How Do Trade Margins Respond to Exchange Rate? The Case of Egypt

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Outline

- Introduction
- Stylized Facts
- Methodology
- Empirical Findings
- Policy Implications

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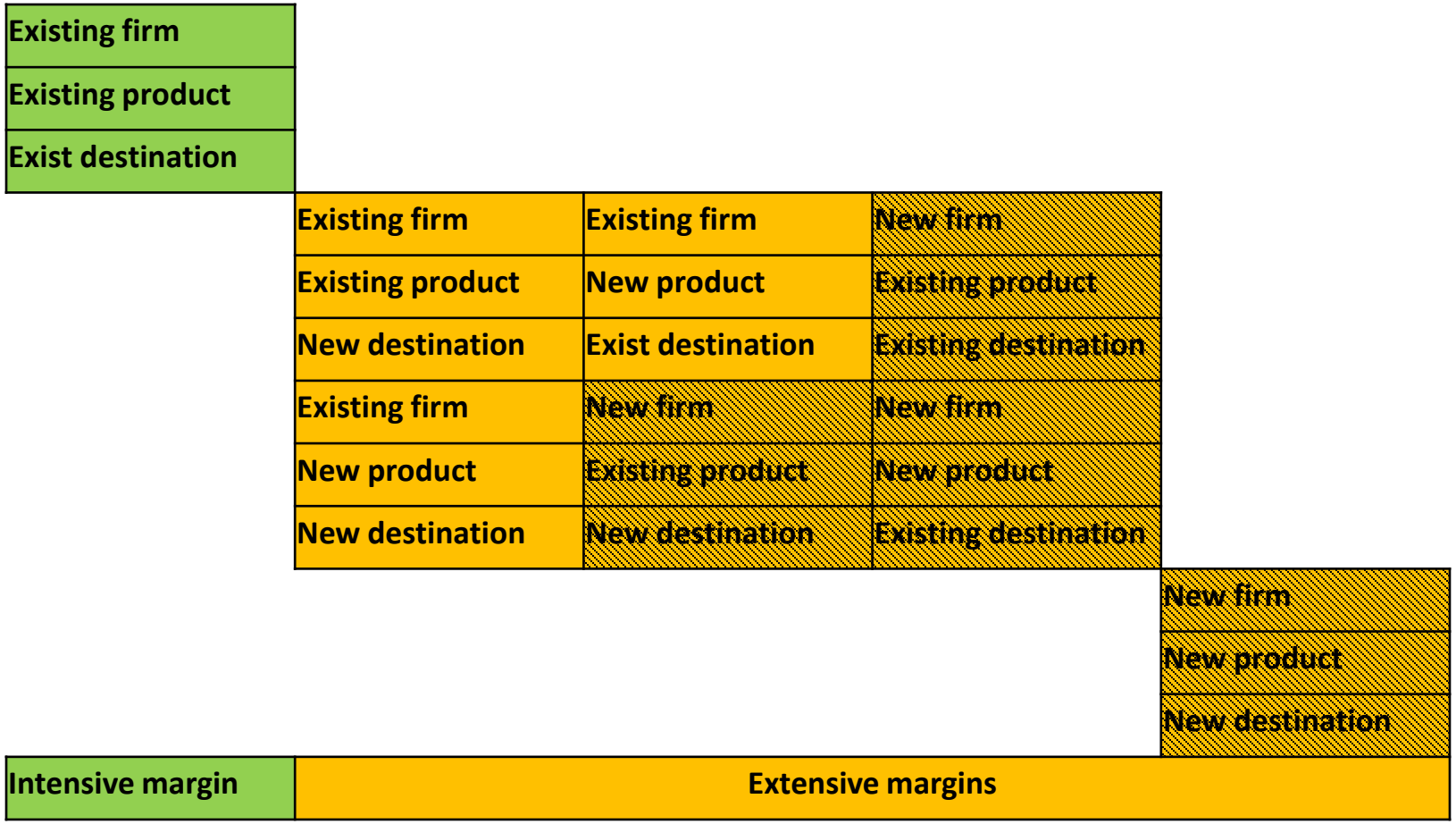
Motivation

- The trade literature provides evidence on the robust correlation between exports growth and depreciated real exchange rates, especially in developing and emerging countries (Aghion et al, 2009).
- The case of Egypt is relevant for the study of the effect of exchange rate developments on exports.
  - Indeed, in the aftermath of the January 25, 2011 revolution, Egypt's external accounts became more fragile for several reasons.
  - Lately in November 2016 the Central Bank of Egypt announced the floatation of the Egyptian pound whose value was cut down by around 45 percent to stand at EGP 13 against the US dollar after the decision and EGP 18 soon after.

Motivation

Macro	Firm level	Egypt and MENA
World Bank (2010), Genc and Artar (2014), Bahmani-Oskooee and Ardalanif (2006), Loto (2011), Rowbotham et al (2014), Besedeˇs and Prusa (2008) Cadot et al (2011) Effect depends: - on the fact that countries that are originally export based before the movement of the currency and that economies that are import dependent can hardy benefit from these currency movements - Low and Middle income countries: addition of new product lines, whereas high income countries re-concentrate their exports towards fewer products	Klitgaard (1999) for Japan, Chen and Juvenal (2016) for Argen., Li et al (2015) for China, Amiti et al (2014) for Belgium, Berman et al (2012) for France, Cheung and Sengupta (2013) for India Campos (2010) for Brazil. Effect depends: - For developing countries: the quantity of traded exports was found to have a moderate response to currency devaluation. - In general, high-productivity choose to partially absorb exchange rate fluctuations by increasing their markups.	Macro studies: Oskooe and Kandil (2008) El-Ramly (2008) Brixiova et al (2014) Nouira et al (2010) Bahmani-Oskooee et al (2015a) Firm-level studies: Not so much El-Badawi and Zaki (2016)

What we do


Existing firm
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New firm
New product
Existing destination
New firm
New product
New destination
Intensive margin
Extensive margins

What we do

- Using monthly firm-level and sector-level data for the period 2005-2016, this study tries to examine the impact of devaluation on the increase in the quantity of exports, as well as the ability to export new products and/or venture into new export markets.
- How both the intensive (the quantity of exports) and the extensive (the probability of exporting a new product to a new destination, exporting a new product to an existing destination or exporting an existing product to a new destination) margins to trade are affected by the devaluation of the Egyptian pound using firm level data.
- Exchange rate is measured by the real effective exchange rate and the exchange rate misalignment.
- We map products sensitivity with Egypt's comparative advantage.

