FRIEDRICH EBERT STIFTUNG

Egypt Office

The Impact of Egypt-EU Free Trade Agreement on Egypt's Manufacturing Exports and Employment

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Omneia Helmy

Professor, Faculty of Economics and Political Science, Cairo University. Email: omneia.helmy@feps.edu.eg

Nora Aboushady

Assistant Professor, Faculty of Economics and Political Science, Cairo University. Email: nora.aboushady@feps.edu.eg

Chahir Zaki

Associate Professor, Faculty of Economics and Political Science, Cairo University. Email: chahir.zaki@feps.edu.eg

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Prepared by: Omneia Helmy, Nora Aboushady, Chahir Zaki*

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About Friedrich-Ebert-Stiftung (FES) in Egypt

Inspired by its general aims to promote democracy and social justice, to support economic and social development, as well as to advocate for human rights and gender equality, the Friedrich-Ebert-Stiftung (FES) started working in Egypt in 1976. For more than 40 years, the office operates in cooperation with local partners within the framework of several agreements with the Egyptian government. This first was endorsed by Presidential Decree 139/1976 and by the Egyptian parliament. The agreement was renewed in 1988, endorsed by Presidential Decree 244/1989 and approved by the Egyptian parliament.

In March 2017, a new Additional Protocol was signed in Berlin by both, the Egyptian and the German governments, amending the Cultural Agreement of 1959. This protocol was ratified by the Egyptian parliament in July 2017 and entered effect in November by Presidential Decree 267/2017.

While the legal framework of FES' engagement in Egypt has changed, its commitment to assist the Egyptian people during the ongoing transition process remains the same. The Egyptian uprising of 2011 was driven by demands for profound social and political change. Responding to these aspirations still is and will be the main challenge for stakeholders and the whole of Egyptian society during the coming years. Through a brought range of mutually agreed upon projects, FES is contributing to meet this challenge.

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Friedrich-Ebert-Stiftung
Egypt Office

4, El Saleh Ayoub Street
11211 Zamalek, Cairo – Egypt

T: 002 02 27371656-8

F: 002 02 27371659

Email: fes@fes-egypt.org

www.fes-egypt.org

Abstract

Reshaping the Euro-Mediterranean relations became a necessity in the aftermath of the Arab Spring in several South Mediterranean Countries (SMCs), including Egypt. The objective of this paper is therefore to study the impact of Egypt-EU Association Agreement on the manufacturing sector and to point out industries with strong potential for export growth and job creation. We also analyze opportunities for enhancing Egypt-EU investment and trade and –eventually– paving the way for a Deep and Comprehensive Free Trade Agreement (DCFTA) in light of the urgent need for social justice in the region. To do so, we proceed in three ways. First, we undertake a descriptive analysis of trade and investment flows. Second, we run a gravity-type model to examine the impact of Egypt-EU trade agreement on their bilateral trade and to determine the most sensitive products that are affected by the agreement. Finally, we construct an index for Egypt's main exports taking into account trade, employment and gender dimensions. We found that fertilizers are one of the most significant products that experienced increases in their market share, are sensitive and are labor intensive.

Content

Foreword

The Friedrich-Ebert-Stiftung (FES) is the oldest German political foundation and it focuses its diverse programs on the core ideas and values of social democracy – freedom, justice and solidarity. The regional project "Economic Policies for Social Justice in the MENA Region" aims to support new research on economic policies and to provide a platform for academics, civil society and decision makers for exchange and collaboration. The focus is how the economic system can become more just, that is how the benefits of growth and development can reach everybody and be distributed equally. This, we believe, is an important prerequisite for social and political stability.

The European Union (EU) is Egypt's most important trading partner, both for import and export. After an Association Agreement with the EU entered into force in 2004, the trade volume has more than doubled. After 2011, EU-Egypt relations entered a new dynamic, with even a first round of talks on a Deep and Comprehensive Free Trade Agreement, taking place in June 2013. However, such talks have since stalled. Nevertheless, trade relations have increased in recent years, with EU exports surpassing 20 Billion Euros in 2015 and 2016.

For the EU, Egypt is not just a trading partner: Economic and political stability are strong interests of the EU. Therefore, the EU has a genuine interest in sustainable economic development in Egypt, which allows for job creation and added value. A large potential to positively impact economic development in Egypt remains in trade policy. In this light, the present study on the "Impact of Egypt-EU Trade Agreements on Egypt's Manufacturing, Exports and Employment" is very timely. Targeted liberalizations, as proposed in this study, are important to unlock potentials for inclusion while trying at the same time to limit negative effects on social justice and employment. Costs for compliance with EU norms and standards are high, but such investments (especially if tailored to assist SMEs) can prove beneficial to Egypt and the EU. This means that this study (and its accompanying policy paper) are addressed at decision makers in Egypt and Brussels alike.

Creating links and opening avenues for academic debates on a better and more just economic system between European and Arab researchers and stakeholders is the central interest of the regional project. Trade policy and its influence on social justice and employment are naturally of great importance for this work. The project's research is mainly centered on the trade relations of the EU and the countries of the Agadir Agreement (Egypt, Jordan, Tunisia and Morocco), but also takes into consideration regional trade agreements. Effects on social justice, gender relations and the environment need the be important considerations for future negotiations. This study is an important step in the direction of a more nuanced discussion on trade.

Thomas Claes,

Project Director, For Socially Just Development
in the MENA Region

List of Acronyms

ACAA	Agreement on Conformity Assessment and Acceptance
CSF	Civil Society Facility
DCFTA	Deep and Comprehensive Free Trade Agreement
EC	European Community
EEAS	European External Action Services
EIB	European Investment Bank
ENP	European Neighborhood Policy
ENI	European Neighborhood Instrument
FTA	Free Trade Agreement
FDI	Foreign Direct Investment
GOEIC	General Organization for Exports and Imports Control
MECU	Million European Currency Unit
MEDA	Mesures d'Accompagnement
NTM	Non-Tariff Measures
RCA	Revealed Comparative Advantage
SME	Small and Medium Enterprises
SMC	South Mediterranean Countries
SPS	Sanitary and Phytosanitary Measures
UFM	Union for the Mediterranean

1. Introduction

Geographic proximity and the significance of trade flows between the North and the South of the Mediterranean have induced several efforts to create a common area of peace and shared prosperity. Regional integration is therefore key not only to increase trade between both sides of the Mediterranean, but also to foster sustainable economic growth and social inclusion in South Mediterranean Countries.

Egypt enjoyed preferential access to the European market with the entry into force of the Bilateral Cooperation Agreement in 1977. With the launching of the Barcelona process in 1995, preferential agreements were gradually transformed into bilateral reciprocal trade agreements between the European Union and South Mediterranean Countries (SMCs). In this context, Egypt signed the Association Agreement with the EU in 2001. The agreement entered into force on January 1st, 2004 and covered the manufacturing sector in addition to selected agricultural products.

Reshaping the Euro-Mediterranean relations became a necessity in the aftermath of the Arab Spring in several SMCs. Trade and investment flows were not enough to foster sustainable and inclusive economic growth. In the case of Egypt as in the case of several SMCs, exports of manufacturing products remain limited due to difficulties in compliance with EU standards and prevalence of technical barriers to trade. Additionally, exports of agricultural products and trade in services remain mostly excluded from the Association Agreement. EU investments are also heavily allocated towards the oil sector, which limits the potential for job-rich growth. The Euro-Mediterranean cooperation framework needs therefore to better reflect necessities, priorities and cater to opportunities in the region in general, and in Egypt in particular.

The objective of this paper is therefore to study the impact of Egypt-EU Association Agreement on the manufacturing sector and to point out industries with strong potential for export growth and job creation. We also analyze opportunities for enhancing Egypt-EU investment and trade and –eventually- paving the way for a Deep and Comprehensive Free Trade Agreement (DCFTA) in light of the urgent need for social justice in the region.

To do so, we proceed in three ways. First, we undertake a descriptive analysis of trade and investment flows. Second, we run a gravity-type model to examine the impact of Egypt-EU trade agreement on their bilateral trade and to determine the most sensitive products that are affected by the agreement. Finally, we construct an index for Egypt's main exports taking into account trade, employment and gender dimensions. We found that fertilizers are one of the most significant products that experienced increases in their market share, are sensitive and that are labor intensive.

Our work is divided into 6 main sections. In Section 2, we briefly track the historical evolution of economic relations between Egypt and the EU since the 1970's to date. In Section 3, we highlight the main investment and trade-related reforms undertook by the Egyptian government over the period 2004-2017 and analyze Egypt-EU investment and trade relations. Section 4 provides an empirical analysis of bilateral trade between Egypt and the EU and an assessment of the impact of Egypt-EU free trade area on Egyptian manufacturing exports using a gravity-type model. In Section 5, an Egyptian manufacturing sector with strong potential for export growth and job creation is identified by conducting sector analysis. We choose fertilizers as a potential sector to thrive within Egypt-EU investment and trade relations, since it fulfills a set of specific criteria suggesting potential growth and contribution to employment. Finally, Section 6 concludes with some policy implications.

2. Historical Evolution of Egypt-EU Economic Relations

Given the geographic proximity and the significance of trade flows between the North and the South of the Mediterranean, there has been continuous interest to create a common area of peace and shared prosperity. In this context, regional integration is key to achieve higher rates of sustainable economic growth and provide security and peace in the Mediterranean. The following sub-sections briefly track the historical evolution of Egyptian-European economic relations since the 1970's to date.

2.1. EGYPT-EC (EUROPEAN COMMUNITY) COOPERATION AGREEMENT IN 1977

January 18th, 1977 marks the beginning of institutionalized Egyptian-European relations with the signature of the Cooperation Agreement in Brussels. The main objective was to establish important areas of cooperation between both parties for the economic and social development of Egypt. The Cooperation Council responsible for the management of the agreement had met 9 times since its establishment. The agreement covered trade, economic and technical cooperation as well as financial aid.

The Egypt-EC Cooperation Agreement established provisions for non-reciprocal trade liberalization and market access. Under its provisions, all Egyptian exports of industrial products and raw materials enjoyed free access to the community market, while agricultural exports to the European Community (EC) benefited from substantial tariff concessions, with the exception of few sensitive items, such as textiles and fabrics as well as some processed agricultural products. EU exports of industrial and agricultural products take place under Most Favored Nation (MFN) treatment. Additional protocols were signed afterwards to organize trade relations in certain sectors such as Coal and Steel that were considered sensitive sectors. The 1987 Protocol granted Egypt preferential treatment in access to the EU market by means of tariff quotas and export calendars for its traditional flows.

Since the entry into force of the Cooperation Agreement in 1977, four financial protocols have been signed amounting to a total amount of 1436 MECU, of which 661 MECU were allocated in form of grants from the Commission's budget, and 802 MECU from the European Investment Bank (EIB) loans. The lion share of the EIB funds was allocated to the energy sector and to industrial development taking the form of general loans benefiting Small and Medium Enterprises (SMEs).

The first financial protocol covering the period from 1978 to 1981 totaled 170 MECU (million European Community Unit). During this first Protocol, the EIB provided €93 million, divided between the Suez Canal Authority (€25 million) and energy projects (€68 million). The second Protocol (1983-1986) provided €185 million to finance the agricultural and manufacturing sectors, and infrastructure. The allocated funds were extended to cover the third Protocol (1986-1992). In the fourth Protocol (1992-1996), funds were increased by 65% compared to the previous protocol. In addition to energy and infrastructure projects, funds were directed to public and private banks to support SMEs.

Out of all non-member Mediterranean countries, Egypt has been the main beneficiary, receiving nearly 31% of the total funds available for the Mediterranean region. Between 1977 and 1995, grants were mainly oriented towards the acceleration of the economy's modernization and restructuring process, alongside the increase of the private sector's capacity. Continuity of economic reform in Egypt was thus heavily supported by the EC. Table 1 depicts EC funds directed to restructuring programs.

Table 1- Main EC Funds Directed to Restructuring Programs (1977-1995)

Restructuring Program	(Million European Currency Unit (MECU
Support to the privatization programs	43
Reform of the banking sector- support to the Central Bank of Egypt	11.7
Private sector development program	25
Privatization of veterinary services	20

Source: Institut MEDEA, EU-Egypt Relations, http://www.medea.be/en/countries/egypt/eu-egypt-relations/

In addition to funds for economic reform, Egypt had benefited from funds external to the protocols amounting to 450 MECU allocated to food aid, and 175 MECU of special assistance during the Gulf Crisis in 1991[1].

2.2. THE EURO-MEDITERRANEAN PARTNERSHIP

Since the early 1990s, negotiations on the replacement of non-reciprocal preferences with bilateral free trade agreements have started. In 1995, the Euro-Mediterranean Partnership was hence introduced in the Barcelona Conference, providing greater interregional cooperation and eventual completion of the Free Trade Area (FTA) between the EU and the SMCs.

