# Sources for Firm Level Data Base August 2017

Prepared by: ERF Data Team





# Firm-Level Data Base

# Sources:.

- (1) World Bank Enterprise Surveys (Open Access- requires registration)
- (2) ERF Firm-Level data projects (Licensed Data- requires registration)
- (3) National Statistical Offices' Surveys (requires Formal Agreements)

# (1) World Bank Enterprise Surveys

#### **Overview**

- > Firm-level harmonized economic data
- Cover small, medium and large companies
- Global methodology that allows cross-economy analysis
- > Free Access in STATA format- upon registration
- ➤ The universe includes the entire manufacturing, services sector, and transportation and construction sectors.
- Public utilities, government services, health care, and financial services sectors are not included in the universe
- Collected through face-to-face interviews with top managers and business owners.
- > Data for more than 171,000 firms in 150 countries during 2002 to 2017



- > 18 Countries in the ERF region have surveys data during the period 2002-2016
  - Of which; 13 countries have recent surveys data in 2013-2015
- > Cover a broad range of business environment topics (90% of the questionnaire) including:

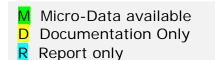
Access to finance Corruption Infrastructure

Crime Competition Performance measures

> Remaining 10% assesses the respondents' opinions on what are the obstacles to firm growth and performance.

# **Objectives**

- Provide statistically significant investment climate indicators that are comparable across countries
- Assess the constraints to private sector growth and job creation
- Build a panel of establishment-level data that will make it possible to track changes in the business environment over time, thus allowing impact assessments of reforms
- Stimulate dialogue on reform opportunities



# Data types and Coverage on the country/year level- ERF Countries

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### (1) Enterprise surveys on a country/year level

	2002												M			
	2003							V								,
<b>-</b>	2004												M			,
Enterprise Survey	2005				-			M					M			M
	2006			ľ	M	M			•					М		
22 curvove/ 10	2007	M	M		•		M									
32 surveys/ 18 countries in the ERF	2008		M		-								M			
region	2009				M						M			•		
region	2010														М	
290 surveys/132 countries outside the	2011			M					•			-		•		
	2012				-				M			-				,
ERF region	2013	N	M N	ľ	M M		M		-			М	M	М	М	
ERI Togion	2014			•••••••••••••••••••••••••••••••••••••••		M				M M		•				
	2015												M*			
	2016		M													M
Micro Enterprise	2006					М										
Questionnaire											_					
	2003	R									D					,
	2004		D		<u>-</u>				_							<sub>1</sub>
	2005						R				R					<b></b> ,
Investment Climate	2006				D											<u> </u>
Survey	2007					R							R	R		<u> </u>
	2009		R		D					R						······
	2010												R			<b></b> ,
	2014											R		R		

<sup>\*</sup> Turkey 2015 survey did not fully follow the standard ES methodology as it used a simplified questionnaire, where some of the standard questions were dropped and others were replaced with more detailed questions on infrastructure, trade, land, and business-government relations. It also expanded the standard global coverage to include micro firms, defined as registered firms with 1 to 4 employees.

	Years	Algeria	Djibouti	Egypt	Iraq	Jordan	Lebanon	Mauritania	Morocco	Oman	- T	Somali Land	Sudan	South Sudan	Syria	Tunisia	Turkey	Wb and Gaza	Yemen	Combined Data
(2) Enterprise panel data a country/period level									<u> </u>											
	0004 0007																			
	2004-2007			M					M											
Panel Survey	2005-2008		•												•••••		M			
raner Survey	2008-2013			М													M			
	2010-2013																		М	
(3) Combined datasets for a set of countries/years																				
Fratamailas Cumusus	2002-2006																			M
Enterprise Survey	2006-2016						_						•							M
Productivity Estimates	2006-2016																			М

M

Enterprise Surveys

Indicators

2002-2016

Years	Algeria	Djibouti	Egypt	Iraq	Jordan	Lebanon	Mauritania	Morocco	Oman	SA	Somali Land	Sudan	South Sudan	Syria	Tunisia	Turkey	Wb and Gaza	Yemen	Combined Data	_
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## (4) Other surveys for country specific topics