What we find

- We find that while a depreciation of the real exchange rate increases the value of exports (intensive margin), the quantity of exports is not affected showing that the price effect is more significant than the quantity effect. In other words, depreciation lowers the foreign currency price of exports, but does not increase the quantity of exports.
- Furthermore, the number of destinations and the number of products (extensive margins) respond positively to exchange rate depreciation.
- At the sectoral level, the intensive margin seems to matter for some products more than others. Indeed, the most beneficial group includes products that are sensitive to real depreciations and for which Egypt has a comparative advantage. These products are fruits and vegetables, apparel and clothing, fibers, mineral fuels and oils and some chemical products.
- At the destination level, European countries seem to be the most sensitive.

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Stylized Facts: Exports

Table 1. Factors behind Marginal Growth of Egypt's Exports (2014)

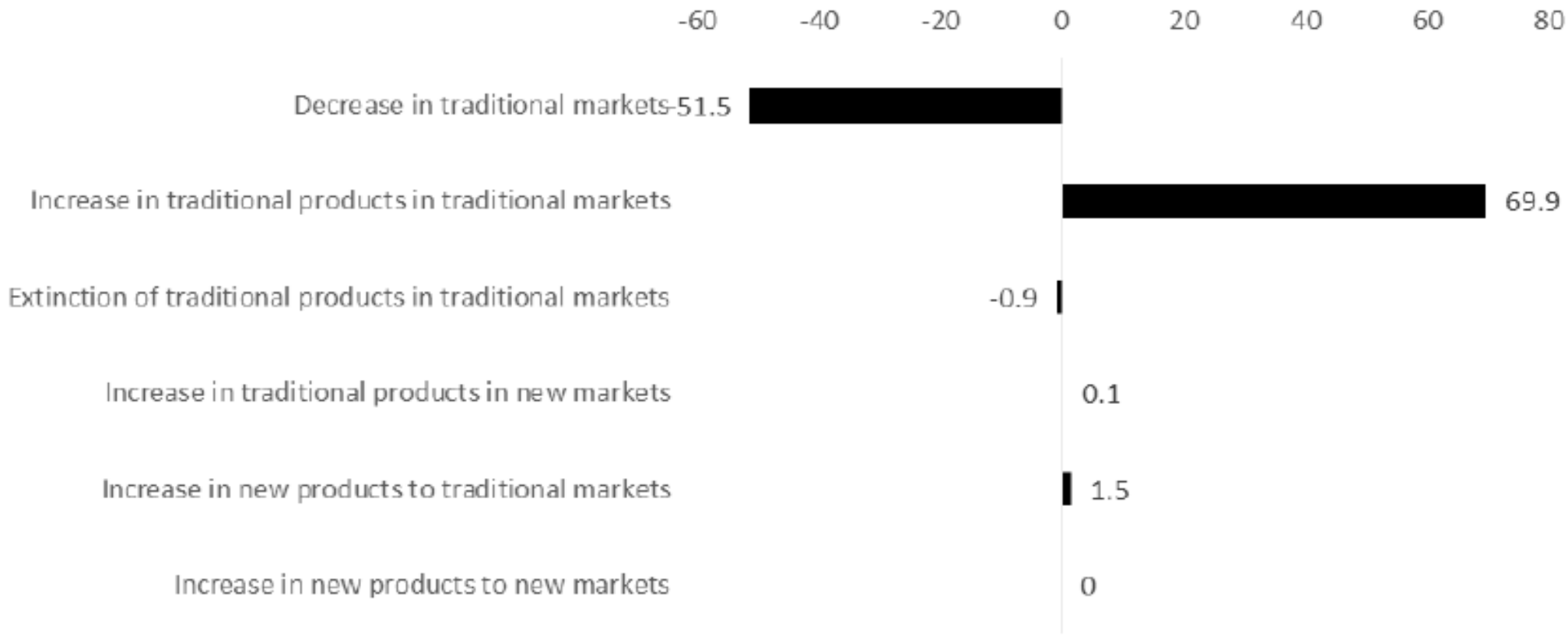
Marginal Growth due to	US$ change	% change
World's trade growth[1]	11,797,832.8	48.8
Product specialization[2]	1,925,387.8	8.0
Geographic specialization[3]	-1,390,742.0	-5.8
Competitiveness[4]	-7,735,189.6	-32.0
Sum of marginal growths	4,597,289.0	19.0

Source: ITC (2014)

Stylized Facts: Exports

Exports are relatively rigid since Egyptian exporters were not able neither to enter new markets nor to export new products

Figure 1. Factors behind Growth of Egypt's Exports



Source: ITC (2014)