Besides economic cooperation and the establishment of a Free Trade Area in the region, objectives of the Euro-Mediterranean Partnership extend to supporting economic transformation using financial assistance instruments. Under the framework of the Euro-Mediterranean Partnership, the MEDA[2] program was created in 1995 as a tool to encourage and support economic reform in the SMCs.

MEDA resources are attributed bilaterally, within the framework of the National Indicative Program, while the Regional Indicative Program covers multilateral activities. Bilateral MEDA programs benefited Algeria, Tunisia, Morocco, Egypt, Jordon, Syria, Lebanon and The Palestinian Territories. The same partners, as well as Israel and Turkey also benefited from the MEDA regional program.

For the period between 1995 and 1999, financial commitments went to four main types of operations: Support to structural adjustment (15%), support to economic transition and private sector development (30%), classical development projects (mainly education, health, the environment, rural development) (41%) and regional projects (14%) of total commitments.

1 http://www.medea.be/en/countries/egypt/eu-egypt-relations/

2 The term MEDA stands for mesures d'accompagnement.

The second phase of MEDA (MEDA II) taking place between 2000 and 2006 is a revised version of MEDA I. MEDA II is rather program-oriented, and was supplied by an amount of €5.350 million for the scheduled period. Under the framework of MEDA II, the EIB allocated €330 million as loans to support infrastructure projects in water, energy and transport sectors (Table 2).

Table 2- EIB loans to support infrastructure projects in Egypt (2000-2006)

Project	Million Euros
Cairo North Power Plan I	150
Industrial Development Bank of Egypt Global Loan II	30
National Drainage Program	50
Industrial Development Bank of Egypt Global Loan III	50
Cairo Metro Line Extension	50

Source: EIB, Projects lists, 2000-2006, http://www.eib.org/projects/loan/list/?region=5&country=EG

Between 2000 and 2017, the EIB has established credit lines worth €1,137 million to support small and medium-sized enterprises (SMEs) through public and private commercial banks (Table 3). Loans are focused on (SMEs), implementing projects in the productive and services sectors (for example: agribusiness, manufacturing, tourism, private education, small-scale energy, healthcare and related services).

Table 3- EIB Credit Lines to Support SMEs from 2000-2017

Credit Line	Year	Million Euros
IDBE Global Loan III	2000	50
EDBG GL II	2001	30
Upgrading Egyptian Enterprises III	2002	25
GL Private Sector Development	2004	60
Upgrading Egyptian Enterprises III	2005	22
Upgrading Egyptian Enterprises III	2009	3
NBE Global Loan	2013	80
Private Sector Development & Economic Growth	2015	120
EBE SME MIDCAPS loans	2016	28
QNB Loans for SMEs	2016	500
EG BANK Loans for SMEs	2017	18

Source: EIB, Loans, Credit Lines, Projects Lists, Egypt, 2000-2017. http://www.eib.org/projects/loan/list/?region=5&country=EG

2.3. THE EGYPT-EU ASSOCIATION AGREEMENT

In 2001, Egypt and 15 EU- Member States signed an association agreement in Brussels to replace the previous Cooperation Agreement, and with the aim of gradually establishing a free trade area over a transitional period not exceeding 12 years since the entry into force of the agreement on January 1st, 2004.

Euro-Mediterranean Association Agreements are bilateral trade agreements with other forms of cooperation, such as enhancing the political dialogue, respecting human rights and democracy, gradual establishment of WTO- compatible free trade, provisions related to intellectual property rights, public procurement, competition rules, state aids and monopolies. The agreements also provide cooperation in areas of social affairs and migration.

Egypt-EU bilateral free trade area is based on reciprocal tariff liberalization for both industry and agriculture. According to the Agreement, exports of Egyptian origin enjoy an immediate removal of all customs duties and other charges having equivalent effect upon the entry into force of the Agreement, with the exception of sensitive products such as textiles and ready-made garments, which were subject to quotas. At the same time, Egyptian imports are subject to gradual removal of tariffs by category of product, as shown in Table 4.

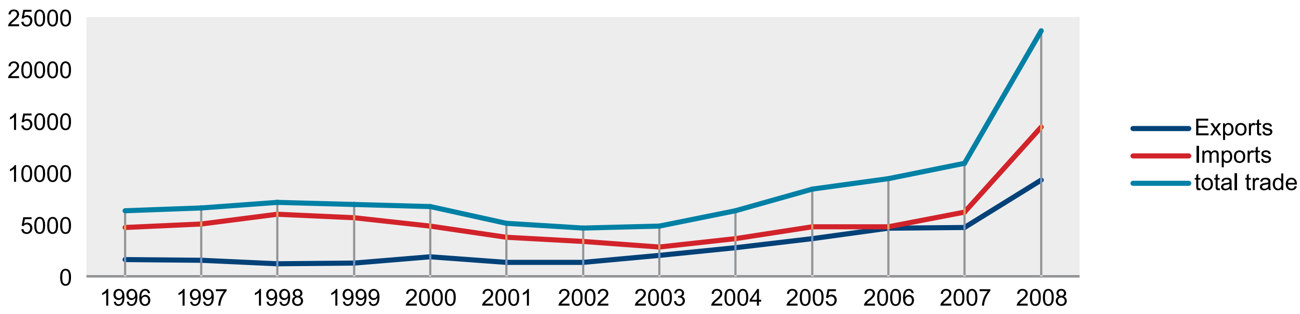
Table 4- Tariff Reduction Plan: Egyptian Industrial Imports from the EU (2007-2020)

	Agreement Implementation Years													
	07	08	09	10	11	12	13	14	15	16	17	18	19	20
	(%) Tariff Reduction Rate													
List 1: (Raw materials) aluminum ores, sodium chloride, sulphur, wood, Parts of machines, aluminum oxide, cooper alloys	75	100	-	-	-	-	-	-	-	-	-			
List 2: (Intermediate goods) carbon, chemical preparation, papers, glasses fibers, tubes and pipes of vulcanized rubber, insecticides and vacuum flask	-	10	25	40	55	70	85	100						
List 3: (Final goods) apparel, textile, shoes, iron and steel, electrical equipment and machines. (2010-2017)	-	-	-	5	10	25	40	55	70	85	100			
List 4: Vehicles and some electrical engines and generators (2011-2020)	-	-	-	-	10	20	30	40	50	60	70	80	90	100

Source: Free Trade Agreement between Egypt and EFTA States, Trade Agreement Sectors, Ministry of Trade and Industry.

In the years following the entry into force of the Agreement between Egypt and the EU, bilateral trade has increased considerably, as shown in Figure 1.

Figure 1- Egypt-EU Trade (USD million, 1996-2008)



Source: Saleh. A, Abouelkheir. H. (2013), "Egypt and the EU: An Assessment of the Egyptian Euro-Mediterranean Partnership", Topics in Middle Eastern and African Economies, Vol.15, No.1, May.

Over the period 2004- 2016, Egypt- EU trade more than doubled from €11.4 billion in 2004 to €27.3 billion in 2016 to represent 31.3% of Egypt's total trade value in 2016.

2.4. THE EUROPEAN NEIGHBORHOOD POLICY (ENP)

The European Neighborhood Policy (ENP) is a European Foreign and Security Policy instrument, allowing the EU to work with its Southern and Eastern neighbors on achieving stabilization, security and prosperity. The Neighborhood Policy covers key priorities areas including the promotion of democracy, rule of law, respect of human rights and social cohesion.

Following the enlargement in 2003 and the emergence of new neighbors, the ENP was put in place in 2004 to act as a unified policy framework of the EU's relations with 16 partner countries. The implementation of the ENP requires joint action on both sides. On the EU side, the ENP frames the institutional role of the European External Action Services (EEAS), the European Commission and Member States. On the other side, the success of the ENP requires the willingness of partner countries to adhere to the principles of the EU.

Following the Arab Uprising, the radical changes and political instability occurring in the neighboring countries, the ENP was reviewed in 2011. The revised ENP was announced by the EEAS and the European Commission in November 2015. This review introduced major principles such as "More for More", whereby additional reforms and financial support are tied by the efforts of the partner countries in committing to reforms. Another new concept is the "Country by Country" principle, whereby the EU is to adopt a flexible and differentiated approach in engaging partner countries in cooperation based on each partner's circumstances, priorities and willingness to reform.

The ENP provides a bilateral framework for cooperation between the EU and its partner countries. It is, however, complemented by regional and multilateral initiatives, such as the Union for the Mediterranean (UFM) and the Eastern Partnerships[3]. The ENP's Association Agendas, Action Plans or Partnership Priorities build on already existing legal agreements between the EU and its partners. The Association Council remains the highest formal institution to supervise the implementation of the Agreements and to discuss mutual interests. The ENP Action Plans set political and economic agendas for reform with short and medium term priorities, and focus on sector-based cooperation.

In 2014, the EU provided financial support through the European Neighborhood Instrument (ENI) amounting to EUR 15 billion and covering the period 2014-2020.[4] The European Commission provides support in terms of grants, EIB and EBRD loans. The Civil Society Facility (CSF) is also a financial instrument created in 2011 to support the Civil Society and to enhance its role in supporting democracy and good governance. In the framework of the "More for More" principle, the Commission has set financial support programs called "SPRING" for its Southern partners taking concrete reform steps[5], which was replaced by "Umbrella Program Funds" under the 2014-2020 multi-financial framework and Tunisia was the first recipient in 2014 (€50million) and in 2015 (€71.8 million).[6] Tunisia receives the maximum allocation, while Egypt still cannot benefit from this fund.

The ENI is considered a key financial instrument for the EU-Egypt cooperation between 2014 and 2020. Financial assistance takes the form of Country Annual Action Programs. In addition to bilateral ENI, Egypt benefits from ENI regional and neighborhood –wide cooperation programs. The ENI assistance to Egypt is outlined in two Single Support Frameworks with a combined maximum allocation of just €1bn. Bilateral allocation for Egypt totaled €311 and €380 million for 2014-2016 and the rest is allocated to the second Single Support Frameworks from 2017-2020. [7]

Between 2014 and 2016, EU bilateral funding to Egypt through the ENI totaled €320 million, as shown in Table 5 and €62 million funded by regional ENI including: Egyptian

3 European Neighborhood Policy, European External Action Services 2016

4 Bonschma,R, Paci, R, (2016), "Economic Perspective on the European Neighbourhood Policy: Introduction", Utrecht University, October.

5 Financing ENP, European External Action Services, October 2016.

6 Michou.H. (2016), "EU-Egypt Bilateral Relations: What Scope for Human Rights Advocacy? ", EuroMed Rights, June

7 http://ec.europa.eu/enlargement/neighbourhood/pdf/key-document/egypt/20160304-extended-single-support-framwork-egypt-2014-2016.pdf

Pollution Abatement Program III, Additional Technical Assistance for Transport and Urban Development Project, and Fayoum Waste Water Expansion Program.[8]

Table 5- EU bilateral funding to Egypt through ENI from 2014-2017:

Year	Amount	Projects
2014	€115 million	• Egypt Natural Gas Connections Program • Kafr El-Sheikh Waste Water Management • Expanding Access to Education and Protection for Children at Risk
	€10 million additional	• Egyptian Pollution Abatement Program III
2015	€105 million	• Citizen Right Project • Promoting Inclusive Growth in Egypt • Upgrading in formal Areas Infrastructure • Fostering Reforms in Egypt Renewable Energy and Water Sector • 200 MW Wind Farm Project-Gulf Suez • Sustainable Energy Finance Facility
2016	€100 million	• Advancing Women's Rights in Egypt • EU Facility for Inclusive Growth and Job Creation • National Drainage Program III
2017	€100 million	• Initiatives in areas contributing to stabilization through the promotion of the economic sustainable development and democratic governance in Egypt.