Private Entrepreneurship Questionnaire- Tourism	2005					М
Employees Questionnaire	2006		M			
Private Enterprise	2007	M				
Survey - Hotels	2008	M				
Private Enterprise						
Survey- Informal	2008	M				
survey						
Financial Crisis	2009	<u> </u>				M
Survey	2010					M
Business Survey	2013			M		
<b>Experimental Questions</b>	2013					M
Innovation Follow up Survey	2014				M M	

<sup>&</sup>quot;M": The Micro data is available to download on the url:

https://www.enterprisesurveys.org/portal/index.aspx#/library?dataset=Enterprise%20Survey

<sup>&</sup>quot;"D": The Documentation of the data is only available on the <a href="url:http://www.enterprisesurveys.org/nada/index.php/catalog">url:http://www.enterprisesurveys.org/nada/index.php/catalog</a>

<sup>&</sup>quot;R": The country report is available to download on the url: <a href="https://openknowledge.worldbank.org/handle/10986/2183/search-filter?field=country&searchScope=discover">https://openknowledge.worldbank.org/handle/10986/2183/search-filter?field=country&searchScope=discover</a>

# List of countries & number of surveys - outside the ERF Region

COUNTRY	# surveys	COUNTRY	# surveys	COUNTRY	# surveys	COUNTRY	# surveys
Afghanistan	2	Czech Republic	4	Lao PDR	3	Rwanda	2
Albania	4	Côte d'Ivoire	2	Latvia	4	Samoa	1
Angola	2	Dominica	1	Lesotho	2	Senegal	2
Antigua and Barbuda	1	Dominican Republic	2	Liberia	1	Serbia	4
Argentina	2	Ecuador	2	Lithuania	5	Sierra Leone	1
Armenia	4	El Salvador	3	Macedonia, FYR	4	Slovak Republic	4
Azerbaijan	4	Eritrea	1	Madagascar	2	Slovenia	4
Bahamas, The	1	Estonia	4	Malawi	2	Solomon Islands	1
Bangladesh	2	Ethiopia	3	Malaysia	2	South Africa	1
Barbados	1	Fiji	1	Mali	3	Spain	1
Belarus	4	Gabon	1	Mauritius	1	Sri Lanka	1
Belize	1	Gambia, The	1	Mexico	2	St. Kitts and Nevis	1
Benin	2	Georgia	4	Micronesia	1	St. Lucia	1
Bhutan	2	Germany	1	Moldova	5	St. Vincent & Gren.	1
Bolivia	2	Ghana	2	Mongolia	2	Suriname	1
Bosnia and Herzegovina	4	Greece	1	Montenegro	2	Swaziland	2
Botswana	2	Grenada	1	Mozambique	1	Sweden	1
Brazil	2	Guatemala	2	Myanmar	2	Tajikistan	5
Bulgaria	6	Guinea	2	Namibia	2	Tanzania	2
Burkina Faso	2	Guinea-Bissau	1	Nepal	2	Thailand	2
Burundi	2	Guyana	1	Nicaragua	3	Timor-Leste	2
Cabo Verde	2	Honduras	2	Niger	2	Togo	2
Cambodia	3	Hungary	4	Nigeria	2	Tonga	1
Cameroon	3	India	2	Pakistan	2	Trinidad and Tobago	1
Central African Republic	1	Indonesia	2	Panama	2	Uganda	2
Chad	1	Ireland	1	Papua New Guinea	1	Ukraine	4
Chile	2	Israel	1	Paraguay	2	Uruguay	2
China	1	Jamaica	1	Peru	2	Uzbekistan	5
Colombia	2	Kazakhstan	4	Philippines	2	Vanuatu	1
Congo, Dem. Rep.	3	Kenya	2	Poland	5	Venezuela, RB	2
Congo, Rep.	1	Korea, Rep.	1	Portugal	1	Vietnam	2
Costa Rica	2	Kosovo	2	Romania	4	Zambia	2
Croatia	4	Kyrgyz Republic	5	Russian Federation	4	Zimbabwe	2

# Structure of Enterprise surveys data on country/year level

Collected using TWO questionnaires:

- 1) Manufacturing Questionnaire
- 2) Services Questionnaire.