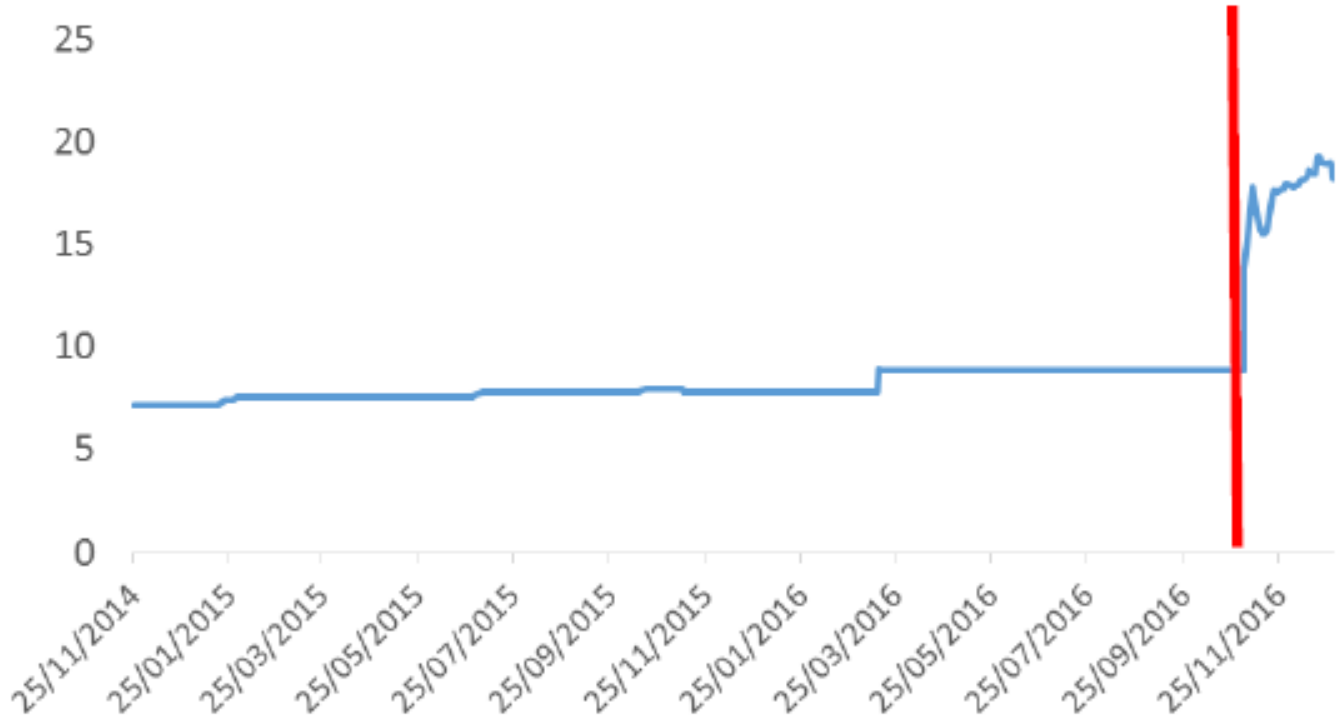
Table 3. Evolution of RCA between 2001 and 2015

RCA in 2001 and increased in 2015	RCA in 2001 and decreased in 2015	No RCA in 2001 and RCA in 2015
Articles of apparel and clothing access	Aluminum and articles thereof	Albuminoidal substances;
Articles of stone, plaster, cement.	Animal or vegetable fats and oils	Articles of iron or steel
Edible fruit and nuts; peel of citrus f	Articles of apparel and clothing access	Carpets and other textile floor covering
Edible vegetables and certain roots and	Ceramic products	Cocoa and cocoa preparations
Glass and glassware	Cereals	Copper and articles thereof
Oil seeds and oleaginous fruits; miscel.	Coffee, tea, spices	Dairy produce; birds' eggs; natural hon
Preparations of vegetables, fruit, nuts	Commodities not elsewhere specified	Essential oils and resinoids; perfumery
Products of the milling industry; malt;	Cotton	Furniture; bedding, mattresses, mattress
Raw hides and skins (other than furskin)	Fertilizers	Lac; gums, resins and other vegetable s
Salt; Sulphur; earths and stone; plaster	Inorganic chemicals; organic or inorganic	Lead and articles thereof
Soap, organic surface-active agents	Iron and steel	Live trees and other plants; bulbs.
Sugars and sugar confectionery	Mineral fuels, mineral oils and product	Man-made filaments; strip and the like

Stylized Facts: Exchange Rate

By the end of 2016, the Egyptian pound was floated against the US dollar to EGP 13.00 per USD. By early 2017, the exchange rate reached 18 EGP/USD (Figure 3) leading to soaring inflation rates (Figure 4).