Source: Annual Action Program 2017-Annual Action Program 2014[9]

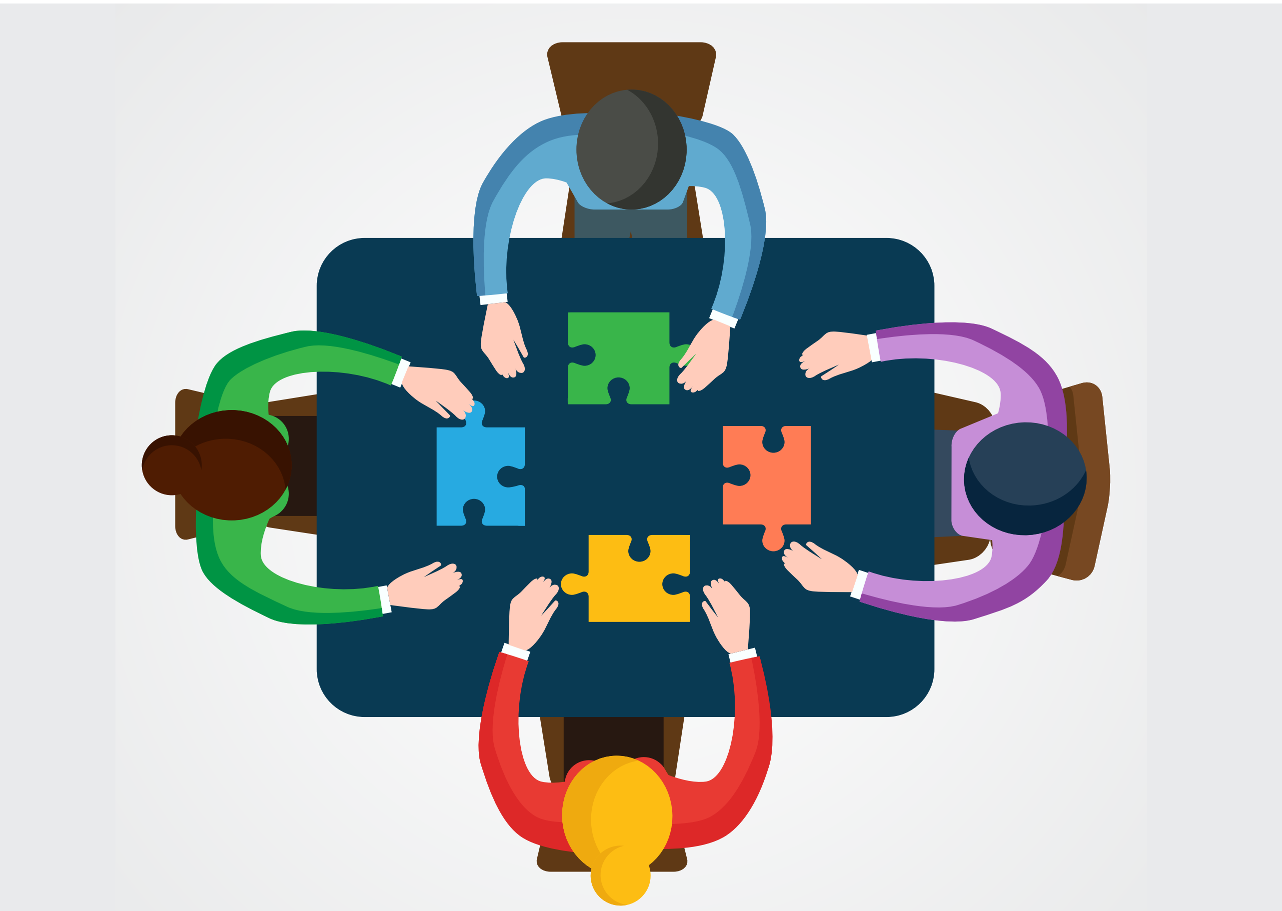
In addition to the ENI, Egypt is also eligible for additional funding under several EU thematic programs and instruments such as: the Instrument contributing to Stability and Peace (ICSP), thematic programs under the Development Cooperation Instrument (DCI) which cover among others Civil Society Organizations and Local Authorities, Human Development and Migration & Asylum. From 2014-2017, Egypt has received €4 million through the European Instrument for Democracy and Human Rights. Egypt is also eligible for Erasmus + programs for promoting higher education.

8 European Neighborhood Instrument ENI-2014-2020; Single Support Framework for EU support to Egypt http://eeas.europa.eu/archives/docs/enp/pdf/financing-the-enp/egypt_2014-2015_programming_document_en.pdf = https://ec.europa.eu/neighbourhood-enlargement/neighbourhood/countries/egypt_en

9 https://ec.europa.eu/neighbourhood-enlargement/neighbourhood/countries/egypt_en

2.5. THE UNION FOR THE MEDITERRANEAN (UFM)

The UFM is an intergovernmental Euro-Mediterranean organization including all of the 28 countries of the EU and 15 SMCs. It was launched at the Paris Summit for the Mediterranean in 2008 to reaffirm the political ambition to strengthen regional cooperation in the Mediterranean region within the framework of Barcelona Process. The UFM aims at "building on consensus to pure cooperation, political and socio-economic reform and modernization on the bases of equality and mutual respect for each other's sovereignty"[10]. Since 2010, the UFM has worked proactively towards greater level of cooperation in the region, in response to the change in the scope of the challenges faced by the region. Fifteen ministerial conferences have been conducted tackling key strategic areas. More than 200 regional forums have been organized to include representatives from parliaments, international organizations, civil society organizations, financial institutions, private sectors and universities. On the projects level, the UFM labelled 50 projects, 28 concerned with human development (Youth unemployment, women empowerment, mobility and higher education), and 22 projects concerned with sustainable development (climate action, urban development, water and environment). Egypt is a beneficiary in many UFM labelled projects, as shown in Table 6.



10 The Union for the Mediterranean: An Action driven Organization for regional cooperation Development:2017

Table 6 - Selected UFM Projects in Egypt

Project	Beneficiaries	Priority Area	Labelled in	Total Cost
Imbaba Urban Upgrading Project	Egypt	Transport and Urban Development	June 2014	€100 million
Mediterranean RESCP POST RIO +20: Supporting the adoption of Sustainable Consumption and Production (SCP) and Resource Efficiency (RE) models in the Mediterranean region	Albania, Bosnia & Herzegovina, Egypt, Jordan, Montenegro, Morocco, Tunisia, Turkey	Water and Environment	July 2014	€8.9 million
LOGISMED Training Activities	1st Phase: Egypt, Morocco, Tunisia 2nd Phase: the rest of the Mediterranean countries	Transport and Urban Development	November 2011	€6.6 million
Euro-Mediterranean Development Center for Micro, Small and Medium Enterprises	Tunisia, Morocco, Jordan, Egypt	Business Development	February. 2013	€5.4 million
Developing Youth Employability and Entrepreneurial Skills -	Jordan, Egypt, Morocco, Palestine	Business Development	July 2015	€3.8 million
Generation Entrepreneur	Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine, Tunisia	Business Development	January 2014	€3.4 million
Governance & Financing for the Mediterranean Water Sector	Albania, Egypt, Jordan, Lebanon, Morocco, Palestine, Tunisia	Water and Environment	January 2015	€2.3 million
Skills for Success – Employability Skills for Women	Tunisia, Egypt,) Jordan, Lebanon, Morocco	Social and Civil Affairs	October 2012	€700,000

Source: Union for the Mediterranean Projects- Monitoring 2016

In 2017, four ministerial conferences were held in Cairo, Egypt, II UFM Regional Forum (January), WATER (April), Sustainable Urban Development (2017) and Strengthening the Role of Women in Society (November). It was declared that 2017 is considered a new phase for the UFM with the adoption of the Road Map of Action that reaffirmed the commitment of the 43 countries to work together for an effective cooperation.

2.6. DEEP AND COMPREHENSIVE TRADE AGREEMENTS (DCFTA) AND THE FUTURE OF EGYPTIAN-EU RELATIONS

DCFTAs are bilateral free trade agreements, based on the existing Association Agreements, allowing partner countries to access the European Single Market in selected sectors and providing partner countries the opportunity to modernize their trade relations. This will take place via the progressive removal of customs, non-tariff barriers, and by an extensive harmonization of laws, norms and regulations in various trade-related sectors.[11] This also includes measures leading to a regulatory convergence to increase economic integration with ENP partners.[12]

Such DCFTAs have been signed with Georgia, Moldova and Ukraine starting 2014 but entered into force in 2016.[13] Therefore, these DCFTAs are considered a benchmark for other emerging economies.[14] Legal and institutional framework of DCFTAs can be outlined using Ukraine as a best practice (see Appendix 1).

It is important to note that in December 2011, following the Arab uprisings, the Council of the European Union adopted negotiating directives for DCFTAs with Jordan, Egypt, Tunisia and Morocco. Those countries were selected because they have some common characteristics: they are WTO members, parties in Agadir Agreement and for the EU, they were perceived as having sufficient economic and political reforms. In the following parts, we present the evolvement of the DCFTA negotiations in Arab countries:

- **Morocco**: Negotiations were only launched with Morocco in March 2013. The objective was to upgrade the existing association agreement which since 2000 has already guaranteed tariff-free trade for many products and to include trade in services and investment, government procurement, competition, intellectual

11 EU-Ukraine Deep and Comprehensive Trade Agreement: European Commission

12 Panorama of EU Regional Programs and Projects: Southern Mediterranean 2012- 2014 , the European Commission

13 http://ec.europa.eu/trade/policy/countries-and-regions/countries/ukraine/

14 http://ec.europa.eu/trade/policy/countries-and-regions/countries/moldova/

property rights and the gradual integration of the Moroccan economy into the EU single market, for example in areas like industrial standards and technical regulations or sanitary and phyto-sanitary measures. Despite the progress of the first four negotiation rounds, Morocco insisted on suspending the negotiations in July 2014, to assess the results on its sectors and fearing the negative impacts on key sectors of the Moroccan economy.

- **Tunisia**: DCFTA negotiations were launched in October 2015. The DCFTA aims at expanding liberalization of two-way trade in agriculture and fisheries and will also include provisions on a full range of regulatory areas of mutual interest, such as trade facilitation, technical barriers to trade, sanitary and phyto-sanitary measures, investment protection, public procurement, competition policy and trade and sustainable development. Liberalization of trade in services and investment will also be covered. Yet, these negotiations did not lead to concrete steps.

- **Jordan**: the preparatory process is ongoing by carrying out a Sustainability Impact Assessment (SIA). Furthermore, towards a more facilitated trade scheme, the EU and Jordan agreed to simplify the rules of origin that Jordanian exporters use in their trade with the EU.

- **Egypt**: EU and Egypt began talks about a DCFTA in June 2013. Yet, it is worthy to mention that negotiations on trade in services are currently on hold.[15]

Three main lessons can be learnt from the Ukrainian case in order to improve the implementation of the DCFTA with Arab countries and especially Egypt. First, and most importantly, there has been a clear political will from both sides. This was particularly crucial because both the required funds and technical assistance might be present but without a political support, nothing can be implemented. Second, the DCFTA covered various trade-related issues as outlined in Appendix 1. Hence, the DCFTA was perceived as a comprehensive reform to improve the performance of the economy. This does not contradict the fact that the DCFTA countries should focus first on reforms that are directly related to export-driven growth, access to the EU market, competitiveness gains and attractiveness for FDI inflows. Third, the government of Ukraine particularly focused on behind the border barriers and regulations which are substantial in the Arab countries.

15 Loo. G, (2015), "Enhancing the Prospects of the EU's Deep and Comprehensive Free Trade Areas in the Mediterranean: Lessons from the Eastern Partnership", CEPS, June

3. Analysis of Egypt-EU Investment and Trade Relations

In this section, we highlight the main investment and trade-related reforms undertook by the Egyptian government over the period 2004-2017, and provide an analysis of Egypt-EU trade and investment relations. The analysis reveals that there is still large potential for enhancing these relations and using them to respond to the urgent need for economic growth and social inclusion in Egypt.

3.1. EGYPT INVESTMENT-RELATED REFORMS

Between 2004 and 2017, the Egyptian government undertook a series of investment-related reforms to improve the business environment and encourage investment, especially in export-oriented sectors (Table 7).

