I	٩т	T	т١	7

[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 e30	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				

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.6a Was this establishment formally registered when it began operations?		
Yes 1 No 2 Don't know (spontaneous) -9		
Notes		
Indicator Updates		
Indicator Updates		

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**5 Don't know (spontaneous) -9 INTERVIEWER: PROVIDE FOUR DIGITS FOR YEAR B.6a Was this establishment formally registered when it began operations? Yes 2 No Don't know (spontaneous) -9 b6a B.6b In what year was this establishment formally registered? Year **Answer from** previous round Year establishment formally registered b6b Don't know (spontaneous) -9 Never registered (spontaneous) INTERVIEWER: PROVIDE FOUR DIGITS FOR YEAR. Notes **Indicator Updates**

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
[ge	nd1] Percent of firms with female participation in ownership
Description	
	females among the owners.
Survey Variable Used to	Construct Indicator
This indicator is created fr	om the variable B.4.
B.4 Amongst the	owners of the firm, are there any females?
	Yes 1
	No 2
	Don't know (spontaneous) -9
	b4
Notes	
Indicator Updates	
May 2, 2011	Changes to ECA 2002 & 2005 surveys
171GV 6. 6UII	Ghanges to ben 2002 & 2003 surveys

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.

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 8 or more hours per day) (INTERVIEWER: include interviewee if applicable).

	Number
Permanent, full-time workers end of last fiscal year	l1
Don't know (spontaneous)	-9

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 production workers	l5a	-9
Female permanent full-time non-production workers	l5b	-9

Notes

Indicator Updates	
	Outlier Program Change #1 affected outlier treatment on the variables 11,15a,
Summer 2009	15b
	Outlier Program Change #2 affected outlier treatment on the variables 11,15a,
November 18, 2010	15b

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]	13b	-9

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	15b	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variables l1, l5b
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variables l1, l5b
February 3, 2014	Replace l1 with l3b

Gend4] Percent of firms with a female top manager Description Percentage of firms with females as the top manager. Survey Variable Used to Construct Indicator This indicator is created from the variable B.7a. B.7a Is the Top Manager female? Yes 1 No 2 DON'T KNOW (SPONTANEOUS) -9 Notes
Description Percentage of firms with females as the top manager. Survey Variable Used to Construct Indicator This indicator is created from the variable B.7a. B.7a
Percentage of firms with females as the top manager. Survey Variable Used to Construct Indicator This indicator is created from the variable B.7a. B.7a
Percentage of firms with females as the top manager. Survey Variable Used to Construct Indicator This indicator is created from the variable B.7a. B.7a
This indicator is created from the variable B.7a. B.7a Is the Top Manager female? Yes 1 No 2 DON'T KNOW (SPONTANEOUS) -9 b7a
This indicator is created from the variable B.7a. B.7a Is the Top Manager female? Yes 1 No 2 DON'T KNOW (SPONTANEOUS) -9 b7a
Yes
Yes 1 No 2 DON'T KNOW (SPONTANEOUS) -9
Yes 1 No 2 DON'T KNOW (SPONTANEOUS) -9
No 2 DON'T KNOW (SPONTANEOUS) -9 b7a
DON'T KNOW (SPONTANEOUS) -9 b7a
b7a
Notes Services Servic
Notes Control of the
Indicator Updates
June 17, 2009 Indicator created

	Gender		
[gend5] Proportion (of permanent full-time produ	iction workers tha	t are female *
Description			
Percentage of permanent full-time	production workers that are fema	ale.	
Survey Variable Used to Construct	Indicator		
This indicator is created from the varia	able L.3a and L.5a.		
L.3 At the end of the last co	omplete fiscal year, how many perma	nent, full-time individua	als in this establishment were
		Number	Don't know (spontaneous)
Production workers		l3a	-9
	[insert last complete fiscal year], e following categories were female?		
		Number	Don't know (spontaneous)
Female permanent full-time pro-	duction workers	l5a	-9
Notes			
Indicator Updates			
February 3, 2014	Indicator created		

			Gender	_		_	
	ſ	gend6] Pe	rcent of firms with maj	ority	female owner	rship	
D 1.11							
Description Percentage of	firms with	majority fen	nale ownership				
2011, where B.	s created fro 3a (or equiva	m the variable	e B.4 and B.4a. Exceptions are for certain surveys) was used d to be majority female-owne	instea			
B.4 A	mongst the	owners of the	firm, are there any females?				
	N		(SPONTANEOUS)	1 2 -9	-		-
						b4	
B.4a W	hat percent	age of the firm	is owned by females?				
					Percentage		<u> </u>
		Percentage	of female ownership		b4a%		
		DON'T KNO	W (SPONTANEOUS)		-9		
		surveyed bet	ween 2009 and 2011]				
	A	ll men		1			
		ajority are me		2			
Majority are w			omen	3			
All women			4				
		between men and women	5				
Does not apply		у	-7				
	D	on't know		-9			-
						b3a	
Notes							
Indianta II.	latos						
Indicator Upd			T 1: 4				
August 20 20	15		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 or 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.

K.	.3	Over fiscal year [Insert last complete fiscal year], 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?
		SHOW CARD 17
		SHOW CARD 17

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

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	k5a %		k5a1	-9
Owners' contribution or issued new equity shares	k5i %		k5i1	-9
Borrowed from banks: private and state-owned	k5bc%		k5bc1	-9
Borrowed from non-bank financial institutions, which				-9
include microfinance institutions, credit cooperatives,	k5e %		k5e1	
credit unions, or finance companies				

		uppliers and advances from	k5f %	k5f1	-9
	stomers	de relativos hande etc	k5hdj%	k5hdj1	-9
Other, moneylenders, friends, relatives, bonds, etc.				n5a+n5b	-9
INT K.16		AT TOTAL SUMS TO 100% OF UNLESS RESPONDEN	IT DOES NO	TAL SUM EQUALS TO T KNOW	
N.10	apply for any loans or	last fiscal year [insert last collines of credit?	mpiete lisc	ai year], ald this estab	nsnment
	Yes		1	GO TO QUESTION K.20)
	No		2		
	DON'T KNOW	(SPONTANEOUS)	-9	GO TO QUESTION K.21	1
				k16	
K.17	SHOW CARD 18	eason why this establishment o			1
		need for a loan – establishmen			
		lication procedures were com	plex	2	
		rest rates were not favorable		3	1
		ateral requirements were too		4	1
		of loan and maturity were ins		5	
		not think it would be approve	α	6	
	Oth			7	1
	Doi	't know (spontaneous)		-9	4
				k17]
K.20	Referring only to this that application?	most recent application for a li	ine of credit	or loan, what was the	outcome of
	<u> </u>	11. 6.11		7	
	Application was a Application was a	* *	1 2	-	
	Application was a		3	1	
	Application was v	vithdrawn	4		
	APPLICATION ST		-6	4	
	DON'T KNOW (S	PUNTANEOUS)	-9	k20a1	
otes				RZUA1	
ndicator	Updates				
	2023	First released			
ine 26, 2		I II St I Cleaseu			

FINANCE

[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 appling (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

K.3	Over fiscal year [Insert last complete fiscal year], 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?
	SHOW CARD 17

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

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** DON'T KNOW OR Amount (SPONTANEOUS) Percent [Insert **LCUs** Internal funds or retained earnings **k5a**% k5a1 -9 Owners' contribution or issued new equity shares **k5i** % k5i1 -9 Borrowed from banks: private and state-owned k5bc% k5bc1 -9 Borrowed from non-bank financial institutions, which include microfinance institutions, credit cooperatives, **k5e** % k5e1 credit unions, or finance companies Purchases on credit from suppliers and advances from **k5f** % k5f1 -9 customers 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** In fiscal year [insert last complete fiscal year], did this establishment purchase any new or used **K.4** fixed assets, such as machinery, vehicles, equipment, land, or buildings? Yes 1 2 No **DON'T KNOW (SPONTANEOUS)** -9 k4 Referring again to the last fiscal year [insert last complete fiscal year], did this establishment **K.16** apply for any loans or lines of credit? **GO TO QUESTION K.20** Yes 1 2 DON'T KNOW (SPONTANEOUS) -9 **GO TO QUESTION K.21** k16 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 Application procedures were complex 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 Don't know (spontaneous) -9

k17

K.20	Referring only to this most recent application that application?	n for a line of cr	edit or loan, what was the outcome of
	Application was approved in full	1	1
	Application was approved in part	2	1
	Application was rejected	3	
	Application was withdrawn	4	
	APPLICATION STILL IN PROCESS	-6	
	DON'T KNOW (SPONTANEOUS)	-9	k20a1
Notos			
Notes			
Indicato	r Updates		

First released

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June 26, 2023

[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 tidd not apply, the reason for not appling (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.