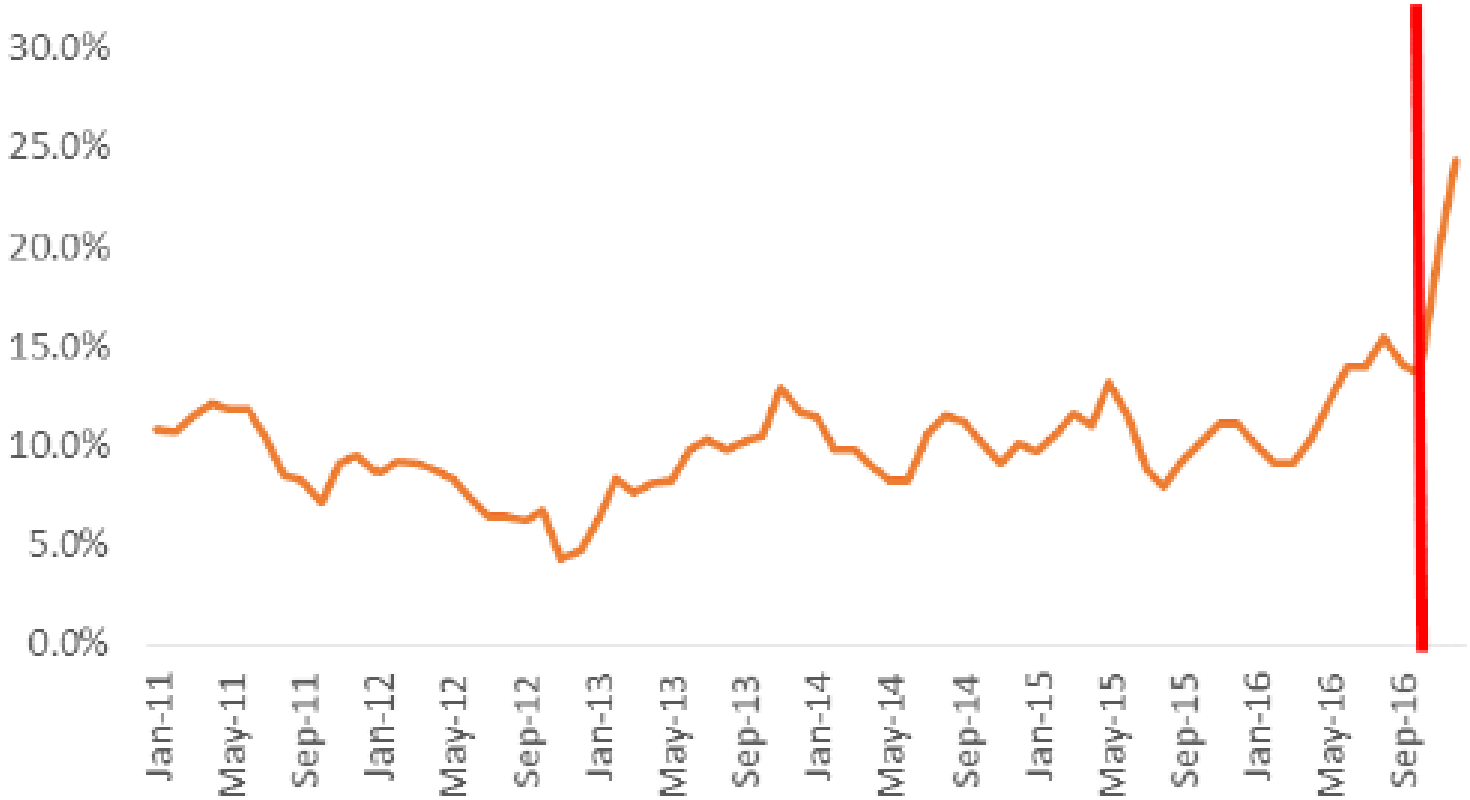
Figure 3: Exchange Rate Developments



Source: The Central Bank of Egypt

Stylized Facts: Exchange Rate

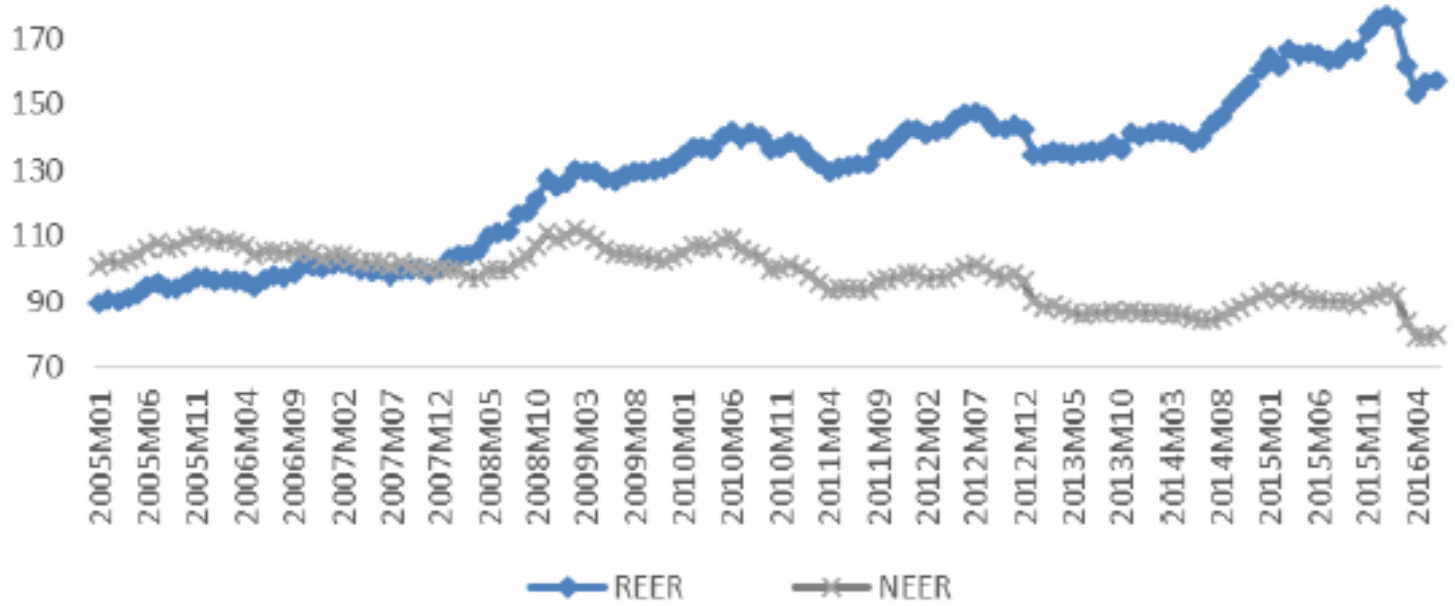
Figure 4: Inflation Rate Development



Source: The Central Bank of Egypt

Stylized Facts: Exchange Rate

Figure 5: Egypt's REER and NEER for the period January 2005 till June 2016

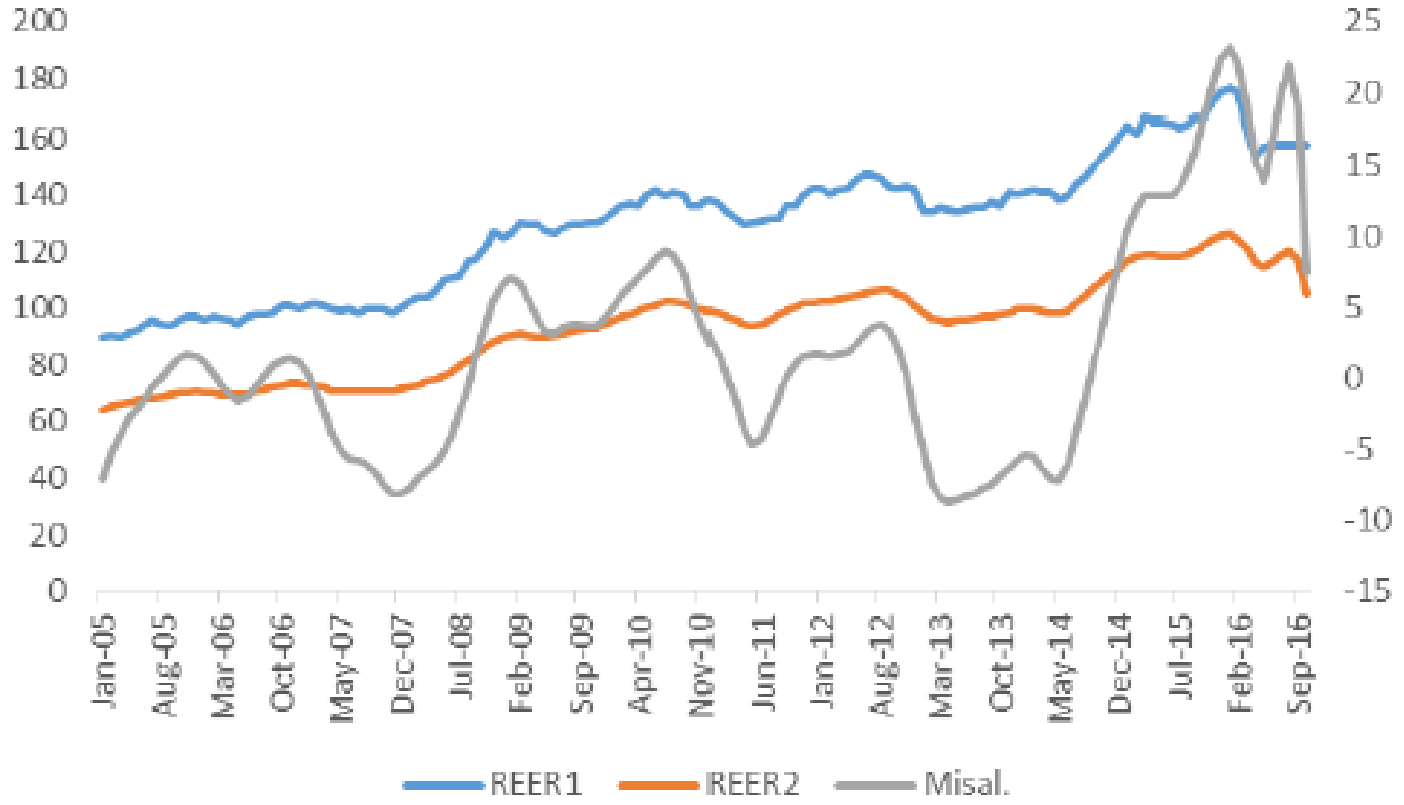


Source: Constructed by the authors using Brugel's database (Darvas, 2012).

Note: An increase in the REER index indicates an appreciation (in real terms) of the home currency against the basket of currencies of trading partners.

- An appreciation of the REER indicates that the domestic price level in Egypt is rising over the reported period compared to its trading partner countries

Figure 7. Different Measures of REER and Exchange Rate Misalignment



Source: Constructed by the authors using Darvas (2012) and Noureldin (2017).
Note: (i) REER1 is the real effective exchange rate estimated by Darvas (2012), REER2 is the real effective exchange rate estimated by Noureldin (2017), both on the left-hand side axis and Misal is the exchange rate misalignment estimated by Noureldin (2017) on the right-hand side axis.
(ii) An increase in REER1 or REER2 means an appreciation. Positive value for Misal means overvaluation.

Stylized Facts: Exchange Rate and Exports