Each questionnaire is comprised of **14** sections organized by topic:

- (1) Control Information
- (2) General information: characteristics of the establishment
- (3) Infrastructure and Services: power, water, transport, and communication technologies
- (4) Sales and Supplies: imports, exports, supply and demand conditions
- (5) Degree of Competition: number of competitors and technology
- (6) Capacity: use of production capacity, hours of operation
- (7) Land: land ownership, land access issues
- (8) Innovation: introduction of product or process innovation, R&D
- (9) Crime: extent of crime and losses due to crime
- (10) Finance: sources of finance, access to credit
- (11) Business-Government Relations: quality of public services, consistency of policy, regulatory compliance costs (management time, bribes)
- (12) Labor: employment, training, skills
- (13) Business Environment: ranking of general obstacles
- (14) Performance: numbers and figures needed to estimate performance or productivity.

# **Content of Enterprise Surveys Indicators data set**

#### **Regulations and Taxes**

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

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

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

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

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

[bus2] Days to obtain operating license

[bus3] days to obtain construction

[bus1] days to obtain an import license

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

#### Corruption

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### Crime

[crime1] Percent of firms paying for security

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

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

[crime2] Security costs (% of annual sales)

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

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

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

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

#### Informality

[infor3] Percent of firms expressing that a typical firm reports less than 100% of sales for tax purposes

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

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

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

[infor5] Number of years firms operated without formal registration

#### Gender

- [gend1] Percent of firms with female participation in ownership
- [gend2] Proportion of permanent full-time workers that are female
- [gend3] Proportion of permanent full=time non-production workers that are female \*
- [gend4] Percent of firms with a female top manager
- [gend5] Proportion of permanent full -time production workers that are female \*
- [gend6] Percent of firms with majority female ownership

#### **Finance**

- [fin14] Percent of firms with a bank loan/line of credit
- [fin1] Proportion of investments financed by internal funds (%)
- [fin2] Proportion of investments financed by banks (%)
- [fin3] Proportion of investments financed by supplier credit (%)
- [fin4] Proportion of investments financed by equity or stock sales (%)
- [fin5] Proportion of investments financed by other financing sources (%)
- [fin6] Proportion of working capital financed by internal funds (%)
- [fin7] Proportion of working capital financed by banks (%)
- [fin8] Proportion of working capital financed by supplier credit (%)
- [fin9] Proportion of working capital financed by other financing sources (%)
- [fin19] Proportion of working capital financed by external sources (%)
- [fin12] Percent of firms using banks to finance investments
- [fin13] Percent of firms using banks to finance working capital
- [fin10] Value of collateral needed for a loan (% of the loan amount)
- [fin11] Proportion of loans requiring collateral (%)
- [fin16] Percent of firms identifying access to finance as a major constraint
- [fin15] Percent of firms with a checking or savings account
- [fin17] Proportion of sales that are pre-paid (%)
- [fin18] Proportion of sales sold on credit (%)
- [fin20] Percent of firms not needing a loan
- [fin21] Percent of firms whose recent loan application was rejected

#### Infrastructure

- [in1] Delay in obtaining an electrical connection (upon application)
- [in2] Number of electrical outages in a typical month
- [in3] Duration of a typical electrical outages (hours)
- [in3\_c] If there were outages, average duration of a typical electrical outages (hours)
- [in15] Average total time of power outages per month
- [in4] Losses due to electrical outages (% of annual sales)
- [in4\_c] If there were outages, average losses due to electrical outages (% of annual sales)
- [in5] Delay in obtaining a water connections (days)
- [in6] Number of water insufficiencies in a typical month\*
- [in7] Duration of insufficient water supplies (hours)\*
- [in7 c] If there were shortages, average duration of the water shortage (hours)\*
- [in8] Delay in obtaining a mainline telephone connection (days)
- [in9] Percent of firms owning or sharing a generator
- [in10] Proportion of electricity from a generator (%)
- [in10\_c] If a generator is used, average proportion of electricity from generator (%)
- [in11] Percent of firms identifying transportation as a major constraint

- [in12] Percent of firms identifying electricity as a major constraint
- [in14] Proportion of products lost to breakage or spoilage during shipping to domestic markets (%)\*

#### Innovation and Technology

- [t1] Percent of firms with internationally recognized quality certification
- [t2] Percent of firms with annual financial statement reviewed by external auditor
- [t4] Percent of firms using technology licensed from foreign companies\*
- [t5] Percent of firms having its own website
- [t6] Percent of firms using Email to communicate with clients/suppliers