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	GO TO Q	UESTION K.20	
No	2			
DON'T KNOW (SPONTANEOUS)	-9	GO TO Q	GO TO QUESTION K.21	
	•	k16		

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
Don't know (spontaneous)	-9
	k17

K.20	Referring only to this mo that application?	st recent application	for a line of c	redit or loan, what was the outcome of
	Application was approve	d in full	1	7
	Application was approve		2	1
	Application was rejected	•	3	1
	Application was withdray	vn	4]
	APPLICATION STILL IN PROCESS DON'T KNOW (SPONTANEOUS)		-6	
			-9	<u>] </u>
				k20a1
Notes				
Indicate	or Updates			
June 26,	2023	First released		

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FINANCE		
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.		
K.8 At this time, does this establishment have a line of credit or a loan from a financial institution?		
Yes 1 No 2 Bon't know (spontaneous) -9 GO TO QUESTION K.15d k8		
Notes		
Indicator Updates		

[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.

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

	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
	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	

[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.

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

	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
	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	



[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.

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

	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	k5f %	-9
Other, moneylenders, friends, relatives, bonds, etc		-9
	100%	

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

Notes

Indicator Updates		
May 2, 2011 <u>Changes to ECA 2002 & 2005 surveys</u>		

[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.

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

	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
	100%	

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

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u	N	u	и.	c.	R

Indicator Updates	
May 2, 2011	Changes to ECA 2002 & 2005 surveys

[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.

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

	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
	100%	

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	Changes to ECA 2002 & 2005 surveys
Aug.28.2014	This indicator was out of date and had been removed from ES website

[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.

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	k3a %	-9
Borrowed from banks: private and state-owned		-9
Borrowed from non-bank financial institutions which include microfinance		-9
institutions, credit cooperatives, credit unions, or finance companies		
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, etc.		-9
	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
May 29,2014	This indicator was out of date and had been removed from ES website

	FINANCE	
[fin7] Proportion of working capital financed by banks (%)		
Description		
Proportion of	the working capital that was financed by bank loans.	
Survey Variab	le Used to Construct Indicator	
This indicator is created from the variable K.3bc.		
K.3 0	Over fiscal year [insert last complete fiscal year], please estimate the proportion of this establishment's working	
C	apital that was financed from each of the following sources?	

	Percent	Don't know (spontaneous)
Internal funds or retained earnings		-9
Borrowed from banks: private and state-owned	k3bc %	-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
	100%	

INTERVIEWER: SHOW CARD 12

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

notes	
T 1: , TT 1 ,	
Indicator Updates	
May 2, 2011	Changes to ECA 2002 & 2005 surveys
May 2, 2011	Changes to ECA 2002 & 2005 surveys

	FINANCE	
[fin8] Proportion of working capital financed by supplier credit (%)		
Descriptio	n	
Proportion	n of the working capital that was financed by supplier credit and advances from customers.	
Survey Va	riable Used to Construct Indicator	
This indica	cor is created from the variable K.3f.	
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?	

	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		-9
institutions, credit cooperatives, credit unions, or finance companies		
Purchases on credit from suppliers and advances from customers	k3f %	-9
Other, moneylenders, friends, relatives, etc.		-9
	100%	

INTERVIEWER: SHOW CARD 12

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

Notes	
Indicator Updates	
May 2, 2011	Changes to ECA 2002 & 2005 surveys

Back to <u>List of Indicators</u>

[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.

	oportion 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	k3e %	-9
Purchases on credit from suppliers and advances from customers		-9
Other, moneylenders, friends, relatives, etc.	k3hd %	-9
	100%	

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

Notes

Indicator Updates		
May 2, 2011 <u>Changes to ECA 2002 & 2005 surveys</u>		
Aug 28, 2014 This indicator was out of date and had been removed from ES website		

[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	k3bc %	-9
Borrowed from non-bank financial institutions which include microfinance institutions, credit cooperatives, credit unions, or finance companies	k3e %	-9
Purchases on credit from suppliers and advances from customers	k3f %	-9
Other, moneylenders, friends, relatives, etc.	k3hd %	-9
	100%	

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

Notes

Indicator Updates		
May 2, 2011 <u>Changes to ECA 2002 & 2005 surveys</u>		
May 29, 2014 This indicator was out of date and had been removed from ES website		
1149 27, 2011	The majorite was or all the same and all	

[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

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

	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
	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	

	FINANCE		
[fin13] Percent of firms using banks to finance working capital			
Description	on		
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			
К.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?		

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

INTERVIEWER: SHOW CARD 12

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

Changes to ECA 2002 & 2005 surveys

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

K.3 Over fiscal year [insert last complete fiscal year], 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? SHOW CARD 18

	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
	100%	

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

Notes

Indicator Updates

June 26, 2017	First released
Julic 20, 2017	I II St I CICUSCU

[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.15, K.13, and K.8.

K.15 Referring only to this most recent line of credit or loan, what was the approximate value of the collateral required?

	LCUs
Value of collateral	k15a
Don't know (spontaneous)	-9

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

Yes	1	
No	2	GO TO QUESTION K.15b
DON'T KNOW (SPONTANEOUS)	-9	GO TO QUESTION K.15b
		k13

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

Yes	1	
No	2	GO TO QUESTION K.15d
DON'T KNOW (SPONTANEOUS)	-9	GO TO QUESTION K.15d
		k8

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variables k15
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variables k15
May 2, 2011	Changes to ECA 2002 & 2005 surveys

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. K.8 At this time, does this establishment have a line of credit or a loan from a financial institution? Yes 1 No 2 **GO TO QUESTION K.15d** -9 **GO TO QUESTION K.15d** Don't know (spontaneous) Referring only to this most recent loan or line of credit, did the financing require collateral? K.13 Yes 2 **GO TO QUESTION K.15b** No Don't know (spontaneous) **GO TO QUESTION K.15b** k13 Notes **Indicator Updates** Changes to ECA 2002 & 2005 surveys May 2, 2011

[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 k30	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		
[fin17] Pro	oportion of sales that are pre-	paid (%)	
escription			
ercentage of total annual sales of goods o	or services paid for before the deliv	ery.	
urvey Variable Used to Construct Indicat	tor		
his indicator is created from the variable K.2	(k2a). Only created for global surveys	before 2010.	
		Don't know	
	Percent	Don't know (spontaneous)	
Paid for before the delivery			
Paid for before the delivery		(spontaneous)	
Paid for before the delivery		(spontaneous)	
Paid for before the delivery		(spontaneous)	

Changes to ECA 2002 & 2005 surveys

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

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Indicator Updates

May 2, 2011 May 29, 2014

FINANCE					
[fin18] Proportion of sales sold on credit (%)					
Description					
	of total annual sales of	goods or service	s sold on credit.		
Survey Varia	able Used to Construct	Indicator			
This is disse-	r is created from the varia	phlo I/ 2			
inis indicator	r is created from the varia	ible K.Z			
K.2	In fiscal year [insert la goods or services were	_	l year], what percentage of	this establishment's tota	al annual sales of its
	goods of services were	paid for after defiv	ery?		
		Ē	Percent	Don't know (spontaneous)	
	Paid for after delive	ery?	K2c %	-9	
Notes					
Indicator Up	odates				
May 2, 2011		Changes to ECA	A 2002 & 2005 surveys		
Aug 28, 201	4	This indicator	was out of date and has	been removed from E	ES website.