A strong correlation (0.99) between the two measures of REER and a significantly negative correlation between the three measures of exchange rate and exports proving that a real appreciation or an overvaluation of the Egyptian pound are negatively correlated to exports.

Table 4. Correlation between Exports and Exchange Rate Measures

	Ln(Value)	Ln(REER1)	Misal.	Ln(REER2)
Ln(Value)	1			
Ln(REER1)	-0.035***	1		
	(0.000)			
Misal.	-0.019***	0.593***	1	
	(0.000)	(0.000)		
Ln(REER2)	-0.031***	0.996***	0.635***	1
	(0.000)	(0.000)	(0.000)	

Source: Constructed by the authors using Darvas (2012) and Noureldin (2017).
Note: P-values between brackets.

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Methodology

- We run a gravity-type equation at the macro and sectoral levels.
- We introduce classical gravity controls with different measures of exchange rate.
- Sectoral regressions at HS4 level and country regressions at the destination level are also run to determine which products and which markets are more sensitive to exchange rate developments.

Intensive Margin

$$Ln(X_{ijkt}) = \beta_0 + \beta_1 \ln(GDP_{jt}) + \beta_2 \ln(d_{ij}) + \beta_3 Col_{ij} + \beta_4 Comcol_{ij} + \beta_5 Conti_{ij} + \beta_6 Lang_{ij} + \beta_7 \ln(REER_t) + f + y_t + \varepsilon_{ijkt} \quad (1)$$

$$Ln(X_{ijkt}) = \alpha_0 + \alpha_1 \ln(GDP_{jt}) + \alpha_2 \ln(d_{ij}) + \alpha_3 Col_{ij} + \alpha_4 Comcol_{ij} + \alpha_5 Conti_{ij} + \alpha_6 Lang_{ij} + \alpha_7 Misal_t + f + y_t + \omega_{ijkt} \quad (2)$$