#### **Trade**

- [tr1] Days to clear direct exports through customs
- [tr2] Days to clear imports from customs\*
- [tr4] Proportion of total sales that are domestic sales (%)
- [tr6] Proportion of total sales that are exported indirectly (%)
- [tr15] Percent of firms exporting directly (at least 1% of sales)
- [tr10] Percent of firms exporting directly or indirectly (at least 1% of sales)
- [tr7] Proportion of total inputs that are of domestic origin (%)\*
- [tr8] Proportion of total inputs that are of foreign origin (%)\*
- [tr11] Percent of firms using material inputs and/or supplies of foreign origin\*
- [tr9] Percent of firms identifying customs and trade regulations as a major constraint
- [tr14] Days of inventory of main input\*
- [tr12] Products exported directly lost due to theft (%)
- [tr13] Products exported directly lost due to breakage or spoilage (%)

#### Workforce

- [wk1] Percent of firms offering formal training
- [wk2] Proportion of workers offered formal training (%) \*
- [wk3] Number of permanent skilled production workers\*
- [wk4] Number of unskilled production workers \*
- [wk6] Number of permanent production workers\*
- [wk7] Number of permanent non-production workers\*
- [wk8] Years of the top manager's experience working in the firm's sector
- [wk9] Percent of firms identifying labor regulations as a major constraint
- [wk10] Percent of firms identifying an inadequately educated workforce as a major constraint
- [wk11] Number of temporary workers
- [wk12] Number of permanent full time workers
- [wk13] Proportion of unskilled workers (out of all production workers) (%)\*

#### Firm Characteristics

- [car1] Age (years)
- [car2] Proportion of private domestic ownership in a firm (%)
- [car3] Proportion of private foreign ownership in a firm (%)
- [car4] Proportion of government/state ownership in a firm (%)
- [car5] Proportion of other ownership in a firm (%)
- [car6] Proportion of a firm held by the largest owner(s) (%)
- [Iform1] Percent of firms with legal status of publicly listed company
- [Iform2] Percent of firms with legal status of privately held Limited Liability Company

[Iform3] Percent of firms with legal status of Sole Proprietorship

[Iform4] Percent of firms with legal status of Partnership

[Iform5] Percent of firms with legal status of Limited Partnership

#### The Biggest Obstacle

[obst1] Access to finance

[obst2] Access to land

[obst3] Business licensing and permits

[obst4] Corruption

[obst5] Courts

[obst6] Crime, theft and disorder

[obst7] Customs and trade regulations

[obst8] Electricity

[obst9] Inadequately educated workforce

[obst10] Labor regulations

[obst11] Political instability

[obst12] Practices of competitors in the informal sector

[obst13] Tax administration

[obst14] Tax rates

[obst15] Transport

#### Performance

[perf1] Real annual sales growth (%)

[perf2] Annual employment growth (%)

[perf3] Annual labor productivity growth (%)

[t3] Capacity utilization (%) \*

[perf4] Percent of firms buying fixed assets

# **Content of Productivity Estimates data set**

Two types of firm level productivity estimates based on the ES.

- 1- Estimates of total factor productivity (TFP)
  - = The portion of output that is not explained by the amount of inputs utilized

This estimation may be troublesome for multiple reasons — e.g. selection, simultaneity, issues with using monetary (as opposed to physical) measures of output and inputs.