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 **GO TO QUESTION K.20** No 2 DON'T KNOW (SPONTANEOUS) -9 GO TO QUESTION K.21 k16 **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 5 Size of loan and maturity were insufficient Did not think it would be approved 6 Other 7 Don't know (spontaneous) -9 k17 Notes **Indicator Updates**

Indicator Created

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May 1, 2012

FINANCE [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 **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 **GO TO QUESTION K.20** 2 No **DON'T KNOW (SPONTANEOUS)** -9 **GO TO QUESTION K.21** k16 K.20 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 Application was approved in part 2 Application was rejected 3 Application was withdrawn 4 **APPLICATION STILL IN PROCESS** -6 **DON'T KNOW (SPONTANEOUS)** -9 k20a1 Notes **Indicator Updates** April 17, 2012 **Indicator Created**

specific options on the loan application.

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June 26, 2017

Variable k20 was revised and replaced with k20a1, which provided more

	FINANCE			
[t2] Percent of firms with annual financial statement reviewed by external auditor				
Description				
Percentage o	f firms with their annual financial statement reviewed by an external auditor.			
Survey Varia	ble Used to Construct Indicator			
This indicator	is created from the variable K.21.			
K.21	In fiscal year [insert last complete fiscal year], did this establishment have its annual financial statements checked and certified by an external auditor?			
	Yes 1 No 2 Don't know (spontaneous) -9			
Notes				
Indicator Up	dates			
May 2, 2011	Changes to ECA 2002 & 2005 surveys			

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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.

[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

C.4 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?

	Days
Wait for electrical connection	c4
Less than one day	1
Still in process	-6
Application denied	-5
Don't know (spontaneous)	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable c4
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable c4
May 2, 2011	Changes to ECA 2002 & 2005 surveys

[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		
No	2	GO TO Q	UESTION C.10
Don't know (spontaneous)	-9	GO TO QUESTION C.10	
		с6	

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	c7
Don't know (spontaneous)	-9

IF 0, GO TO QUESTION C.10

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable c7
July 6, 2009	For Congo 2009 survey, replaced in 2 as missing if the number of power outages reported is over 150, or the duration is over 24 hours.
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable c7

Infrastructure [in16] Percent of firms experiencing electrical outages Description Percentage of firms that experienced power outages over the last complete fiscal year. Survey Variable Used to Construct Indicator This indicator is created from the variable C.6 **C.6** Over fiscal year [insert last complete fiscal year], did this establishment experience power outages? 2 DON'T KNOW (SPONTANEOUS) -9 с6 Notes **Indicator Updates** First released June 26, 2017

[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 [insert last complete fiscal year], how many power outages did this establishment experience?

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

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	с8а	c8b
LESS THAN ONE MINUTE		1
DON'T KNOW (SPONTANEOUS)	-9	-9

Notes

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

[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

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

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

Notes

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

[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 [insert last complete fiscal year], how many power outages did this establishment experience?

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

IF 0, GO TO QUESTION C.10

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

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

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable c7
August 20, 2009	Replace indicator in 15 as 720 if the answers are more than 720 hours.
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable c7

[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).

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

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?

No	2
DON'T KNOW (SPONTANEOUS)	-9

GO TO QUESTION C.10 GO TO QUESTION C.10

c6

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	c9a %
outages	
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	Outlier Program Change #1 affected outlier treatment on the variables d2, c9b
	Outlier Program Change #2 affected outlier treatment on the variables d2, c9a,
November 18, 2010	c9b
May 2, 2011	Changes to ECA 2002 & 2005 surveys

[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.

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

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

Notes

Summer 2009 Outlier Program Change #1 affected outlier treatment on the variable c1	
December 15, 2009	missing if c13 is larger than 180.
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable c13
May 29, 2014	This indicator was out of date and has been removed from ES website.

[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.

C.15 Over fiscal year [insert last complete fiscal year], did this establishment experience insufficient water supply for production?

Yes	1
No	2
The establishment does not use water for production	-7
DON'T KNOW (SPONTANEOUS)	-9

c15

C.16 In a typical month, over fiscal year [insert last complete fiscal year], how many incidents of insufficient water supply did this establishment experience?

	Number
Average number of incidents of water insufficiency per month	c16
Don't know (spontaneous)	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable c16
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable c16
	The indicator is updated to use c15 as a screener variable and the got corrected
	in following surveys: Afghanstan2014, Bangladesh2013, India2014, Nepal2013,
July 12, 2015	Pakistan2013, China2012, and Malawi2014.

Infrastructure [in17] Percent of firms experiencing water insufficiencies * Description Percentage of firms that experienced insufficient water supply for production over the last complete fiscal year. Survey Variable Used to Construct Indicator This indicator is created from the variable C.15 C.15 Over fiscal year [insert last complete fiscal year], did this establishment experience insufficient water supply for production? Yes 1 2 The establishment does not use water for production -7 **DON'T KNOW (SPONTANEOUS)** -9 c15 Notes **Indicator Updates** First released June 26, 2017

[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

C.16 In a typical month, over fiscal year [insert last complete fiscal year], how many incidents of insufficient water supply did this establishment experience?

	Number
Average number of incidents of water insufficiency per month	c16
Don't know (spontaneous)	-9

IF 0, GO TO QUESTION C.18

C.17 How long did these incidents of insufficient water supply last on average?

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

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable c16
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable c16
May 2, 2011	Changes to ECA 2002 & 2005 surveys
May 29, 2014	This indicator was out of date and had been removed from ES website

[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

C.17 How long did these incidents of insufficient water supply last on average?

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

Notes

Indicator Updates					
May 2, 2011	Changes to ECA 2002 & 2005 surveys				
May 29, 2014	This indicator was out of date and had been removed from ES website				

[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.

C.20 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	c20
Less than one day	1
Still in process	-6
Application denied	-5
Don't know (spontaneous)	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 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	Outlier Program Change #2 affected outlier treatment on the variable c20
May 2, 2011	Changes to ECA 2002 & 2005 surveys
May 29, 2014	This indicator was out of date and had been removed from ES website

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 No 2 GO TO QUESTION C.12 Don't know (spontaneous) -9 GO TO QUESTION C.12 c10 c10						
Notes						
Indicator Updates						

[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	1
No	2	GO TO QUESTION C.12
Don't know (spontaneous)	-9	GO TO QUESTION C.12
		c10

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	c11 %
Don't know (spontaneous)	-9

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 in 10 as zero if the establishment did not own or share a generator.
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable c11

-									
_	NI	FR	Λ 6	CT	וחי	T T	CTI	ID	_

[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

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	c11 %
Don't know (spontaneous)	-9

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	Outlier Program Change #2 affected outlier treatment on the variable c11

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.

D.30	Using the response options on the card; To what degree is Transport an obstacle to the current operations of this
	establishment? SHOW CARD 8

Using the response options on the card; To what degree is **Customs and Trade Regulation** an obstacle to the current operations of this establishment? **SHOW CARD 8**

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Don't Know (spontaneous)	Does Not Apply (spontaneous)
Transport d30a	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

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.

C.30	Using the response options on the card; To what degree is Electricity an obstacle to the current operations of this
	establishment? SHOW CARD 4

Using the response options on the card; To what degree is **Telecommunications** an obstacle to the current operations of this establishment? **SHOW CARD 4**

	No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Don't Know (spontaneous)	Does Not Apply (spontaneous)
Electricity c30a	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

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 spoils	age.		
Survey Variable Used to Construct Indicator			
This indicator is created from the variables D.11.			
D.11 In fiscal year [insert last complete fiscal year], what percentage of value of product supply domestic markets was lost while in transit because of breakage or spoilage?	s this establishment shipped to		
supply domestic markets was lost withe in transit because of breakage of sponage:			
	Percent		
Losses due to breakage or spoilage as percentage of the value of the products	d11 %		
No losses	0		
Don't know (spontaneous)	-9		
No internal shipments made	-7		
Notes			
Indicator Updates			

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 of 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. 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 working 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.