Extensive Margin

$$Ln(Num.prod_{ijt}) = \sigma_0 + \sigma_1 \ln(GDP_{jt}) + \sigma_2 \ln(d_{ij}) + \sigma_3 Col_{ij} + \sigma_4 Comcol_{ij} + \sigma_5 Conti_{ij} + \sigma_6 Lang_{ij} + \sigma_7 \ln(REER_t) + f + y_t + \eta_{ijt} \quad (3)$$

$$Ln(Num.dest_{it}) = \rho_0 + \rho_1 \ln(GDP_{jt}) + \rho_2 \ln(d_{ij}) + \rho_3 \ln(REER_t) + f + y_t + \varsigma_{it}$$

Data Sources

- Trade data comes from the General Organization for Export and Import Control (GOEIC), the Ministry of Industry and Foreign Trade in Egypt (monthly data, between 2005 and 2016, at the HS4 level, both quantities and values of exports).
- Other variables come from the Doing Business dataset, the World Development Indicators and the CEPII gravity dataset.
- Real effective exchange rate comes from two sources (Darvas, 2012 and Noureldin, 2017) that have been used to check the robustness of our results. Exchange rate misalignment comes also from Noureldin (2017).

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Intensive Margin

Table 5. Results of the Intensive Margin – Value of Exports

	Ln(Value EGP)			Ln(Value USD)		
Ln(GDP imp)	0.103***	0.103***	0.103***	0.0686***	0.0686***	0.0686***
	(0.00129)	(0.00129)	(0.00129)	(0.00218)	(0.00218)	(0.00218)
Ln(Dist.)	-0.0624***	-0.0624***	-0.0624***	0.00204	0.00205	0.00200
	(0.00295)	(0.00295)	(0.00295)	(0.00511)	(0.00511)	(0.00511)
Contig.	0.0379***	0.0379***	0.0378***	0.00292	0.00290	0.00291
	(0.00830)	(0.00830)	(0.00830)	(0.0140)	(0.0140)	(0.0140)
Com. Lang.	0.0602***	0.0602***	0.0602***	0.0804***	0.0804***	0.0803***
	(0.00513)	(0.00513)	(0.00512)	(0.0101)	(0.0101)	(0.0101)
Colony	0.0190***	0.0189***	0.0190***	0.00405	0.00405	0.00402
	(0.00558)	(0.00558)	(0.00558)	(0.00987)	(0.00987)	(0.00987)
Ln(REER1)	-0.195***			-0.200**		
	(0.0610)			(0.0984)		
Ln(REER2)		-0.227***			-0.198*	
		(0.0664)			(0.112)	
Misalig.			-0.174***			-0.197**
			(0.0510)			(0.0848)
Constant	-1.045***	-0.973***	-1.929***	-0.823*	-0.895*	-1.729***
	(0.280)	(0.283)	(0.0320)	(0.455)	(0.479)	(0.0630)
Firm FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Month FE	YES	YES	YES	YES	YES	YES
Observations	320496	320496	320496	320496	320496	320496
R-squared	0.394	0.394	0.394	0.433	0.433	0.433

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Intensive Margin

Table 6. Results of the Intensive Margin – Quantity of Exports

	Ln(Quantity)		
Ln(GDP imp)	0.110***	0.110***	0.110***
	(0.00224)	(0.00224)	(0.00224)
Ln(Dist.)	-0.0905***	-0.0905***	-0.0904***
	(0.00434)	(0.00434)	(0.00434)
Contig.	0.141***	0.141***	0.141***
	(0.0124)	(0.0124)	(0.0124)
Com. Lang.	0.179***	0.179***	0.179***
	(0.00659)	(0.00659)	(0.00658)
Colony	0.0417***	0.0417***	0.0417***
	(0.00894)	(0.00894)	(0.00894)
Ln(REER)	0.141		
	(0.156)		
Ln(REER2)		0.122	
		(0.155)	
Misalig.			-0.0200
			(0.124)
Constant	-0.198	-0.0716	0.439***
	(0.709)	(0.657)	(0.0651)
Firm FE	YES	YES	YES
Year FE	YES	YES	YES
Month FE	YES	YES	YES
Observations	1493001	1493001	1493001
R-squared	0.569	0.569	0.569

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Why limited effects on quantities?

- First, this result depends on the price elasticity of exports. If the price-elasticity of exports in terms of a foreign currency of a country is less than unity, the value of exports in terms of a foreign currency will fall as increase in physical volume of exports will be more than offset by the depreciation of the currency. Hence, prices will react more than quantities.
- Second, if the demand for imports is inelastic, they will not decrease despite devaluation which can erode the benefits of depreciation unless the country imposes some protectionist measures.
- Third, as Egypt is a net importer of capital goods and raw materials used in exportables, the rise in their import prices will not only directly raise the price level but as they are used as inputs in the production of other goods, rise in their imports prices will also push up the cost of production of these other goods and thus will bring about cost-push inflation.

Why limited effects on quantities?

- Fourth, a devaluation might have a limited effect if the country's main export partners are in a recession. Indeed, the Eurozone, Egypt's main trade partner, has a weak growth. Thus, more competitive Egyptian exports might be insufficient to boost export demand.
- Fifth, Egyptian firms shall pass on the effects of devaluation. Indeed, while devaluation leads to a lower price of exports, firms may not choose to keep foreign currency prices as they are to increase their profit margins.
- Sixth, since depreciation affects demand, supply is not concerned. Hence, some studies argue that depreciation can reduce the incentive to be efficient because firms can become competitive without the effort of increasing productivity, which might make depreciation inefficient.

Extensive Margin

- A depreciation is likely to increase the number of destination at the extensive margin since developing countries are able to form new export relationships and find new market, but are much less successful in maintaining those relationships.
- Consequently, Egypt is likely to witness a higher diversification at the destination level with a more depreciated (or undervalued) currency.