Table 7- Reforms for Doing Business in Egypt (2004- 2017)

Year	Reforms
2004	• Egypt introduced computerized company contract models for use in business incorporation and created a single access point for business registration with approval in 24 hours
2007-2009	• Egypt lowered registration fees, improved the process at the one-stop shop and reduced the minimum capital requirement • Improved access to credit: the credit bureau I-score was established in 2007 and later improved. Borrowers' right to inspect their own data in the credit bureau was guaranteed in 2008, and the credit bureau added retailers to its database in 2009.
2010	• Egypt reduced the cost to start a business
2014	• The role of the Egyptian Regulatory Reform and Development Authority (ERRADA) is reactivated to review all investment-related regulations and eliminate burdensome regulations. • Egypt issues Decree Law 56/2014 that amends the Competition Law 3/2005 to reinforce the role of the Competition Authority
2015	• Law 5/2015 regarding national preferences for Egyptian products in government contracts expanded the scope of application of national preferences to all supply and project agreements and extended it to public companies. • Egypt issues Decree-Law 87/2015 on electricity to separate between regulation and provision and allows for privatization of electricity generation • New Investment Law-decree 17/2015 is issued to provide further incentives to investors and introduce new dispute settlement mechanisms
2016	• Decrees no.991/2015 and 49/2016 (in force March 2016), mandating special import requirements for a list of 25 categories of goods. The most significant category of products covered by the decrees in terms of value of EU exports to Egypt is milk and dairy products. • Egypt strengthened minority investor protections by barring subsidiaries from acquiring shares issued by their parent company. • Egypt adopted a flexible exchange rate regime • Energy prices were increased • Value-Added Tax was introduced • Lower prices of investment land for specific activities in Upper Egypt

Year	Reforms
2017	• The New Investment Law no. 72 of 2017 was introduced • Investors were granted strong safeguards and generous incentives • Land may be allocated free of charge or benefit from a 50% refund from the State for some strategic activities and under specific conditions • Quota of foreign workers per production unit was increased from 10% to 20% • Special incentives were granted to investment projects in under-developed geographic locations, export-oriented projects, labor-intensive activities, SMEs, communication and information technology activities, environment protection, healthcare, social care, cultural care, technical education, scientific research and training

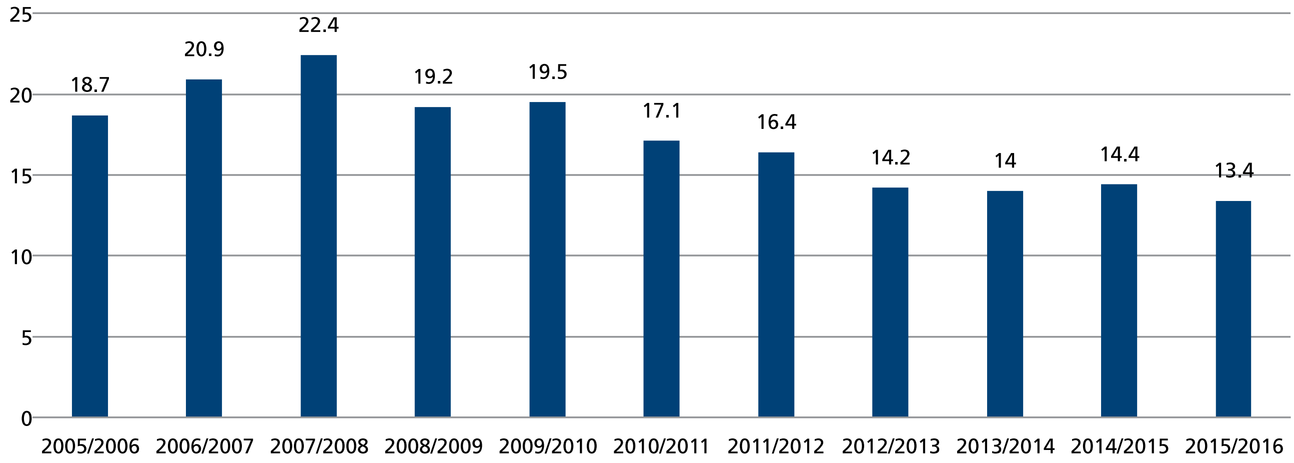
Source: World Bank, 2017 Doing Business.

Notwithstanding the above-mentioned reforms, Egypt maintains a number of regulatory barriers to foreign investment. Regulatory barriers arise mainly from "horizontal" laws and regulations affecting all industries, such as, restrictions on the transfer of funds, limitations on the movement of people, and caps on foreign equity participation in some sectors (49% of total equity). Some barriers are also "sector" specific (such as in tourism and telecommunications). Some regulations are rather "modal" and mainly take the form of restrictions on commercial presence in terms of land ownership, and presence of natural persons (visa requirements for foreigners and limitations on the period of stay). Other barriers arise from the "stage of supply" regulations, such as limiting the entry of services suppliers to the Egyptian market through licensing and registration requirements. These barriers are basically prevalent in infrastructure services, such as maritime and air transportation, courier services, in addition to construction, commercial agency services, and government procurement activities. Public monopolies still operate in fixed line telecommunications, electricity production and distribution, gas distribution, railway transportation and postal delivery services.

3.2. EGYPT-EU INVESTMENT RELATIONS

Successful regulatory reforms in the period 2004-2008 helped increase the share of total investment in GDP, reaching a peak of 22.4 percent of GDP in FY2007/2008 (Figure 2). Total investment as a percent of GDP dropped to 19.2 percent in 2008/2009 due to the global economic slowdown, and continued its downward trend as a result of political unrest in Egypt and the region since 2011, reaching 13.4% of GDP in FY2015/2016.

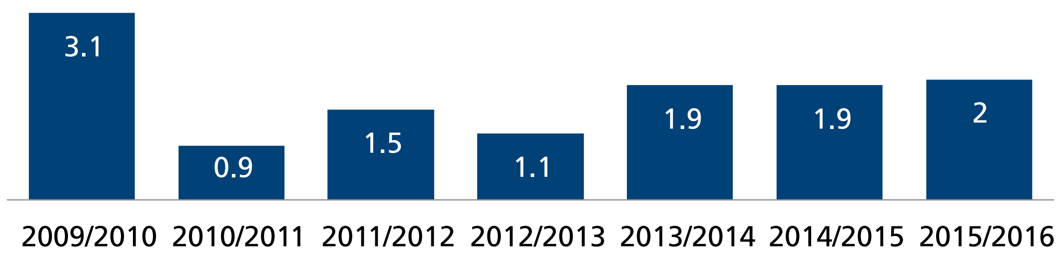
Figure 2- Total Investment in Egypt (as % of GDP)



Source: Ministry of Finance, Monthly Bulletin, December 2016

Foreign direct investment (FDI) inflows to Egypt also witnessed a steady increase from USD 2.1 billion in FY 2003/2004 to USD 13.2 billion in FY 2007/2008, equivalent to nearly 9% of GDP. However, FDI inflows dropped to USD 8.1 billion in FY 2008/2009, which is likely to be explained by the financial crisis. Following the 2011 uprising, FDI inflows sharply dropped to 0.9% of GDP in FY 2010/2011. FDI inflows have slowly picked up to reach 2% of GDP in FY 2015/2016 (Figure 3).

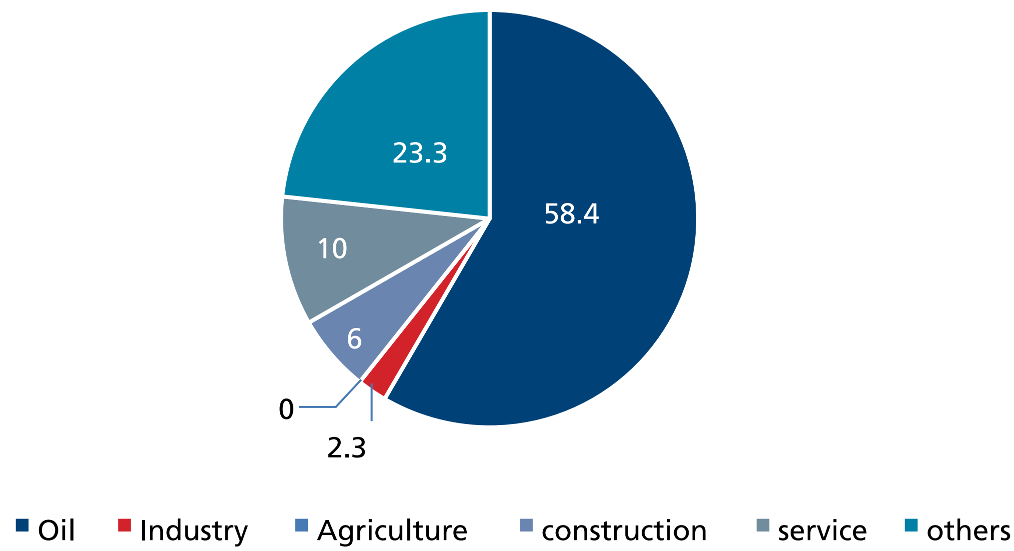
Figure 3: Net FDI (as % of GDP)



Source: Ministry of Finance, Monthly Financial Bulletin, several issues.

FDI in Egypt is mainly directed towards the oil sector, which attracts more than 58% of total inward FDI flows, followed by services (10%) and construction (6%). Meanwhile, manufacturing benefits from a mere share of 2.3% of inward FDI flows. Finally, no FDI seems to be allocated towards the agriculture (Figure 4).

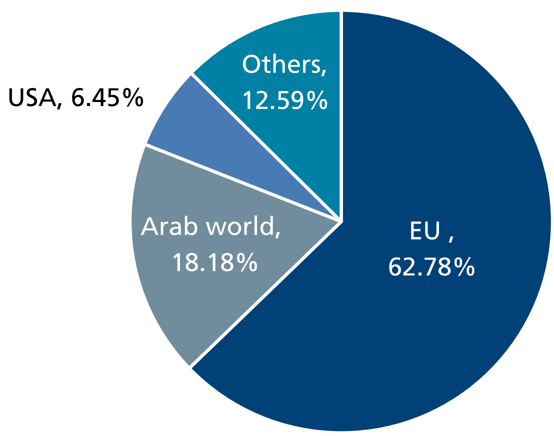
Figure 4- Distribution of inward FDI by sector (%, FY 2015/2016)



Source: Central Bank of Egypt, Annual Report 2015/2016

The EU is the main investor in Egypt, accounting for more than 62% of total inward FDI flows in FY 2015/2016, followed by the Arab countries (18.8%). The USA only accounts for 6.45% of Egypt's total inward FDI. There are currently 22 bilateral investment treaties (BITs) signed between Egypt and most of the EU countries.

Figure 5- Net FDI by Origin (FY2015/2016)



Source: Ministry of Finance, Monthly Bulletin, September 2017.

Among EU Member States, UK, France, the Netherlands, Germany and Spain have been the most important sources of FDI for Egypt (Table 8).

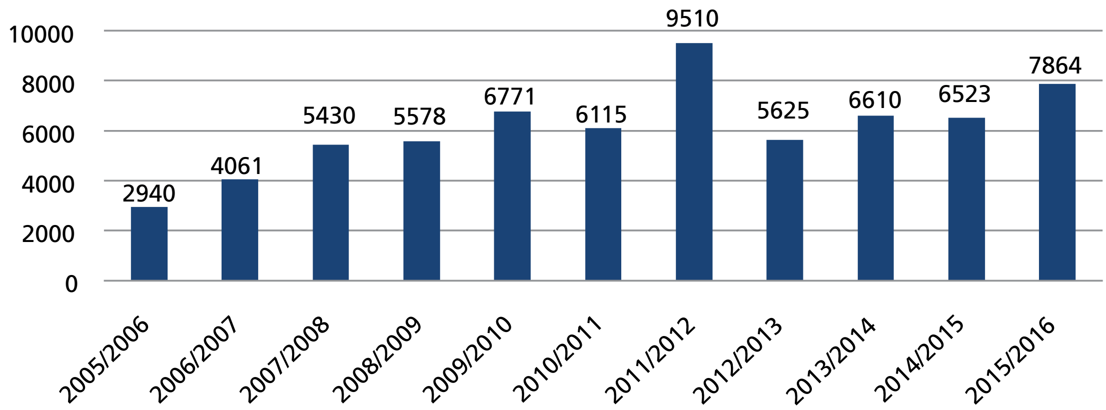
Table 8- Total FDI inflows by country in million USD (FY 2011/2012- FY 2015/2016)

	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Total Inflows	**11768**	**10274**	**10856**	**12546**	**12526**
USA	578	2183	2230	2116	858
Germany	**203**	**186**	**194**	**190**	**201**
France	**316**	**266**	**347**	**230**	**249**
UK	**5870**	**3997**	**5079**	**4990**	**5944**
Spain	**60**	**30**	**6**	**28**	**154**
Netherlands	**409**	**164**	**192**	**182**	**246**
Saudi Arabia	240	192	284	649	313
UAE	560	481	401	1383	1329
Kuwait	64	46	130	237	133
Bahrin	153	263	194	137	165
Oman	13	11	13	12	12
Switzerland	125	115	95	165	128
others	2497	2339	1592	2229	2796

Source: Central Bank of Egypt, Annual Report 2015/2016.

Unlike the rest of FDI inflows to Egypt, FDI originating from the EU has only slightly dropped in the year of the uprising (FY 2010/2011), before picking up sharply in the following year (FY 2011/2012). In FY 2012/2013, EU direct investment in Egypt has dropped sharply again for political reasons[16], before modestly picking up in the years to follow (Figure 6).

Figure 6- Total EU Investment Inflows to Egypt in million USD (FY2005/2006- FY2015/2016)



Source: Ministry of Finance, Monthly Bulletin, July 2016.

16 The sudden drop in FY 20122013/ could be explained by the political setup during this year with the dominance of the Muslim Brotherhood party in both legislative and executive powers. With the ouster of Mohamed Mursi in July 2013, EU FDI started to pick up again.

To sum up, boosting investors' confidence in the Egyptian economy and attracting more sustainable and diversified domestic and foreign investments require effective implementation of investment-related reforms and lower regulatory barriers to foreign investment.