[mgmt1] Management practices index

Description

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:

$$mgmt1_i = \frac{\sum_{j=2}^{9} mgmtj_i}{8}$$

where $mgmtj_i = [0,100]$ is management practice j (2 through 9) by business i, 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.

Survey Variable Used to Construct Indicator

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.

Notes

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

[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.

R.1 ASK IF MANUFACTURING

Over fiscal year [Insert last complete fiscal year], what best describes what happened at this establishment when a problem in the production process arose?

ASK IF SERVICES

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?

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
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

r1

Notes

Indicator Updates	
May 15, 2023	First released

[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. R.2 Over fiscal year [Insert last complete fiscal year], did this establishment monitor any performance indicators? Yes No 2 DON'T KNOW (SPONTANEOUS) r2 R.3 How many performance indicators were monitored? 1-2 indicators 2 3-9 indicators 10 or more indicators 3 DON'T KNOW (SPONTANEOUS) -9 r3 Notes **Indicator Updates** May 15, 2023 First released

[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.

R.4 ASK IF MANUFACTURING

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.

ASK IF SERVICES

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
DON'T KNOW (SPONTANEOUS)	-9

r4

R.5 ASK IF MANUFACTURING

What best describes the time frame of those production targets?

ASK IF SERVICES

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
DON'T KNOW (SPONTANEOUS)	-9

r5

Notes

Indicator Updates

marcator opaates	
May 15, 2023	First released

[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 (r6=1). 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.

R.4 ASK IF MANUFACTURING

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.

ASK IF SERVICES

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
DON'T KNOW (SPONTANEOUS)	-9

r4

R.6 ASK IF MANUFACTURING

How easy or difficult was it for this establishment to achieve those production targets overall?

ASK IF SERVICES

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
DON'T KNOW (SPONTANEOUS)	-9

r6

Notes

Indicator Updates

May 15, 2023 First released

[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.

R.4 ASK IF MANUFACTURING

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.

ASK IF SERVICES

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
DON'T KNOW (SPONTANEOUS)	-9

r4

R.7 ASK IF MANUFACTURING

Who was aware of the production targets at this establishment?

ACK IE CEDVICE

Who was aware of the service provision targets at this establishment?

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
DON'T KNOW (SPONTANEOUS)	-9

r7

Notes

Indicator Updates

May 15, 2023	First released

[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. **R.8** Over fiscal year [Insert last complete fiscal year], did this establishment have performance bonuses for managers? Yes No 2 **DON'T KNOW (SPONTANEOUS)** -9 R.9 What were those managers' performance bonuses mostly based on? Their own performance 2 Their team's performance The establishment's performance 3 The firm's performance 4 **DON'T KNOW (SPONTANEOUS)** -9 r9 Notes **Indicator Updates** May 15, 2023 First released

[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.

R.10	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	2
example, tenure or family connections)	
Based mainly on factors other than performance and ability (for example,	3
tenure or family connections)	
Non-managers are not normally promoted	4
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

r10

Notes

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

[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.

R.11	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
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

r11

Notes

Indicator Updates	
May 15, 2023	First released

INNOVATION AND TECHNOLOGY

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.

INNOVATION AND TECHNOLOGY [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.8** Does this establishment have an internationally-recognized quality certification? (INTERVIEWER: if there is need for clarification, some examples are: ISO 9000 or 14000, or HAPC) Yes 1 No 2 **Still in process** -6 Don't know (spontaneous) -9 **b8** Notes **Indicator Updates** May 2, 2011 Changes to ECA 2002 & 2005 surveys

		Innovation and Technology
[t4] Percent of firms using technology licensed from foreign companies*		
Description	1	
		nology licensed from foreign companies.
Survey Var	iable Used to Const	ruct Indicator
This indicate	or is created from the	
E.6	Does this establish software?	hment at present use technology licensed from a foreign-owned company, excluding offic
		Yes 1
		No 2
		Don't know (spontaneous) -9
		<u>e6</u>
Notes		
T 1: , TI	r 1 ,	
Indicator U	_	W. C. J.
Apr.29.201	4	Manufacturing only

	Innovation and Technology		
[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 variation of the present time, does the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, does not be a second of the present time, and the present time, does not be a second of the present time, and the present t	es this establishment use its own website?		
Notes			
Indicator Updates			
May 2, 2011	Changes to ECA 2002 & 2005 surveys		

INNOVATION AND TECHNOLOGY [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. C.22a At the present time, does this establishment use e-mail to communicate with clients or suppliers? Yes No 2 Don't know (spontaneous) -9 c22a Notes **Indicator Updates** Changes to ECA 2002 & 2005 surveys May 2, 2011

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

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 During the last three years, has this establishment introduced new or significantly improved products or services? H.1 Yes No 2 **GO TO QUESTION H.5** DON'T KNOW (SPONTANEOUS) -9 **GO TO QUESTION H.5 H.2** Were any of the new or significantly improved products or services also new for the establishment's main market? Yes No 2 DON'T KNOW (SPONTANEOUS) -9 h2 Notes **Indicator Updates** June 26, 2017 First released

Innovation and Technology			
	[t9] Percent of firms that introduced a process innovation		
D			
Description	of firms that introduced any new or significantly improved process.		
rercentage	of firms that introduced any new of significantly improved process.		
Survey Vari	iable Used to Construct Indicator		
This indicate	or is created from the variable H.5		
Н.5	During the last three years, has this establishment introduced any new or significantly improved process? These include: methods of manufacturing products or offering services; logistics, delivery, or distribution methods for inputs, products, or services; or supporting activities for processes? Yes No 2 DON'T KNOW (SPONTANEOUS) h5		
Notes			
Indicator Updates			
June 26, 20	17 First released		

	Innovation and Technology	
	[t10] Percent of firms that spend on R&D	
Description		
Percentage of firms that spent on the	formal research and development activities during the last fiscal year.	
Survey Variable Used to Construct	Indicator	
This indicator is created from the vari	able H.8	
H.8 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?		
Г	Yes 1	
	No 2	
L	DON'T KNOW (SPONTANEOUS) -9 h8	
Notes		
Indicator Updates		
June 26, 2017	First released	
January 30, 2023	The indicator is restricted to establishments with 20 or more employees	

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

D.4 In fiscal year [insert last complete fiscal year], when this establishment exported goods directly, how many days did it take on average from the time this establishment's goods arrived at their main point of exit (e.g., port, airport) until the time these goods cleared customs?

	Days
Average number of days to clear customs	d4
Less than one day	1
Don't know (spontaneous)	-9

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable d4
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable d4
May 2, 2011	Changes to ECA 2002 & 2005 surveys

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[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.

D.14 In fiscal year [insert last complete fiscal year], 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	d14
Less than one day	1
Don't know (spontaneous)	-9

Notes

Indicator Updates		
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable d14	
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable d14	
May 2, 2011	Changes to ECA 2002 & 2005 surveys	

_	Trade				
	[tr4] Propor	tion of total sa	les that are dom	estic sales (%)	
Description	n				
	sales as percentage of total s	ales.			
Survey Var	riable Used to Construct Indi	cator			
This indicat	or is created from the variable	D.3a.			
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 sa		d3a %	-9	IF 100, GO TO QUESTION D.10	
Indirect exports (sold domestically to third		rd	-9	IF 100, GO TO QUESTION D.8	
party that exports products) Direct exports			-9	IF 0, GO TO QUESTION D.8	
<u> </u>		100%			
			THAT TOTAL SUMS DENT DOES NOT KNO		
	•	ONLESS REST ONE	ENT DOES NOT KIN	· · · · · · · · · · · · · · · · · · ·	
Notes					
Notes					
Indicator U	Indicator Updates				
May 2, 201	L1 Ch	anges to ECA 200	02 & 2005 surveys		