Table 7. Results of the Extensive Margin

	Ln(Dest.)		
Ln(GDP imp)	-0.0380***	-0.0380***	-0.0389***
	(0.00128)	(0.00128)	(0.00128)
Ln(Dist.)	0.0371***	0.0373***	0.0364***
	(0.00320)	(0.00320)	(0.00322)
Ln(REER)	-0.130***		
	(0.0273)		
Ln(REER2)		-0.138***	
		(0.0272)	
Misalig.			-0.128*
			(0.0654)
Constant	2.196***	2.188***	1.598***
	(0.132)	(0.122)	(0.0336)
Firm FE	YES	YES	YES
Year FE	YES	YES	YES
Month FE	YES	YES	YES
Observations	423482	423482	423482
R-squared	0.673	0.673	0.673

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Extensive Margin

- Higher depreciation (or undervaluation) is likely to increase the number of products exported to a certain destination.
- Recent trade models introduce the possibility for firms to choose endogenously between the range of products that they sell in the domestic market and/or export.
- Cadot et al (2007) found similar results since they argued that low and middle income countries diversify mostly along the extensive margin that is, addition of new product lines, whereas high income countries diversify along the intensive margin.
- Tool for diversification.

Table 8. Results of the Extensive Margin

	Ln(Product)		
Ln(GDP imp)	0.0207***	0.0207***	0.0205***
	(0.000300)	(0.000300)	(0.000308)
Ln(Dist.)	-0.0138***	-0.0137***	-0.0140***
	(0.000558)	(0.000559)	(0.000567)
Contig.	0.0218***	0.0218***	0.0244***
	(0.00191)	(0.00190)	(0.00181)
Com. Lang.	0.0706***	0.0706***	0.0698***
	(0.00123)	(0.00123)	(0.00124)
Colony	0.00919***	0.00920***	0.00827***
	(0.00138)	(0.00138)	(0.00137)
Ln(REER)	-0.0853***		
	(0.00540)		
Ln(REER2)		-0.0843***	
		(0.00539)	
Misalig.			-0.0519***
			(0.0196)
Constant	0.127***	0.0944***	-0.277***
	(0.0288)	(0.0270)	(0.00778)
Firm FE	YES	YES	YES
Year FE	YES	YES	YES
Month FE	YES	YES	YES
Observations	1073476	1073476	1073476
R-squared	0.377	0.377	0.376

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Sectoral level

- At the sectoral level, the intensive margin seems to matter for some products more than others. This in line with the assumption that real exchange rate depreciation/undervaluation is likely to generate potential for comparative advantage in new and more sophisticated exportable goods and services.

RCA and ER sensitivity

Table 9. RCA vs. REER Sensitivity

	Not Sensitive	Sensitive
No RCA	41	8
	9%	*9%*
RCA	30	18
	26%	*56%*

Source: Constructed by the authors.

Note: The upper number shows the number of products at the HS2 level and the lower number shows the share of these products in the value of total exports.

RCA and ER sensitivity: first group

- It includes products for which Egypt does not have a comparative advantage and that are not sensitive to a real effective exchange rate depreciation.
- In our dataset, they represent 41 products, represent 9% of total exports
- They include mainly products of the printing industry, silk, precious or semi-precious stones, artificial flowers, cork, base metals, musical instruments, impregnated, coated, covered or laminated textile fabrics, vehicles other than railway or tramway, toys, games and sports requisites, machinery, mechanical appliances, nuclear reactors, meat and edible meat offal, coffee, tea and spices, nickel and articles thereof, wood and articles of wood, beverages.
- These products face mainly two difficulties.
  - First, some of them are subject to several technical barriers to trade and sanitary and phyto-sanitary measures that negatively affect their exports.
  - Second, some of them are intensive in high-technology techniques which are relatively scarce in Egypt compared to other Arab countries. These products are not likely to be boosted by a real depreciation as they are not sensitive and Egypt does not have a comparative advantage in their production

RCA and ER sensitivity: second group

- The second group includes products that are sensitive to real depreciation but Egypt does not have a comparative advantage in their production.
- They are 8 products whose share is 9% in total exports.
- These products are mainly cereals, residues and waste from the food industries, ores, organic chemicals, rubber and articles thereof, iron and steel; electrical machinery and equipment. If Egypt manages to gain a higher comparative advantage in such products, they are likely to yield positive gains from a real depreciation.
- This group represents the extensive margin of trade from which Egypt can benefit more with a real depreciation of the Egyptian pound.

RCA and ER sensitivity: third group

- Third, we identified products for which Egypt has a comparative advantage but are not sensitive to real depreciation (30 products with a share of 26% in total exports).
- This groups encompasses: articles of apparel and clothing accessories, not knitted or crocheted, albuminoidal substances, soap and washing preparations, tobacco, cocoa and cocoa preparations, edible products of animal origin, paper yarn and woven fabrics of paper yarn, articles of iron or steel, carpets and other textile floor coverings, ceramic products, sugars and sugar confectionery, essential oils and resinoids, perfumery, fertilizers, preparations of vegetables, fruit, nuts or other parts of plants, inorganic chemicals, organic or inorganic compounds of precious metals, man-made filaments, live trees and other plants, bulbs, roots and the like, cut flowers and ornamental foliage, aluminum and articles thereof and wool, fine or coarse animal hair.
- As this group is not likely to be affected by the recent developments in the exchange rate, one cannot expect higher exports thanks to more depreciation. This is why it is important to maintain their competitiveness despite an insensitivity with respect to exchange rate, especially for products that are highly demanded by the rest of the world.