3.3. EGYPT TRADE-RELATED REFORMS

Over the past decade, Egypt carried out serious reforms to streamline standards and other non-tariff measures (NTMs). In line with most countries, the proportion of mandatory standards in Egypt has been falling over time, and now represents nearly 10% of the total.

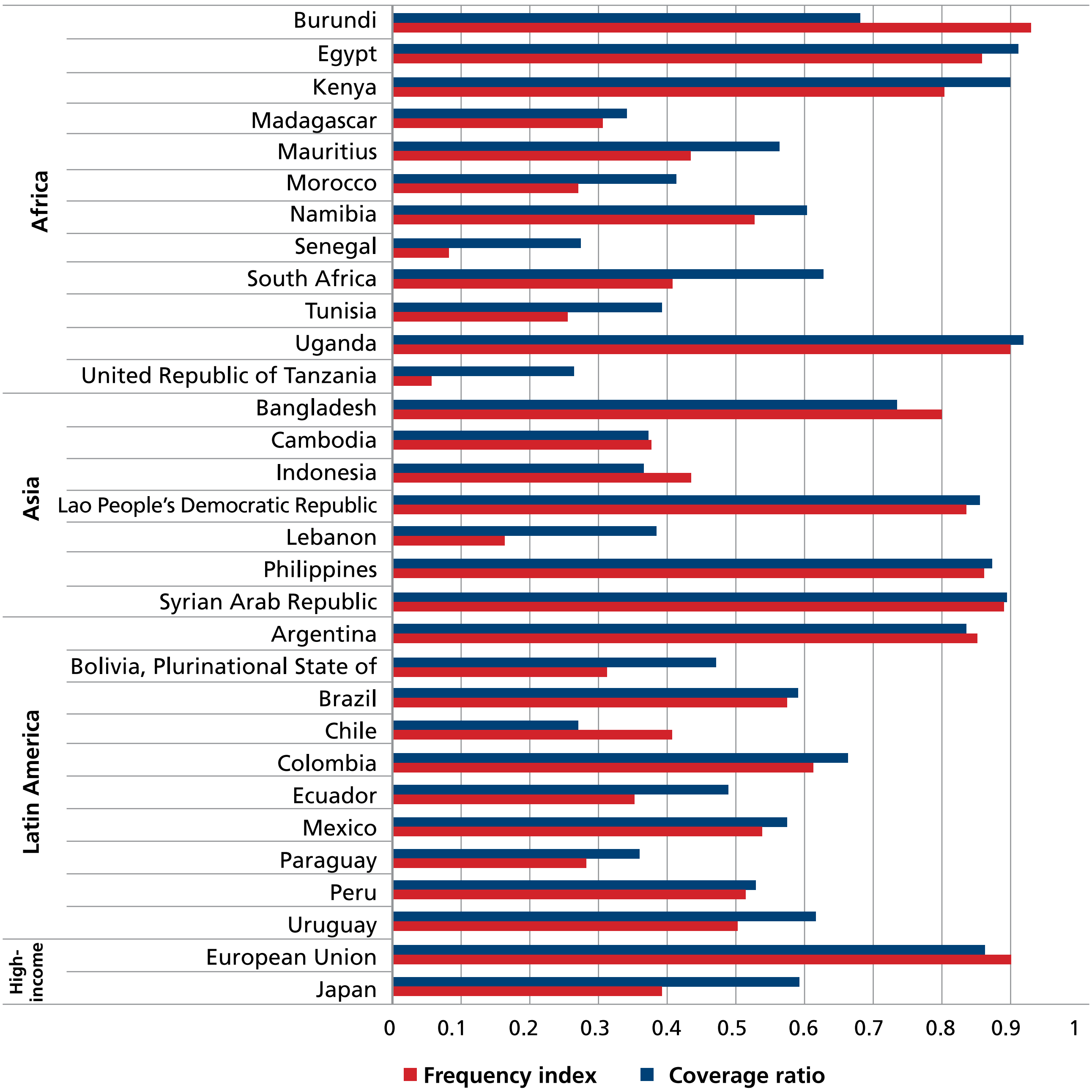
The Egyptian Organization for Standards and Quality (EOS) has so far issued around 10,000 national standards covering textiles, chemicals, food, engineering products, documentation, and measurement. It also works on streamlining and harmonizing local standards with European international standards (ISO/IEC Guides 21-1:2005 and 21-2:2005, European Directives (CEN and CENELEC))[17] to reduce technical barriers to trade, to fulfill the requirements of its regional trade agreements and to boost exports to the European Market within the framework of the EU-Egypt Association Agreement.

Within the abovementioned sectors, the share of mandatory standards appears to be the highest in food products (more than 15%) followed by chemical and engineering products (around 5%). The textile sector has the fewest mandatory standards, while measurement and documentation are not subject to any mandatory requirements. In the food sector, the current share of domestic standards adopted from Codex Alimentarius is estimated at 70%. As for engineering and medical products, standards systems are often entirely based on ISO regulations.

Despite significant reform and liberalization efforts, Egypt remains among the group of developing countries with the highest frequency index and coverage ratio of NTMs (Figure 7).

17 EOS website: http://www.eos.org.eg/en

Figure 7- Frequency Index and Coverage Ratios by Country



Source: UNCTAD (2013).

Administrartive barriers appear to be the most important impediments to trade. The cost of some red tape procedures for exports and imports is relatively high and time-consuming (Table 9). According to the Doing Business dataset, Egyptian procedures create a lengthier than necessary clearance process for imported and exported goods as compared to MENA and OECD countries. Egypt's cost of importing is much higher than the OECD and the MENA region. However, Egypt's cost of exporting is lower than the MENA region.

Table 9- Egypt Export and Import Procedures, 2017

Indicator	Egypt	MENA	OECD
Time to export (hours)	88	74.3	2.4
Cost to export (US$ per container)	100	243.6	35.4
Time to import (hours)	265	94.5	3.5
Cost to import (US$ per container)	1,000	266.2	25.6

Source: World Bank Doing Business Indicators (2018).

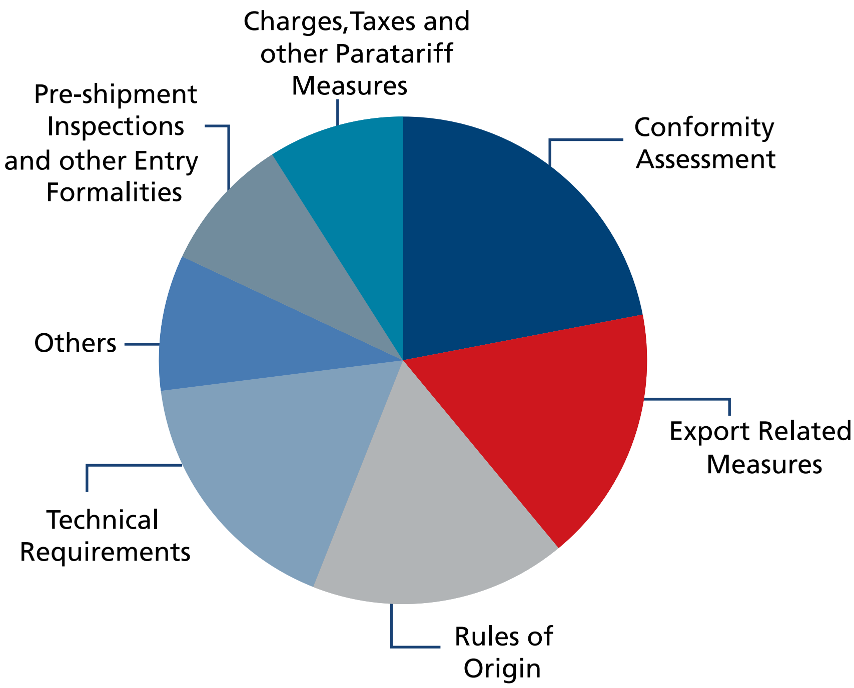
Regarding Egyptian exports, negotiations are ongoing between Egypt and the EU on the Agreement on Conformity Assessment and Acceptance (ACAA) in priority industrial sectors (construction products, electrical appliances, pressure equipment, medical devices, and gas appliances). The ultimate objective is to support Egyptian manufacturers to use the ACAA agreement for better exporting to the EU and other regional markets.[18]

Also, in the Egypt-EU Association Agreement, local component requirements (a minimum of 60% from Egypt or the EU) for the rules of origin under Mediterranean countries allow for the use of inputs from third countries (diagonal accumulation of origin) for the remaining 40% content. However, Egyptian exports suffer from a number of difficulties to access the EU market.

The EU, Egypt's main trade partner, has a particularly high index of non-tariff measures (NTMs) which are mostly sanitary and phyto-sanitary measures (SPS) and technical barriers (TBs) such as certification, testing and labeling requirements. Figure 8 shows the challenges facing Egyptian exporters, which vary between technical requirements, conformity issues, export related barriers and rules of origin, often too strict for Egyptian exporters to be able to comply with.

18 Formally declared as ACAA priority sectors by Egypt to the European Commission are **toys** (Directive 2009/48/EC) and **gas appliances** (Directive 2009/142/EC). Other sectors include **electrical products** (Low voltage Directive 2006/95/EC and electromagnetic Compatibility, Directive 2004/108/EC); **machinery** (Directive 2006/42/EC); **pressure equipment** (pressure equipment directive (PED) 97/23/EC and Simple Pressure Vessels Directive (SPVD) 2009/105/EC); **construction materials** (Regulation 305/2001/EU); **medical appliances** (Directive 93/42/EEC and its amendments).

Figure 8- Types of Burdensome NTMs Faced by Egyptian Exporters



Source: International Trade Center.

Apart from standard-related trade barriers, a number of procedural obstacles persist at the borders and at the destination market, such as complex procedures, large number of required documents to be issued by several government authorities and lack of coordination between these authorities, bureaucracy and delays at customs clearance points and lack of facilities at the ports. In the lines to follow, we briefly overview main obstacles affecting exports in a number of sectors.

Chemicals

Egypt's main export destinations for chemicals are the European and Arab markets, which account for nearly 70% of Egypt's total exports of this category. To export to the EU, exporters face a number of standard-related difficulties, which arise from lack of compliance with protection of human health and environment measures due to lack of awareness of certification requirements according to EU standards.

At-home, border measures are also significant for this sector. Exporters often encounter sudden changes in regulations pertaining to banning exports of certain inputs, increase or imposition of new tariffs on some final products or intermediate goods at the custom's clearance points, which are usually not communicated by the authorities in advance.

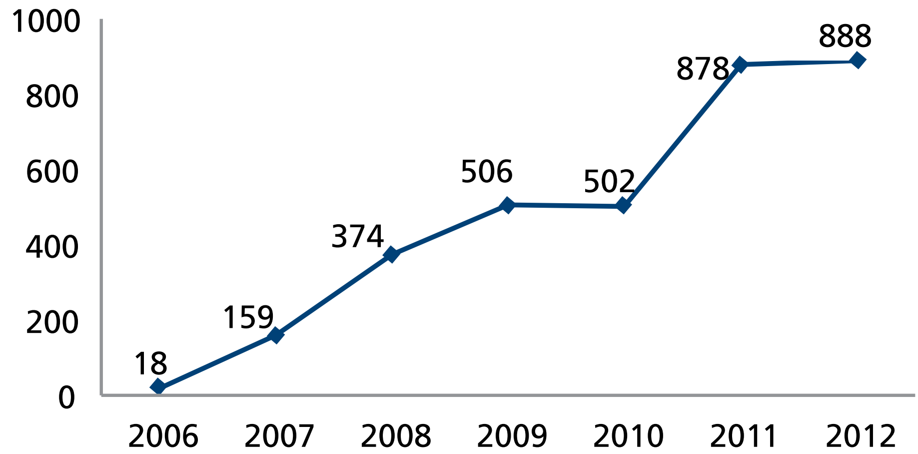
Food (fresh and processed)

SPS measures are the main obstacle to exports falling under this category to the EU market. Egyptian authorities responsible for conformity assessment and certification are not yet accredited according to European regulations. It is also difficult to comply with EU imposed packaging and labeling requirements, and restrictions on weight and size per unit of fresh fruit or vegetables.

Fragmentation among Egyptian quality bodies and ministries, and the absence of a unified food safety authority responsible for testing, conformity assessment and certification of food products exports, are also among the main reasons limiting potential for exports under this category to the EU.

Figure 9 shows that SPS measures do matter for Egypt's trade. Indeed, the number of SPS measures imposed on Egypt increased exponentially from 18 in 2006 to 888 in 2012. This can be explained by the drop in tariffs, which is usually accompanied by a rise in NTMs imposed on trade between developing and developed countries in general.