TRADE				
	[tr5] Proporti	on of total sale	es that are expor	ted directly (%)
Description	n			
	rted directly as percentage o	of total sales.		
Survey Var	riable Used to Construct Indi	cator		
barvey var	Table obea to donot act ma	cator		
This indicat	or 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 sal	les		-9	IF 100, GO TO QUESTION D.10
_	ports (sold domestically to thi	rd	-9	IF 100, GO TO QUESTION D.8
party that exports products) Direct exports		d3c%	-9	IF 0, GO TO QUESTION D.8
Direct exports		100%		11 0, 40 10 402011011 210
			THAT TOTAL SUMS	
	(UNLESS RESPOND	DENT DOES NOT KNO	OW)
Notes				
Indicator U	Indicator Updates			
May 2, 201	May 2, 2011 <u>Changes to ECA 2002 & 2005 surveys</u>			

		Ţ	Γrade	
	[tr6] Proporti	on of total sales	s that are export	ed indirectly (%)
Description	on			
	orted indirectly as percentag	e of total sales.		
Survey Va	ariable Used to Construct Ind	icator		
This indica	ntor is created from the variable	D.3b.		
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 Indirect exports (sold domestically to third party that exports products)			-9	IF 100, GO TO QUESTION D.10
		ird d3b%	-9	IF 100, GO TO QUESTION D.8
Direct exports			-9	IF 0, GO TO QUESTION D.8
		100%		_
			THAT TOTAL SUMS TOTAL SUMS	
Notes				
HOLES				
Indicator	Updates			
May 2, 20	11 <u>C</u>	nanges to ECA 200	02 & 2005 surveys	
·				

		ΓRADE	
[tr15] Percent of f	irms expor	ting directly (at	least 1% of sales)
Description			
Percentage of Firms that Export Directly.			
Survey Variable Used to Construct Indicato	or		
•			
This indicator is created from the variable D.3c.			
D.3 In fiscal year [insert last comple	ete fiscal vear	1 what percentage of	this establishment's sales were
(INTERVIEWER: these must be			
SHOW CARD 6			
г		Don't know	1
	Percent		
	Percent	(spontaneous)	
National sales	Percent	(spontaneous)	IF 100, GO TO QUESTION D.10
National sales Indirect exports (sold domestically to third	Percent		
Indirect exports (sold domestically to third party that exports products)		-9	IF 100, GO TO QUESTION D.8
Indirect exports (sold domestically to third party that exports products)	d3c %	-9	
Indirect exports (sold domestically to third party that exports products) Direct exports	d3c % 100%	-9 -9 -9	IF 100, GO TO QUESTION D.8 IF 0, GO TO QUESTION D.8
Indirect exports (sold domestically to third party that exports products) Direct exports INTERVIE	d3c % 100% WER: CHECK T	-9 -9 -9 THAT TOTAL SUMS	IF 100, GO TO QUESTION D.8 IF 0, GO TO QUESTION D.8 TO 100%
Indirect exports (sold domestically to third party that exports products) Direct exports INTERVIE	d3c % 100% WER: CHECK T	-9 -9 -9	IF 100, GO TO QUESTION D.8 IF 0, GO TO QUESTION D.8 TO 100%
Indirect exports (sold domestically to third party that exports products) Direct exports INTERVIE	d3c % 100% WER: CHECK T	-9 -9 -9 THAT TOTAL SUMS	IF 100, GO TO QUESTION D.8 IF 0, GO TO QUESTION D.8 TO 100%
Indirect exports (sold domestically to third party that exports products) Direct exports INTERVIE	d3c % 100% WER: CHECK T	-9 -9 -9 THAT TOTAL SUMS	IF 100, GO TO QUESTION D.8 IF 0, GO TO QUESTION D.8 TO 100%

	Indicator Updates	licator Updates			
	July 29, 2009	Indicator Created.			
May 2, 2011		Changes to ECA 2002 & 2005 surveys			
	11ay 2) 2011	Ghange to Bar 2002 at 2000 bar ve jo			

7	'n	ว	d	6

[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.

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)		-9
Direct exports	d3c %	-9
	100%	

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

Notes

Indicator Updates		
	June 26, 2017	First released

		ŗ	ΓRADE	
	[tr10] Percent of firms	exporting di	rectly or indirec	tly (at least 1% of sales)
Description	on			
	ge of firms that export directly	or indirectly.		
Survey Va	riable Used to Construct Indica	ator		
This indica	tor is created from the variables I	0.3b and D.3c.		
D.3	In fiscal year [insert last com (INTERVIEWER: these must SHOW CARD 6	-		this establishment's sales were: n the table)
		Percent	Don't know (spontaneous)	
National sa	ales		-9	IF 100, GO TO QUESTION D.10
	sports (sold domestically to third exports products)	d3b %	-9	IF 100, GO TO QUESTION D.8
Direct exp	orts	d3c %	-9	IF 0, GO TO QUESTION D.8
		100%]	
(UNLESS F	RESPONDENT DOES NOT KNOW)		THAT TOTAL SUMS	10 100%
Notes				
Indicator	Updates			
Indicator May 2, 20	-	nges to ECA 200	02 & 2005 surveys	

_	_			
М	'n	••	10	6

[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)	d3b %	-9
Direct exports	d3c %	-9
	100%	

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

Notes

Indicator Updates	
June 26, 2017	First released

			Trade		
	[tr7] Proportio	on of tota		re of domestic	origin (%)*
Description	1				
	of material inputs and/or	supplies of	f domestic origin		
Survey Var	iable Used to Construct Ind	licator			
	or is created from the variable				
D.12	In fiscal year [insert last c year, what percentage of th	-	•	-	erial inputs or supplies purchased the re: SHOW CARD 7
		Γ	Percent	Don't know (spontaneous)	
	s or supplies of domestic origin	n	d12a %	-9	
aterial inputs	s or supplies of foreign origin		100%	-9	IF 0, GO TO QUESTION D.16
			CHECK THAT TOT ESPONDENT DOE	CAL SUMS TO 100% S NOT KNOW)	6
Notes					
Indicator U	pdates				
May 2, 201	1	Changes to	ECA 2002 & 200	<u>)5 surveys</u>	

		Trade		
	[tr8] Proportio	n of total inputs that	are of foreign	origin (%)*
Descriptio	on			
Percentag	e of material inputs and/or su	applies of foreign origin.		
Survey Va	riable Used to Construct Indic	cator		
This indica	tor is created from the variable I).12b.		
D.12	In fiscal year [insert last co year, what percentage of this	•	•	terial inputs or supplies purchased that ere: SHOW CARD 7
		Percent	Don't know (spontaneous)	
	ts or supplies of domestic origin		-9	
aterial input	ts or supplies of foreign origin	d12b %	-9	IF 0, GO TO QUESTION D.16
		VIEWER: CHECK THAT TO JNLESS RESPONDENT DO		%
Notes				
Indicator l	Updates			
May 2, 201	11 <u>C</u> l	hanges to ECA 2002 & 20	005 surveys	
<u> </u>				

			Trade		
	[tr11] Percent of firm	s using n	naterial inputs	and/or supplie	es of foreign origin*
Descriptio	n				
	e of firms that use material	inputs and	d/or supplies of f	oreign origin.	
Survey Va	riable Used to Construct In	dicator			
This indica	tor is created from the variabl	e D.12b.			
D.12	In fiscal year [insert last year, what percentage of the	_		-	erial inputs or supplies purchased that re: SHOW CARD 7
			Percent	Don't know (spontaneous)	
	ts or supplies of domestic orig			-9	
Iaterial input	ts or supplies of foreign origin		d12b %	-9	IF 0, GO TO QUESTION D.16
	INTE			FAL SUMS TO 100% S NOT KNOW)	6
Notes					
Indicator l	Updates				
May 2, 201	11	Changes t	o ECA 2002 & 20	05 surveys	

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.