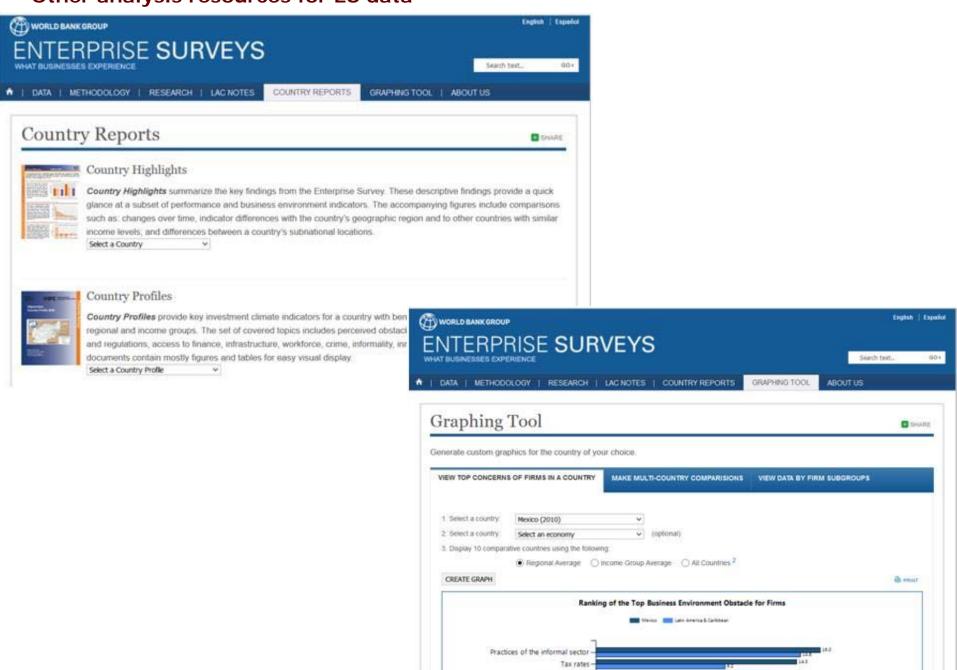
Detailed documentation available in (Firm Level TFP Estimates and Factor Ratios\_Methodological Note\_2017-02-21.pdf)

2- Estimates of firms' productivity in the form of factor ratios

Much simpler but more robust.

Unlike TFP estimates, some of these are also available for non-manufacturing.

## Other analysis resources for ES data



# List of published reports on ICA surveys

COUNTRY	REPORT TITLE	DATE
ALGERIA	Investment climate assessment	2003
EGYPT	Investment climate assessment: Accelerating private enterprise-led growth – policy brief	2009
MAURITANIE	Une évaluation du Climat des Investissements	2007
MOROCCO	Évaluation du Climat de l'Investissement au Maroc Secteur Privé, Secteur Financier et Infrastructures	2005
WEST BANK AND GAZA	Investment Climate Assessment Fragmentation and Uncertainty	
WEST BANK AND GAZA	Investment Climate Assessment: Unlocking the Potential Of The Private Sector	2007
SUDAN	Investment Climate Assessment Finance and Private Sector Development	2009
SYRIA	Investment Climate Assessment: Unlocking the Potential of the Private Sector	2005
TUNISIA	Investment Climate Assessment Enterprises' Perception in Post Revolution	2014
TURKEY	Investment Climate Assessment Overview of Findings and Recommendations	2007
TURKEY	Investment Climate Assessment from Crisis to Private Sector Led Growth	2010

# (2) ERF firm-level data projects

# Exports and Imports Data for Egypt (EID)

S	Dataset	Year	Obs.
1	Exports	2005-2016	900,000+
2	Imports	2005-2016	5,000,000+

Recently updated to include data for 2015 and 2016 in addition to exported and imported quantities

Following HS6 products classification

# Constraints Facing the Development of Micro and Small Enterprises (CDMSE)

S Country	Year	Obs.
1 Egypt	2014	447

# Micro and Small Enterprises Surveys (MSEs)

s	Country	Year	HHs	MSEs
1	Egypt	2003	24,471	4,958
2		2004		4,944
3	Lebanon	2004	2,948	2,948
4	Morocco	2002	5,210	5,210
5		2003		1,166
6	Turkey	2001	9,158	5,000
7		2002		5,000

# (3) National Statistical Offices Surveys

بحث للعاملين خارج المنشات . رقم قومي للمنشات الاقتصادية.

الاحصاء الصناعي السنوي والسلعي في منشات القطاع الخاص ٢٠١٣ 50% of the sample published - 50%

المسح الصناعي الشامل (الجهة: وزارة الصناعة)

مسح الناتج المحلي الاجمالي

المسح الاقتصادي الموسع

مسح منشات التحويل المالي و الصيرفة لسنة ٢٠١٣

مسح الخزن (الخزن للغير) في القطاع الخاص . (الجهة: مديرية احصاءات النقل والاتصالات)

مسح البيئة الاقتصادي ٢٠١٥

المسح الاقتصادي لغرفة تجارة وصناعة محافظة بيت لحم ٢٠١٥

التعداد العام للمنشات الاقتصادية ٢٠١١

المسح الصناعي. (يتم تنفيذه سنويا من قبل دائرة الاحصاءات العامة)

المسح الصناعي الشامل ٢٠١٠