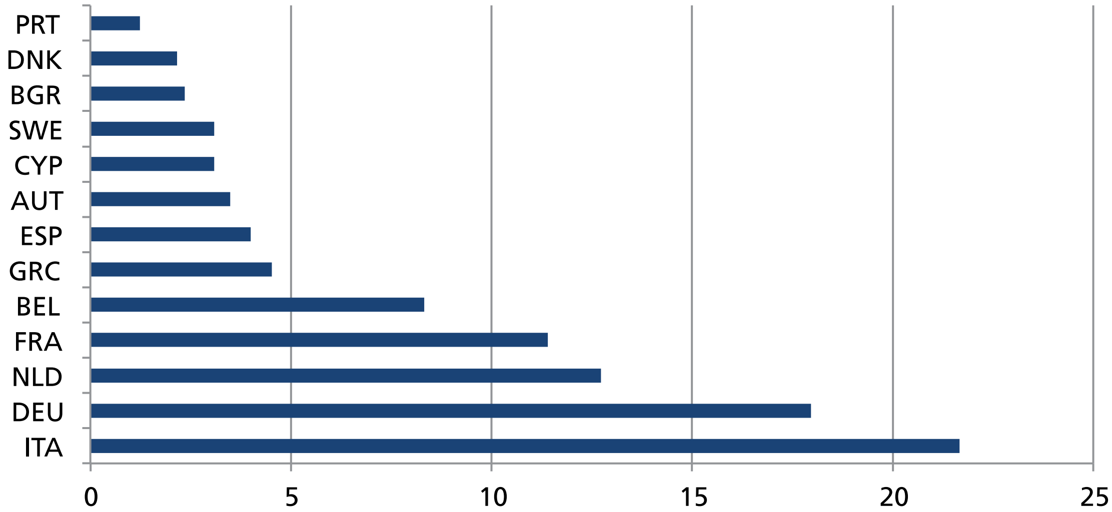
Figure 9- Number of SPS Measures imposed on Egypt's Exports (2006-2012)



Source: El-Enbaby et. al. (2016).

SPS measures imposed on products effectively exported by Egypt, mainly originate from EU Member countries as it is shown in Figure 10. Being the most important trade partner for Egypt, the EU mainly imposes SPS measures on leguminous vegetables, beans and seeds. Food safety, and protection of humans, animals and plants from pests and diseases are the reasons for imposing these measures.

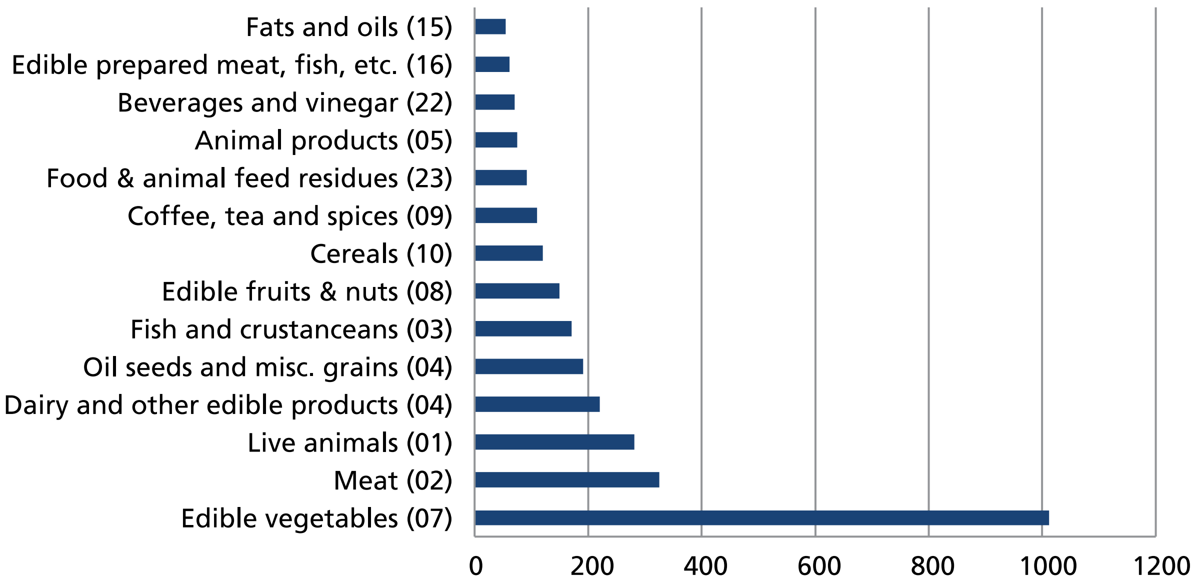
Figure 10- SPS Measures Imposed by European Countries on Egyptian Exports (%)



Source: El-Enbaby et. Al. (2016).

At the HS2 level, edible vegetables are subject to the highest number of SPS measures. SPS measures applying to this category represent more than triple those on meat and meat offal, and live animals which arrive at the the second and third places respectively (Figure 11). In the framework of the EU-Egyptian Association Agreement, Egypt is currently working on the development of an Egyptian policy on food safety, and on the establishment of a unified Food Safety Authority.

Figure 11- SPS Measures Imposed on Egyptian Exports (by sector, at the HS2 level)



Source: El-Enbaby et. Al. (2016).

Labeling and packaging requirements are also among the main obstacles to Egyptian exports of food to other destinations. Many companies struggle with the amount and level of detail required on the label, as well as the way in which information should be presented. A number of procedural obstacles are also encountered by exporters at home and at the border in export markets, such as delays during pre-shipment inspections carried out by the Customs Authority and the General Authority for Exports and Imports Control (GOEIC), in addition to lack of cooling and storage facilities. In the partner country, bureaucratic procedures including delays associated with red tape have also been reported (OIC, 2016).

Machinery and Electric Appliances

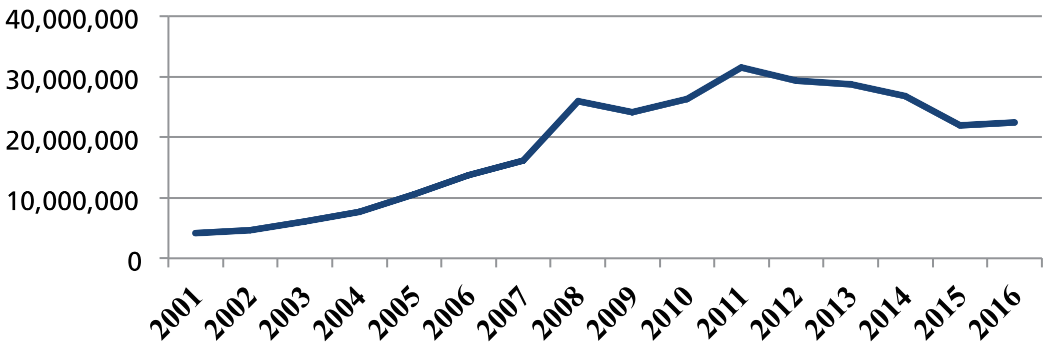
Strict environmental standards and product safety measures are the main obstacles falling under this category. Ongoing preparations of the ACCA between Egypt and the EU are therefore expected to enhance compliance with EU standards and boost Egyptian exports in this sector.

Despite the small market size for both production and exports, the choice of this sector for ACCA could be reasonable since this sector is new to the Egyptian industry and hence starting its production and export in compliance with EU standards would be feasible.

3.4. EGYPT-EU TRADE RELATIONS

During 2001-2008, Egyptian merchandize exports increased. However, these exports dropped in 2009 as a result of the global financial crisis, but picked up afterwards till 2011 to reach USD31 billion. Over 2012-2016, merchandize exports trended downwards for a number of external and internal reasons, including the NTMS previously discussed in sub-section 3.3, reaching USD 22.5 billion (Figure 12).

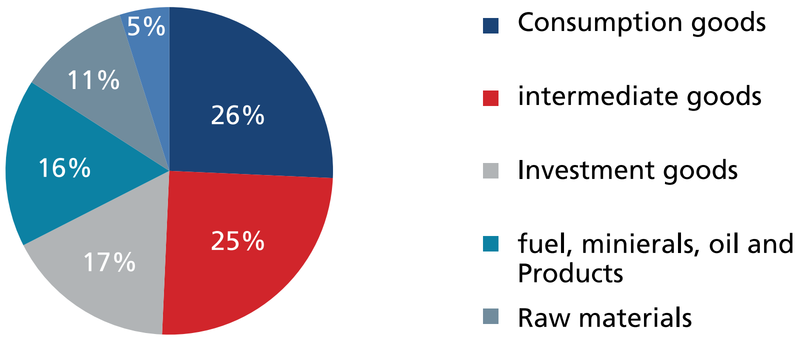
Figure 12- Egypt's Merchandize Exports (USD thousand, 2001-2016)



Source: Authors' calculations using the International Trade Center online dataset.

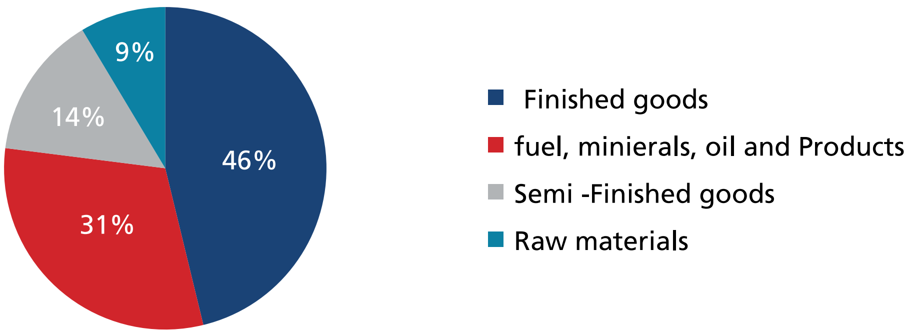
Egyptian merchandize exports are concentrated in finished goods, fuels and oils, while imports are rather diversified between intermediate goods, investment goods, consumer goods, fuel and oil, and raw materials (Figures 13 and 14).

Figure 13- Egyptian Merchandize Imports by Sector (FY 2015/2016)



Source: Central Bank of Egypt, Annual Report 2015/2016.

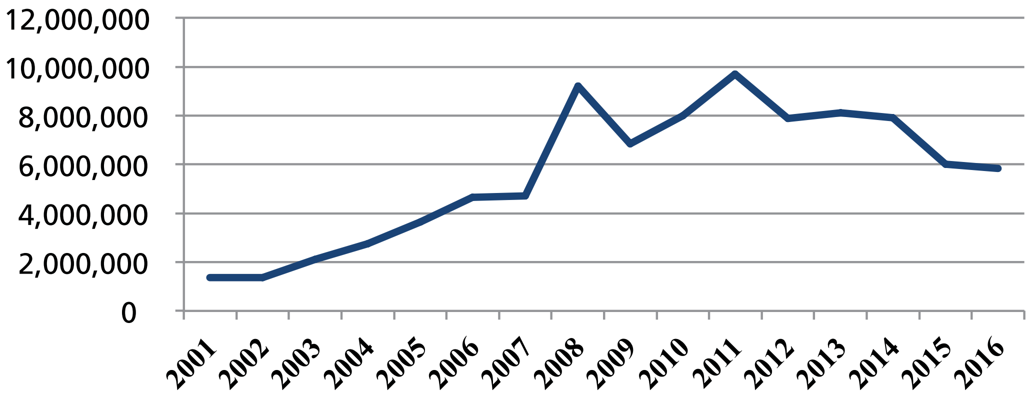
Figure 14- Egyptian Merchandize Exports by Sector (FY 2015/2016)



Source: Central Bank of Egypt, Annual Report 2015/2016.

The EU is Egypt's main trading partner, with a share of nearly 35% of Egypt's total exports and imports. Egyptian merchandize exports to the EU have nearly doubled between 2007 and 2008, from USD 4.7 billion to USD 9.2 billion respectively. However, these exports have dropped in the context of the financial crisis starting 2009. Despite a short pickup in 2011, exports continued to drop in the aftermath of the uprising in Egypt, and are now a little below USD 6 billion (Figure 15).