D.30 Using the response options on the card; To what degree is **Transport** an obstacle to the current operations of this establishment? **SHOW CARD 8**

Using the response options on the card; To what degree is **Customs and Trade Regulation** an obstacle to the current operations of this establishment? **SHOW CARD 8**

		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 regulations d30b	trade	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

		TRADE		
		[tr14] Days of inventory of m	nain input*	
Descripti	ion			
	nventory of the mo	st important input.		
Survey V	ariable Used to Cor	struct Indicator		
This indic	ator is created from t	he variable D.16.		
D.16	days of inventor	ime, when this establishment receives deliver y, measured in days of production, does this e the if respondent requires clarification, defined	establishment keep?	
	Days of i	nventory of most important input	Days d16	
	Don't kn	now (spontaneous)	-9	
Notes				
Indicator	· Updates			
May 2, 20	-	Changes to ECA 2002 & 2005 su:	rveys	
June 26,		Variable d16 is no longer include removed from the website.		ire and has been

		Trade	
	[tr12] I	Products exported directly lost due to th	eft (%)
Descripti	on		
		iternational markets while in transit because of	f theft (computed as percentage of
	gnment values).	ter national markets wille in transit because of	t there (compared as percentage or
	ariable Used to Construct	Indicator	
	ator is created from the varia		
D.6	In fiscal year [insert last lost while in transit bec	st complete fiscal year], what percentage of the valuates of theft?	ue of the products exported directly wa
			Percent
	Losses due to theft as p	ercentage of the value of the products	d6 %
	No losses		0
	Don't know (spontane	eous)	-9
Notes			
Indicator	Updates		
May 29, 2	•	This indicator was out of date and had been r	amoved from ES website
1 viay 43, 4	UIT	ims mulcator was out of date and had been i	cmoved from E3 website

	5.401D 1	11 (0/)
	[tr13] Products exported directly lost due to breakage or sp	oilage (%)
Descriptio	on	
	he products shipped to international markets while in transit due to breakage ge of the consignment values.	e or spoilage, computed a
urvey Va	ariable Used to Construct Indicator	
	lost while in transit because of breakage or spoilage?	
		Percent
Lo	esses due to breakage or spoilage as percentage of the value of the products	Percent d7 %
	sses due to breakage or spoilage as percentage of the value of the products blosses	

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

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 offeri	ng formal training programs for its permanent, full-time employees.		
Survey Variable Used to (Construct Indicator		
This indicator is created from	m the variable L.10.		
L.10 Over fiscal ye full-time empl	ar [insert last complete fiscal year], did this establishment have formal training programs for its permanent, oyees?		
Yes No Don	1		
Notes			
Indicator Updates			
May 2, 2011	May 2, 2011 <u>Changes to ECA 2002 & 2005 surveys</u>		

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.

At the end of fiscal year [insert last complete fiscal year], how many permanent, full-time individuals worked in th establishment? Please include all employees and managers (Permanent, full-time employees are defined as all pai 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	11
Don't know (spontaneous)	-9

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	l3a	-9
Non-production workers [e.g., managers, administration, sales]	13b	-9

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	l11a %		l11a1	0	-9
Non-production full-time permanent employees trained	l11b %		l11b1	0	-9

Notes

Indicator Updates	
	Outlier Program Change #1 affected outlier treatment on the variables l1,
Summer 2009	13a, 13b
	Outlier Program Change #2 affected outlier treatment on the variables l1,
November 18, 2010	13a, 13b

	Workforce			
[wk8] Years	[wk8] Years of the top manager's experience working in the firm's sector			
D				
Description Veges of experience of the ten	manager working in the sector.			
Survey Variable Used to Const	ruct Indicator			
This indicator is created from the	variable B.7.			
B.7 How many years o	f experience working in this sector does the	Гор Manager have?		
	Manager's experience in sector Less than one year Don't know (spontaneous)	Years b7 1 -9		
Notes				
Indicator Updates				

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 L8. 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 INTERVIWEE IF APPLICABLE). Number Permanent, full-time workers end of last fiscal year **DON'T KNOW (SPONTANEOUS)** -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 16 fiscal year NO FULL-TIME SEASONAL OR TEMPORARY 0 GO TO QUESTION L.9b **WORKERS** -9 **DON'T KNOW (SPONTANEOUS)** GO TO QUESTION L.9b 1.8 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 18 fiscal year, in months LESS THAN ONE MONTH **DON'T KNOW (SPONTANEOUS)** _9 Notes

First released

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Indicator Updates

August 7, 2017

	Workforce				
	[wk12]	Number of permanent full time wo	rkers		
Descriptio	on .				
	umber of permanent, full tim	ne workers.			
Survey Va	riable Used to Construct Indi	icator			
This indicat	tor is created from the variable	L.1.			
L.1	this establishment? Please in (Permanent, full-time emplo	sert last complete fiscal year], how many penclude all employees and managers by easy are defined as all paid employees that a paranteed renewal of their employment contrasterviewee if applicable).	are contracted for a ter	rm of one or more	
			Number		
	Don't know (spontan	vorkers end of last fiscal year	-9		
	· ·	,	JLJ		
Notes					
Notes					
Indicator I	Updates				
Summer 2	009	Outlier Program Change #1 affected ou	tlier treatment on the	e variable l1	
November	18, 2010	Outlier Program Change #2 affected out	tlier treatment on the	e variable l1	
May 2, 201	11	Changes to ECA 2002 & 2005 surveys			

		Workforce		
	[wk1	1] Number of tempo	orary workers	
Descript	ion			
	number of temporary workers.			
Survey V	ariable Used to Construct Indica	tor		
This indic	cator is created from the variable L.6	ö.		
L.6	fiscal year]?	are all short-term (i.e. for		mploy during [insert last complete loyees with no guarantee of renewa
Full-tir	ne seasonal or temporary workers e	employed last fiscal year	Number 16	
	LL-TIME SEASONAL OR TEMPORA		0	GO TO QUESTION L.9b
DON'T	'KNOW (SPONTANEOUS)		-9	GO TO QUESTION L.9b
Notes				
Indicato	r Updates			
Summer	2009	<u>Outlier Program Change</u>	#1 affected outlier t	treatment on the variable l6
		Outlier Program Change		

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 L8. 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 INTERVIWEE IF APPLICABLE).

	Number
Permanent, full-time workers end of last fiscal year	11
DON'T KNOW (SPONTANEOUS)	-9

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	16
fiscal year	
NO FULL-TIME SEASONAL OR TEMPORARY	0
WORKERS	
DON'T KNOW (SPONTANEOUS)	-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	18
fiscal year, in months	
LESS THAN ONE MONTH	1
DON'T KNOW (SPONTANEOUS)	-9

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 L8. Note that it is calculated only if both the number of permanent and the number of temporary workers are available.

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 INTERVIWEE IF APPLICABLE).

	Number
Permanent, full-time workers end of last fiscal year	11
DON'T KNOW (SPONTANEOUS)	-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	16
fiscal year	
NO FULL-TIME SEASONAL OR TEMPORARY	0
WORKERS	
DON'T KNOW (SPONTANEOUS)	-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	18
fiscal year, in months	
LESS THAN ONE MONTH	1
DON'T KNOW (SPONTANEOUS)	-9

Notes

Indicator Updates

	August 7, 2017	First released
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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. At the end of fiscal year [insert last complete fiscal year], how many permanent, full-time individuals in this L.3 establishment were: INTERVIEWER: READ EACH CATEGORY Number Don't know (spontaneous) Production workers l3a Non-production workers [e.g., managers, administration, sales] -9 Notes **Indicator Updates**

Changes to ECA 2002 & 2005 surveys

Back to List of Indicators

Summer 2009

May 2, 2011

November 18, 2010

Outlier Program Change #1 affected outlier treatment on the variable l3a

Outlier Program Change #2 affected outlier treatment on the variable 13a

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 l3b -9 Non-production workers [e.g., managers, administration, sales] Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable l3b
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable l3b
May 2, 2011	Changes to ECA 2002 & 2005 surveys

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.

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	13a	-9
Non-production workers [e.g., managers, administration, sales]	13b	-9

Notes

Indicator Updates	
August 7, 2017	First released

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.

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	13a	-9
Non-production workers [e.g., managers, administration, sales]	13b	-9

Notes

Indicator Updates	
August 7, 2017	First released

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.