RCA and ER sensitivity: fourth group

- Fourth, the most beneficial group includes products that are sensitive to real depreciations and for which Egypt has a comparative advantage (18 products and a share of 56% in the value of total exports.
- These products are edible vegetables and certain roots and tubers; edible fruit and nuts, peel of citrus fruit or melons, oil seeds and oleaginous fruits; animal or vegetable fats and oils and their cleavage products, prepared edible fats; mineral fuels, mineral oils and products of their distillation, miscellaneous chemical products, plastics and articles thereof; paper and paperboard, articles of paper pulp, of paper or of paperboard; cotton; man-made staple fibers, articles of apparel and clothing accessories, knitted or crocheted, other made-up textile articles, worn clothing and worn textile articles, articles of stone, plaster, cement, asbestos, mica or similar materials; glass and glassware, copper and articles thereof; lead and articles thereof; miscellaneous manufactured articles. Our findings are relatively in line with Bahmani-Oskooee and Hosny (2012)
- This group represents mainly the intensive margin of trade as they are traditional exports in Egypt.

Destination and ER sensitivity: four groups

- First, traditional markets such as Spain and Italy have a large share in Egypt's exports and are highly sensitive regardless the exchange rate measure we use. For this group, Egypt should take advantage of its presence on those markets and their sensitivity to the pound depreciation to increase its exports.
- Second, other European countries have a lower sensitivity but a large share in Egypt's trade such as Germany, France and Netherlands. These destinations are not likely to be affected by the recent developments of the exchange rate. Hence, Egypt's export to these destinations should remain high, though constant. The same analysis applies on some Arab countries such as Lebanon and Jordan.

Destination and ER sensitivity: four groups

- Third, some African and Asian countries are highly sensitive to exchange rate even though their share is relatively low such as Pakistan, Burkina Faso, Guinea and Zambia. Obviously, these countries represent potential markets as their demand is sensitive to Egypt's exchange rate. **This potential increase is related to the extensive margin mentioned above.**
- Finally, the last group includes countries that have a low share in Egypt's exports and that are not sensitive to exchange rate such as Portugal and Sri-Lanka.

Table 11. Destinations Ranking and Exchange Rate Sensitivity

	REER2		REER		Misal	
Rank	Country	Share	Country	Share	Country	Share
1	ITA	7.28%	ITA	7.28%	ITA	7.28%
2	ESP	3.20%	ESP	3.20%	ESP	3.20%
3	RUS	1.29%	RUS	1.29%	BFA	0.04%
4	ZMB	0.08%	ZMB	0.08%	SWE	0.14%
5	BFA	0.04%	GBR	4.43%	TTO	0.00%
6	GIN	0.05%	PAK	0.70%	PAK	0.70%
7	GBR	4.43%	BDI	0.04%	RUS	1.29%
8	PAK	0.70%	BEL	1.74%	BDI	0.04%
9	MUS	0.10%	TUR	5.80%	GIN	0.05%
10	NOR	0.06%	LTU	0.06%	NOR	0.06%
11	BDI	0.04%	UKR	0.34%	MOZ	0.03%
12	MOZ	0.03%	CZE	0.10%	GBR	4.43%
13	UKR	0.34%	MLI	0.04%	MUS	0.10%
14	LTU	0.06%	MOZ	0.03%	LBN	2.93%
15	MLI	0.04%	GIN	0.05%	LBR	0.03%
16	CIV	0.14%	CIV	0.14%	LVA	0.03%
17	PRT	0.44%	BFA	0.04%	MDV	0.01%
18	BEL	1.74%	IRN	0.27%	ZMB	0.08%

Outline

- Introduction
- Stylized Facts
- Methodology
- Empirical Findings
- Policy Implications

Policy Implications

- Real depreciation can be perceived as a tool to promote export diversification at both the product and the market levels and to reduce the dependence of Egypt on specific products or destinations.
- At the sectoral level, the most beneficial group includes products that are sensitive to real depreciations and for which Egypt has a comparative advantage. Some of these products are already included in the Industrial Development Strategy announced by the Ministry of Trade and Industry (MoTI) in 2016, especially textile and clothing industries and construction industries.

Policy Implications

- Some products are sensitive to the exchange rate development but Egypt does have a comparative advantage in their production. As both chemical and engineering industries are also included in the Industrial Development Strategy, it will be an opportunity for Egypt to develop these products and benefit from their sensitivity to the exchange rate developments. These products represent the extensive margin previously explained.
- The products that are not sensitive to the exchange rate but efficiently produced: marketing, differentiation, better qualities, etc.
- Egypt must avoid the products that are not characterized by a comparative advantage and that are not sensitive to the exchange rate.

Policy Implications: Other macro policies

- **The depreciation of the Egyptian pound per se is not sufficient to boost Egyptian exports. This policy must be accompanied by other measures to guarantee an increase in exports.**
- *At the monetary policy level*, reducing the inflation rate in Egypt compared to the inflation rate among its partners is crucial to benefit from a lower nominal exchange rate of the pound to improve the trade balance. This shows that monetary policy has an important role in promoting exports.
- *As per industrial policy*, incentives are an important determinant of the firms' exports performance. As argued by El Haddad (2016), incentives should be performance-based, finite, pre-announced and enforced along with constant independent monitoring and evaluation. In the same line, as also suggested by El Haddad (2016), it is crucial to improve the economy's competitive environment and accentuate equality of opportunity between all market players.

Policy Implications: Other macro policies

- *For labor policies*, providing an educated workforce and improving the matching between the education system and the labor market requirements. More productive labor will obviously improve the exports competitiveness.
- *At the trade policy level*, first, it is important to improve the quality of Egyptian exports. In fact, with low quality products and significantly depreciated pound, exports might not find large markets. Second, taking advantage from preferential trade agreements. Third, improving the administrative procedures and reducing bureaucracy and red tape cost.

Policy Implications: Other macro policies

- Finally, in terms of *investment policy*, depreciation makes the foreign currency more flexible which reduces the fears and uncertainty related to capital controls and caps on currency transfers. This consequently increases the flow of foreign direct investment (FDI) in any country. Indeed, it has been shown that when financial openness is driven by FDI, it tends to reinforce the export promotion effect of the RER undervaluation/depreciation, because as the literature suggests, FDI is likely to induce technological development and, hence, enhance productivity of exporting firms. More FDI in the manufacturing sector.

Thanks for your attention