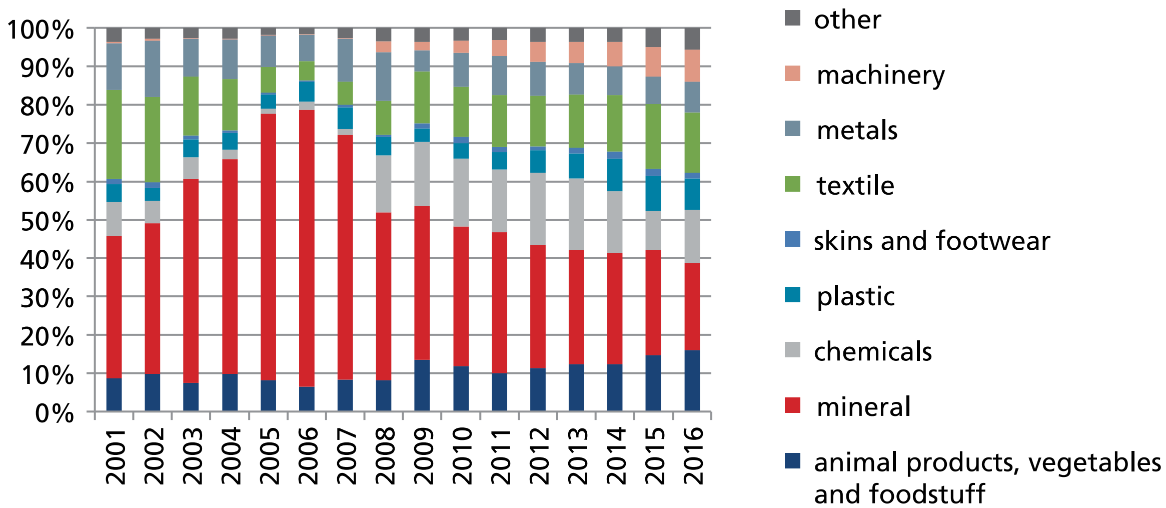
Figure 15- Egypt's Merchandize Exports to the EU (USD thousand)



Source: Authors' calculations using the International Trade Center online dataset.

At the disaggregate level, Egypt mainly exports mineral fuels to the EU. These accounted for nearly 22% of Egypt's total exports to the EU in 2016. However, the share of mineral fuels in Egyptian exports to the EU is declining in favor of exports of chemicals and textiles (Figure 16). Being labor intensive, enhancing trade in these sectors carries a potential for Egypt to exploit its comparative advantage and foster exports and employment.

Figure 16- Composition of Egyptian Merchandize Exports (2001-2016)

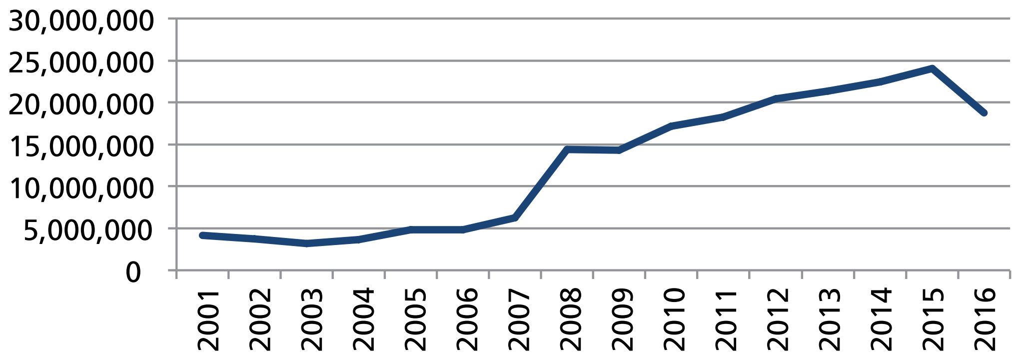


Source: Authors' calculations using the International Trade Center online dataset.

Imports from the EU have witnessed a significant increase since 2007, rising from a little above USD 6 billion in 2007 to over USD 14 billion in 2008 and USD 24 billion in 2015, before dropping to USD 18.8 billion in 2016 (Figure 17).

Two main reasons may explain the drop in Egyptian imports from the EU in 2016. First, the sharp depreciation of the Egyptian Pound, as the exchange rate increased from nearly 10 EGP/€ in early 2016 to more than 20 EGP/€ by the end of the year, coupled with import restrictions and limitations imposed on importers' access to foreign currency. Second, trade diversion from EU imports to Indian and Chinese imports that offer a better price-quality combination for Egyptian consumers.

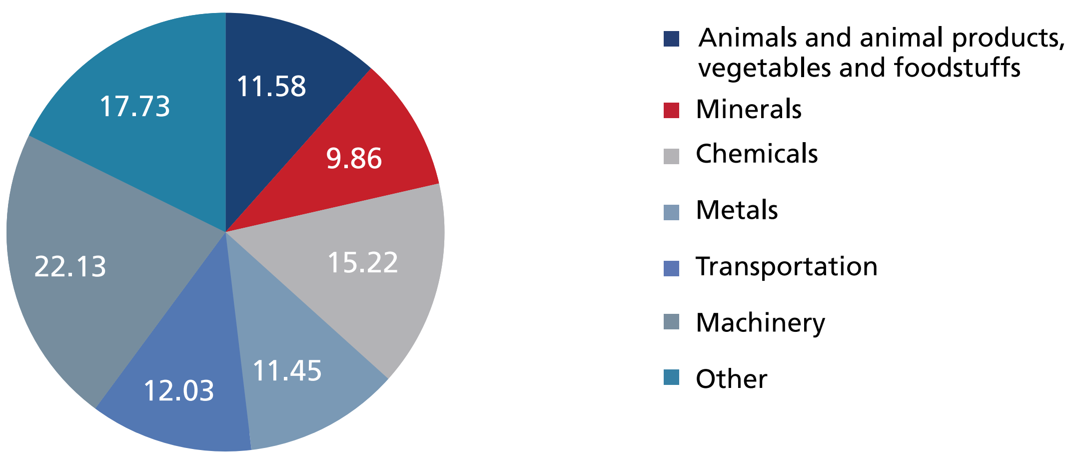
Figure 17: Egyptian Merchandize Imports from the EU (USD thousand)



Source: Authors' calculations using the International Trade Center online dataset.

Egyptian merchandize imports from the EU are diversified among machinery, chemicals, transportation, metals and animal and vegetable products (Figure 18).

Figure 18- Composition of Egypt's Merchandize Imports from the EU by Sector (%) (2016)



Source: Authors' calculations using the International Trade Center online dataset.

4. Impact of Egypt-EU FTA on Egyptian Manufacturing Exports: A Gravity Model

In this section, the impact of Egypt-EU FTA on Egyptian manufacturing exports will be empirically assessed using a gravity type model.

4.1. METHODOLOGY

The methodology used in this study draws on the pioneering work of Tinbergen (1962) and Anderson (1979): the gravity model. Standing as an essential tool in the empirics of international trade to predict bilateral trade flows using multiple determinants of trade, the gravity model has undergone over years significant theoretical and empirical improvements (Mac Callum, 1995; Feenstra et al., 2001; Feenstra, 2002; Evenett and Keller, 2002; Anderson and van Wincoop, 2003; Santos Silva and Tenreyro, 2006), enforcing its theoretical base and narrowing the gap between theoretical and empirical findings.

For Egypt-EU bilateral trade in manufacturing, we use the UN Comtrade database for 175 countries, including Egypt, with 99 sectors (two-digit HS commodities) for the period 1995 – 2015[19]. Our estimable equation is:

$$lnX_{ijkt} = \beta_0 + \beta_1 lnGDP/cap_{it} + \beta_2 lnGDP/cap_{jt} + \beta_3\ lnDist_{ij} + \beta_4 Contig_{ij} + \beta_5 Com\ leg_{ij} + \beta_6 Col_{ij} + \beta_7 Com.Lang_{ij} + \beta_8 GAFTA_{ijt} + \beta_9 Agadir_{ijt} + \beta_{10} EgyptEU_{ijt} + \beta_{11} COMESA_{ijt} + \sigma t + \sigma j + \varepsilon_{ijkt}$$

where X_{ijkt} is the bilateral trade flow between Egypt and country *j* in year *t* for sector *k*; and are country *i* and j's real gross domestic product per capita in year *t*; $lnDist_{ij}$ is the bilateral distance between the two countries; $Contig_{ij}$, Col_{ij}, $Com\ Leg_{ij}$, and $Com.\ Lang_{ij}$ are dummy variables that take the value of 1 if the two countries share common borders, had previous colonial links, have common legal origin. We introduce three variables of trade policy measuring the most important agreements of Egypt which are: *Egypt-EU* a dummy variable that takes the value of 1 to capture the association agreement between Egypt and EU countries (changing over time as each EU member joined in a specific year); *Agadir* a dummy variable that takes the value of 1 for Tunisia, Jordan and Morocco starting 2005, *GAFTA* a dummy variable that takes the value of 1 for GAFTA countries starting 1998 and *COMESA* a dummy variable that takes the value of 1 for COMESA countries (see Appendix 4 for a list of these variables).

4.2. EMPIRICAL FINDINGS

Our main findings show that classical gravitational variables have the expected sign and level of significance (Table 10). Indeed, the GDP/capita of the importer exerts a positive and statistically significant effect on Egypt's exports. It is worthy to note

19 For a description of the list of countries and sectors included in the dataset, kindly refer to Appendix 2 and Appendix 3.

that Egypt's GDP per capita is dropped when year dummies are introduced as they are perfectly correlated. Distance is associated to trade negatively, while contiguity, common language, common legal origin and colonial links boost trade between Egypt and its trade partners.

We introduced some trade policy variables such as the GAFTA agreement, Agadir agreement, COMESA agreement and Egypt-EU association. We run a separate regression for each agreement then combine them together. When each agreement is introduced alone, GAFTA, COMESA and Agadir are highly positive and significant while Egypt-EU agreement is slightly significant and negative. By contrast, when they are combined together, the three agreements are positive and significant with GAFTA showing the highest coefficient, followed by Agadir and then the Egypt-EU Association (Table 10). This result is interesting as Agadir agreement is linked to the EU through an Association Agreement or an FTA. Its purpose was to facilitate integration between Arab states and the EU under the broader EU-Mediterranean process. One of its important characteristics is that it uses the EU's rules of origin. The EU allows its Mediterranean FTA partners to cumulate value-added regardless the place where value was added, for the purpose of preferential tariffs, as long as it was in an FTA partner country. By contrast, the US only considers value added domestically in the country exporting to the US. These conflicting regimes give the EU an advantage in its competition with US and make the EU in a better position than US with respect to Agadir countries. This also explains why GAFTA coefficient is significant and has a high level.

It is important to note also that COMESA agreement exerts a positive impact on Egypt's trade showing how African countries, despite a small share in Egypt's exports, represent a potential important destination for Egyptian exporters. To sum up, our empirical estimates show that Egypt-EU FTA exerts a positive and significant effect on Egypt's exports, even when combined with COMESA, GAFTA and Agadir agreements.

Table 10- Aggregate Results

	Ln(Trade)	Ln(Trade)	Ln(Trade)	Ln(Trade)	Ln(Trade)	Ln(Trade)
Ln(GDPcap imp)	0.764***	0.669***	0.775***	0.769***	0.796***	0.708***
	(0.00711)	(0.00728)	(0.00711)	(0.00766)	(0.00766)	(0.00844)
Ln(Dist)	-1.198***	-1.024***	-1.151***	-1.208***	-1.203***	-0.961***
	(0.0171)	(0.0173)	(0.0172)	(0.0180)	(0.0171)	(0.0184)
Contig.	0.846***	1.558***	1.056***	0.830***	0.596***	1.346***
	(0.0740)	(0.0746)	(0.0744)	(0.0745)	(0.0771)	(0.0782)
Colony	2.983***	3.924***	3.035***	2.988***	2.944***	3.876***
	(0.0693)	(0.0710)	(0.0692)	(0.0694)	(0.0693)	(0.0709)
Com. Lang	2.725***	-0.0480	2.485***	2.707***	2.724***	0.140**
	(0.0343)	(0.0621)	(0.0357)	(0.0359)	(0.0343)	(0.0623)
Com. Leg	0.296***	0.237***	0.258***	0.299***	0.282***	0.177***
	(0.0239)	(0.0237)	(0.0239)	(0.0239)	(0.0239)	(0.0238)
GAFTA		3.713***				3.746***
		(0.0694)				(0.0725)
Agadir			1.856***			1.132***
			(0.0764)			(0.0778)
Egypt-EU				-0.0760*		0.324***
				(0.0422)		(0.0425)
COMESA					0.444***	0.737***
					(0.0387)	(0.0387)
Constant	9.017***	8.415***	8.557***	9.058***	8.755***	7.519***
	(0.188)	(0.187)	(0.189)	(0.189)	(0.189)	(0.191)
Sector dummies	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES
Observations	191,033	191,033	191,033	191,033	191,033	191,033
R-squared	0.303	0.313	0.305	0.303	0.303	0.315