L.4 At the end of fiscal year [insert last complete fiscal year], how many permanent, full-time individuals working i this establishment were: INTERVIEWER: READ EACH CATEGORY

	Number	DON'T KNOW
		(SPONTANEOUS)
Workers in highly skilled production jobs, professionals whose	l4a1	-9
tasks require extensive theoretical and technical knowledge		
Workers in semi-skilled production jobs, technicians whose tasks	l4a2	-9
require some level of mechanical or technical knowledge		
Workers in unskilled production jobs, whose tasks involve no		
specialized knowledge		

Notes

Indicator Updates	
Summer 2009	Outlier Program Change #1 affected outlier treatment on the variable l4a
November 18, 2010	Outlier Program Change #2 affected outlier treatment on the variable 14a
May 2, 2011	Changes to ECA 2002 & 2005 surveys
June 26, 2017	Options for l4 were broken into additional categories.

		Workforce		
	[wł	4] Number of unskilled prod	uction workers *	5
Description	1			
Average nu	ımber of unskilled pro	duction workers.		
Survey Var	iable Used to Construc	ct Indicator		
This indicate	or is created from the va	riable L.4b.		
L.4	At the end of fiscal ye	ear [insert last complete fiscal year]	, how many permane	nt, full-time individuals working i
	this establishment we	ere: INTERVIEWER: READ EACH CATI	EGORY	
			Number	DON'T KNOW (SPONTANEOUS)
Workers	s in highly skilled produc	tion jobs, professionals whose	1	
tasks red	quire extensive theoretic	al and technical knowledge		
Workers	s in semi-skilled producti	on jobs, technicians whose tasks		
require :	some level of mechanical	or technical knowledge		
Workers	s in unskilled production	jobs, whose tasks involve no	l4b	-9
specializ	zed knowledge			
Notes				
Notes				
Indicator U	Indates			
Summer 20	-	Outlier Program Change #1 affe	cted outlier treatm	ent on the variable 14h
November		Outlier Program Change #2 affe		
May 2, 201		Changes to ECA 2002 & 2005 su		one on the variable 110

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.

At the end of fiscal year [insert last complete fiscal year], how many permanent, full-time individuals working in this establishment were: INTERVIEWER: READ EACH CATEGORY

	Number	DON'T KNOW (SPONTANEOUS)
Workers in highly skilled production jobs, professionals whose	l4a1	-9
tasks require extensive theoretical and technical knowledge		
Workers in semi-skilled production jobs, technicians whose tasks	14a2	-9
require some level of mechanical or technical knowledge		
Workers in unskilled production jobs, whose tasks involve no	14b	-9
specialized knowledge		

Notes

Indicator Updates

August 7, 2017 First released

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.

At the end of fiscal year [insert last complete fiscal year], how many permanent, full-time individuals working i L.4 this establishment were: INTERVIEWER: READ EACH CATEGORY

	Number	DON'T KNOW (SPONTANEOUS)
Workers in highly skilled production jobs, professionals whose	14a1	-9
	1441	-9
tasks require extensive theoretical and technical knowledge		
Workers in semi-skilled production jobs, technicians whose tasks	14a2	-9
require some level of mechanical or technical knowledge		
Workers in unskilled production jobs, whose tasks involve no	l4b	-9
specialized knowledge		

Notes

Indicator Updates	
	Outlier Program Change #1 affected outlier treatment on the variables 14a
Summer 2009	and l4b
	Outlier Program Change #2 affected outlier treatment on the variables 14a
November 18, 2010	and l4b
May 2, 2011	Changes to ECA 2002 & 2005 surveys
J, 2017	Options for l4 were broken into additional categories.

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.

L.30 Using the response options on the card; To what degree are **Labor Regulations** an obstacle to the current operations of this establishment?

Using the response options on the card; To what degree is **an Inadequately Educated Workforce** an obstacle to the current operations of this establishment? **INTERVIEWER: SHOW CARD 22**

		No obstacle	Minor obstacle	Moderate obstacle	Major obstacle	Very Severe Obstacle	Do Not Know (spontaneous)	Does Not Apply (spontaneous)
Labor 130a	regulations	0	1	2	3	4	-9	-7
Inadequately workforce	educated	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

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 L.30b.

L.30	Using the response options on the card; To what degree are Labor Regulations an obstacle to the current operations
	of this establishment?

Using the response options on the card; To what degree is **an Inadequately Educated Workforce** an obstacle to the current operations of this establishment? **INTERVIEWER: SHOW CARD 22**

		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 workforce l30b	educated	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

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.

			The section of the se			
			FIRM CHARACTERISTICS			
			[car1] Age (years)			
Description						
Age of the firm l	ased	on the year in wh	ich the firm began operations.			
Survey Variable	Used	to Construct India	cator			
This indicator is o	reated	d from the variables	B.5.			
B.5 In	wha	at year did this e	stablishment begin operations in t	this country?		
				Year	1	
	Γ	Year establishm	ent began operations	b5	1	
	L	INTERVI	EWER: PROVIDE FOUR DIGITS F	OR YEAR		
Notes						
Indicator Updat	00					
June 30, 2009	ES		Adjustment: car1 takes only values	loss than 100		
june 30, 2009			Adjustment: car1 can take on any v imposed June 30, 2009. However,	ralues thus reversir car1 is now subject	to outliers remov	
February 28, 20	whereby the variable is log-transformed and then trimmed at plus and bruary 28, 2011 minus 3 standard deviations from the mean for each survey.					

		FIRM CHARACTERISTICS	
	[car2] Prop	ortion of private domestic owners	hip in a firm (%)
Description	1		
Percentage	of the firm owned by do	omestic individuals, companies or organ	izations.
Survey Var	iable Used to Construct	Indicator	
	or is created from the varia		
B.2	What percent of this f	irm is owned by each of the following: INTERVIEWER: SHOW CARD 2	
		individuals, companies or organizations adividuals, companies or organizations te	Percent b2a %
	IN	TERVIEWER: CHECK THAT TOTAL SUMS T	TO 100%
Notes			
Indicator U	Indates		
	r		
May 2, 201	1	Changes to ECA 2002 & 2005 surveys	

		FIRM CHARACTERISTICS	
	[car3] Proj	oortion of private foreign ownership in a	ı firm (%)
Description			
		reign individuals, companies or organizations.	
Survey Varia	able Used to Construct	Indicator	
This indicato	r is created from the varia	bles B.2b.	
B.2	What percent of this f	irm is owned by each of the following: INTERVIEWER: SHOW CARD 2	
		individuals, companies or organizations adividuals, companies or organizations te	Percent b2b %
		TERVIEWER: CHECK THAT TOTAL SUMS TO 100%	100%
Notes			
Indicator Up	odates		
		Changes to ECA 2002 & 2005 surveys	

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.2** What percent of this firm is owned by each of the following: **INTERVIEWER: SHOW CARD 2** Percent a. Private domestic individuals, companies or organizations b. Private foreign individuals, companies or organizations **b2c** % c. Government/State d. Other 100% **INTERVIEWER: CHECK THAT TOTAL SUMS TO 100%** Notes **Indicator Updates** Changes to ECA 2002 & 2005 surveys May 2, 2011

FIRM CHARACTERISTICS [car5] Proportion of other ownership in a firm (%)				
•	owned by other interests.			
Survey Variable Used t	to Construct Indicator			
This indicator is created				
B.2 What po	ercent of this firm is owned by each of the following: INTERVIEWER: SHOW CARD 2			
	vate domestic individuals, companies or organizations	Percent		
b. Private foreign individuals, companies or organizations c. Government/State				
d. Other		b2d %		
	INTERVIEWER: CHECK THAT TOTAL SUMS T	0 100%		
Notes				
Indicator Updates				
May 2, 2011	Changes to ECA 2002 & 2005 surveys			
May 29, 2014	This indicator was out of date and had been removed from ES website			

FIRM CHARACTERISTICS [car6] Proportion of a firm held by the largest owner(s) (%)				
Percentage held by largest owne	er or owners.			
Survey Variable Used to Constru	ct Indicator			
This indicator is created from the va	ariables B.3.			
B.3 What percent of this firm does the largest owner or owner(s) own?				
Pe	Percent ercent held by largest owner b3 %			
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	Changes to ECA 2002 & 2005 surveys			

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	b2b %	-9
Government or State		-9
Other		-9
	100%	

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

Notes

Indicator Updates		
June 26, 2017	First released	

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	b2c %	-9
Other		-9
	100%	

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

Notes

Indicator Updates	
June 26, 2017	First released

FIRM CHARACTERISTICS		
[lform1] 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 Shareholding company with non-traded shares or shares traded privately Sole proprietorship Partnership Limited partnership OTHER (SPONTANEOUS–SPECIFY)b1x DON'T KNOW (SPONTANEOUS)	1 2 3 4 5 6	
Notes		
Indicator Updates		

FIRM CHARACTERISTICS		
[lform2] Percent of firms with legal status of privately held Limited Liability Company		
Description		
Percent of firms with legal status of privately held Limited Liability Compar	ny	
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 Shareholding company with non-traded shares or shares traded privately Sole proprietorship Partnership Limited partnership OTHER (SPONTANEOUS–SPECIFY)b1x DON'T KNOW (SPONTANEOUS)	1 2 3 4 5 6	<u>b1</u>
Notes		
Indicator Updates		

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 Shareholding company with non-traded shares or shares traded privately Sole proprietorship Partnership Limited partnership OTHER (SPONTANEOUS–SPECIFY)b1x DON'T KNOW (SPONTANEOUS)	1 2 3 4 5 6	
Notes		
Indicator Updates		

EIDA CHAD ACTIONICA		
[Iform4] Percent of firms with legal status of Partnership		
Description		
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 Shareholding company with non-traded shares or shares traded privately Sole proprietorship Partnership Limited partnership OTHER (SPONTANEOUS–SPECIFY)b1x DON'T KNOW (SPONTANEOUS)	1 2 3 4 5 6	
Notes		
Indicator Updates		

FIRM CHARACTERISTICS		
[lform5] 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 Shareholding company with non-traded shares or shares traded privately Sole proprietorship Partnership Limited partnership OTHER (SPONTANEOUS–SPECIFY)b1x DON'T KNOW (SPONTANEOUS)	1 2 3 4 5 6	b1
Notes		
Indicator Updates		

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.

[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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d
110 000 (0) 010 11 2 01 0)	

Notes

Indicator Updates

[obst2] Access to land

Description

M.1

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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d
Rotation (option 1, 2 of 3)	IIIIu

Notes

Indicator Updates

[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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)) r	n1d

Notes

Indicator Updates

[obst4] Corruption

Description

M.1

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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d
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Notes

Indicator Updates



[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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d
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Notes

Indicator Updates

[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
<u> </u>
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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3	m1d

Notes

Indicator Updates

[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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Notes

Indicator Updates

[obst8] Electricity

Description

M.1

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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

ſ	Rotation (option 1, 2 or 3)	T _{m1d}
ı	Rotation (option 1, 2 of 3)	IIIIu

Notes

Indicator Updates

[obst9] Inadequately educated workforce

Description

M.1

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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d

Notes

Indicator Updates

[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.

By looking at card [insert card number] can you tell me which of the elements of the business M.1 environment included in the list, if any, currently represents the biggest obstacle faced by this

INTERVIEWER: DO NOT READ OUT

establishment SHOW CARD 25

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d
Rotation (option 1, 2 or 5	J	IIIIu

Notes

Indicator Updates

[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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Notes

Indicator Updates

[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.

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1,	2 or 3)	m1d

Notes

Indicator Updates

[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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d
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Notes

Indicator Updates

[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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS) -7	

Rotation	(option 1, 2 or 3)	m1d

Notes

Indicator Updates

[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

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	m1a
DON'T KNOW (SPONTANEOUS)	-9
DOES NOT APPLY (SPONTANEOUS)	-7

Rotation (option 1, 2 or 3)	m1d
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Notes

Indicator Updates

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.

[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.² 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: $\frac{6}{12}$ · deflator for year 2015 + $\frac{6}{12}$ · 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
DON'T KNOW (SPONTANEOUS)	-9	
PLEASE ALSO WRITE OUT THE NUMBER (i.	e. 50,000 as Fifty Thousand)	
		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
IF ESTABLISHMENT WAS NOT IN BUSINESS	-7
THREE YEARS AGO	-/
DON'T KNOW (SPONTANEOUS)	-9

Notes

Indicator Updates	
January 3, 2012	Added to ES Indicators
	Methodology Change: see Descriptions of Indicator Updates at the end of
December 15, 2016	this document
	Methodology Change: see Descriptions of Indicator Updates at the end of
September 11, 2017	this document

² GDP deflators are from the World Development Indicators, series NY.GDP.DEFL.ZS

[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.

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 INTERVIWEE IF APPLICABLE).

	Number
Permanent, full-time workers end of last fiscal year	l1
DON'T KNOW (SPONTANEOUS)	-9

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 INTERVIWEE IF APPLICABLE).

	Number
Permanent, full-time workers three fiscal years ago	12
IF ESTABLISHMENT WAS NOT IN BUSINESS THREE	-7
YEARS AGO	
DON'T KNOW (SPONTANEOUS)	-9

Notes

Indicator Updates	
January 3, 2012	Added to ES Indicators

[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.³ 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: $\frac{6}{12}$ · deflator for year 2015 + $\frac{6}{12}$ · 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	d2
DON'T KNOW (SPONTANEOUS)	-9
PLEASE ALSO WRITE OUT THE NUMBER (i.e. 50,0	000 as Fifty Thousand)
	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
IF ESTABLISHMENT WAS NOT IN BUSINESS THREE YEARS AGO	-7
DON'T KNOW (SPONTANEOUS)	-9

³ GDP deflators are from the World Development Indicators, series NY.GDP.DEFL.ZS

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 INTERVIWEE IF APPLICABLE).

	Number
Permanent, full-time workers end of last fiscal year	11
DON'T KNOW (SPONTANEOUS)	-9

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 INTERVIWEE IF APPLICABLE).

	Number
Permanent, full-time workers three fiscal years ago	12
IF ESTABLISHMENT WAS NOT IN BUSINESS THREE	-7
YEARS AGO	
DON'T KNOW (SPONTANEOUS)	-9

Notes	
Indicator Updates	
January 3, 2012	Added to ES Indicators
	Methodology Change: see <u>Descriptions of Indicator Updates</u> at the end
December 15, 2016	of this document
	Methodology Change: see <u>Descriptions of Indicator Updates</u> at the end
September 11, 2017	of this document

Innovation and Technology					
[t3] Capacity utilization (%) *					
D ' ' '					
Description Capacity uti current inp	ilization based on comparison of the current output with the maximum output possible using the				
Survey Vari	able Used to Construct Indicator				
This indicato	or is created from the variable F.1.				
F.1	In fiscal year [insert last complete fiscal year] , what was this establishment's output produced as a proportion of the maximum output possible if using all the resources available (capacity utilization)?				
	Capacity utilization Don't know (spontaneous) Percent f1 % -9				
Notes					
Indicator U	pdates				
May 2, 2012	Changes to ECA 2002 & 2005 surveys				

	INNOVATION AND TECHNOLOGY					
[perf4] Percent of firms buying fixed assets						
Description						
Percent of firms buying fixed asso	Percent of firms buying fixed assets such as machinery, equipment, land or buildings.					
Survey Variable Used to Construc	t Indicator					
This indicator is created from the va	riable K.4.					
K.4 In fiscal year [insert l	In fiscal year [insert last complete fiscal year], did this establishment purchase any new or used fixed assets, such					
as machinery, vehicle	s, equipment, land or buil	dings?				
Yes		1	7			
No		2	1			
DON'T KNOW (SPON	DON'T KNOW (SPONTANEOUS)		1			
			k4			
Notes						
Indicator Updates						
-		,				
Nov.11.2014	New indicator adde	<u>d</u>				

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.

APPENDIX