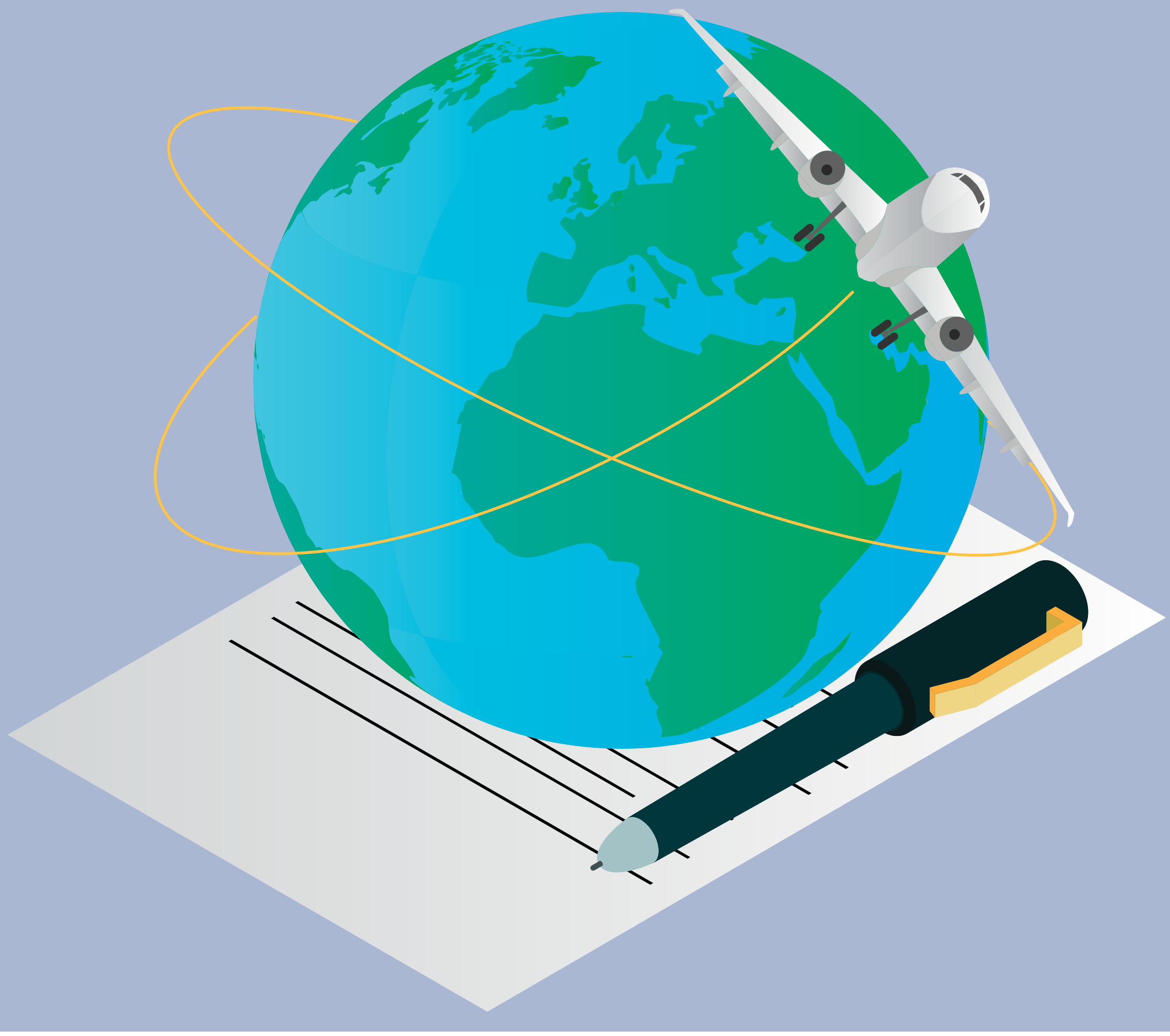
Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

We rely on the last regression to estimate product level elasticities that show which products are more responsive than others to EU demand. Elasticities represent the coefficient associated to the Egypt-EU association dummy variable. Coefficients that are significant at 5 percent are ordered in a descending way in Table 11. Elasticities range from -2.6 to +2.7, with fertilizers being the most responsive product. Thus, our estimates of product level elasticities show that fertilizers are the most responsive products to EU demand.

Table 11- Sectoral Results

Code	Label	Elas.
'31	Fertilizers	2.69
'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	2.25
'69	Ceramic products	2.18
'76	Aluminum and articles thereof	1.98
'48	Paper and paperboard; articles of paper pulp, of paper or of paperboard	1.95
'85	Electrical machinery and equipment and parts thereof.	1.92
'78	Lead and articles thereof	1.90
'87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof	1.86
'52	Cotton	1.78
'74	Copper and articles thereof	1.68
'08	Edible fruit and nuts; peel of citrus fruit or melons	1.64
'39	Plastics and articles thereof	1.61
'07	Edible vegetables and certain roots and tubers	1.51
'62	Articles of apparel and clothing accessories, not knitted or crocheted	1.48
'51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	1.42
'44	Wood and articles of wood; wood charcoal	1.41
'89	Ships, boats and floating structures	1.36
'84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof	1.15
'73	Articles of iron or steel	1.12
'64	Footwear, gaiters and the like; parts of such articles	1.04
'61	Articles of apparel and clothing accessories, knitted or crocheted	0.99
'24	Tobacco and manufactured tobacco substitutes	0.90
'06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage	0.84
'58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	0.82
'54	Man-made filaments; strip and the like of man-made textile materials	0.80
'42	Articles of leather; saddler and harness; travel goods, handbags and similar containers.	0.78

’70	Glass and glassware	0.74
’15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats;	-0.64
’09	Coffee, tea, mate and spices	-0.70
’21	Miscellaneous edible preparations	-0.77
’56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles	-0.78
’91	Clocks and watches and parts thereof	-0.89
’46	Manufactures of straw, of esparto or of other plaiting materials; basket ware and wickerwork	-0.91
’14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	-0.97
’02	Meat and edible meat offal	-0.98
’59	Impregnated, coated, covered or laminated textile fabrics; textile articles.	-1.05
’13	Lac; gums, resins and other vegetable saps and extracts	-1.07
’92	Musical instruments; parts and accessories of such articles	-1.16
’75	Nickel and articles thereof	-1.17
’03	Fish and crustaceans, mollusks and other aquatic invertebrates	-1.53
’16	Preparations of meat, of fish or of crustaceans, mollusks or other aquatic invertebrates	-1.72
’19	Preparations of cereals, flour, starch or milk; pastry-cooks’ products	-1.82
’04	Dairy produce; birds’ eggs; natural honey; edible products of animal origin.	-2.61



5. Identifying an Egyptian Manufacturing Sector with Potential for Export Growth and Job Creation: Sector Analysis

The purpose of this section is to identify an Egyptian manufacturing sector with a strong potential for export growth and job creation, by analyzing the Egyptian manufacturing sectors' export performance, labor intensity and female labor force participation; in addition to the demand structure in the EU.

5.1. IDENTIFYING THE SECTOR

In order to identify an Egyptian manufacturing sector with a strong potential for export growth and job creation, we develop an index based on eight criteria. These criteria are classified into three main categories: trade (supply) performance, demand structure, and social dimension, and assigned equal weights to avoid the choice of any arbitrary weights. Table 12 illustrates the composition of the index and the calculated index for Egypt's manufacturing exports is shown in Appendix 5.

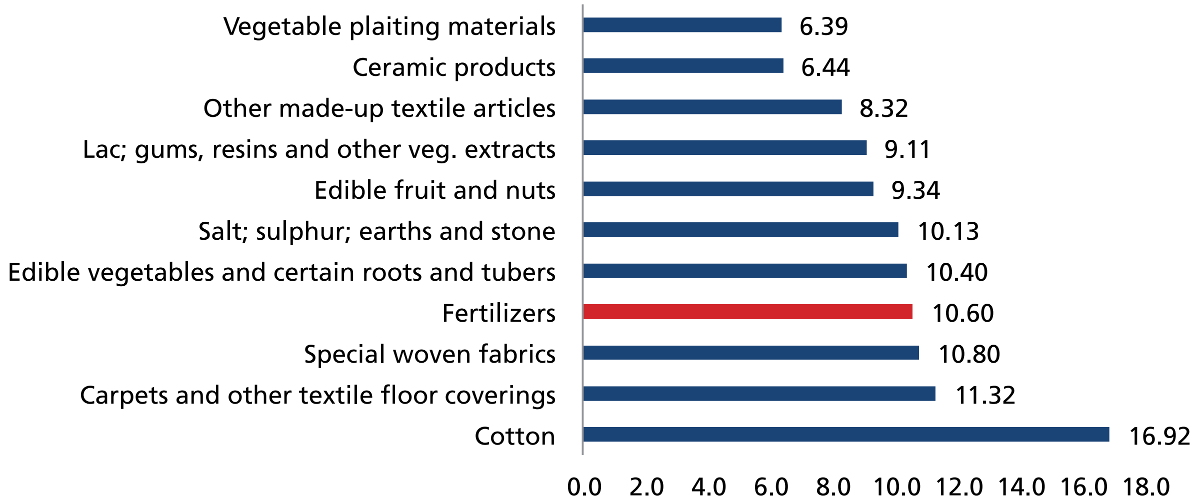
Table 12- Index for Identifying the Sector

Category	Components	Details	Weight
I. Trade (Supply) Performance			
	Revealed comparative advantage (RCA)	RCA = The share of product j in Egypt's total exports compared to the share of product j in EU's total exports (%)	0.125
	Share in Egypt's total manufacturing exports	Share of a sector's exports in Egypt's total manufacturing (%)	0.125
	Share in Egypt's total manufacturing exports to the EU	Share of Egypt's exports from a specific sector to total exports to the EU from the Egyptian manufacturing sector	0.125
	Change in Share of Egypt's total manufacturing exports to the EU	Variation in the share of a sector's exports in Egypt's total manufacturing exports to the EU	0.125
II. Demand structure			
	Share in EU's imports	Share of a sector in EU's total imports	0.125
	Elasticity	The estimated coefficient of the EU dummy variable coming from the gravity model	0.125
III. Social dimension			
	Labor intensity	The share of labor in total value added coming from Egypt's Social Accounting Matrix (SAM)	0.125
	Female share	Share of female workers in a specific sector	0.125

Source: Constructed by the authors.

Among the main Egyptian export sectors, cotton has the highest value for our composite index, followed by carpets and other textile floor coverings, special woven fabrics, and fertilizers (Figure 19).

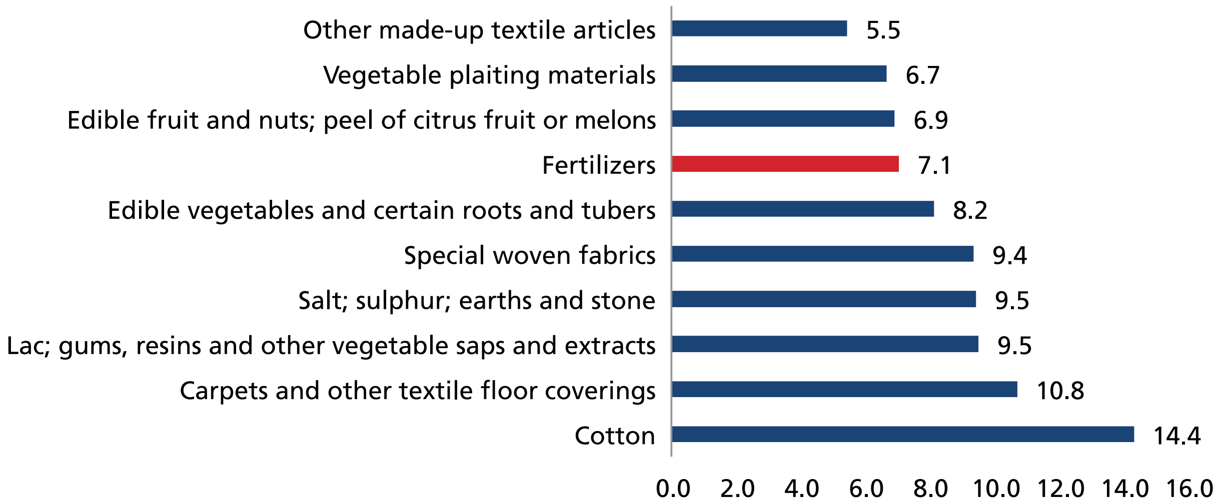
Figure 19- Ranking of Sectors based on the Composite Calculated Index



Source: Authors' calculations using different variables.

As expected, cotton ranks first in terms of RCA, followed by carpets and other textile floor coverings (Figure 20).

Figure 20- Revealed Comparative Advantage Index



Source: Authors' calculations using the International Trade Center online dataset

Cotton –however- appears only in the last place in the share of Egypt's total manufacturing exports in general and manufacturing exports to the EU in particular. As illustrated in previous part of this work, Egypt's manufacturing exports in general, and to the EU in particular, are dominated by mineral fuels (33.6% and 38.3% respectively) (Figures 21 and 22). Fertilizers arrive in second place after mineral fuels and oils in terms of their share in Egypt's total manufacturing exports to the EU (Figure 23).

Figure 21- Share in Egypt's Total Manufacturing Exports

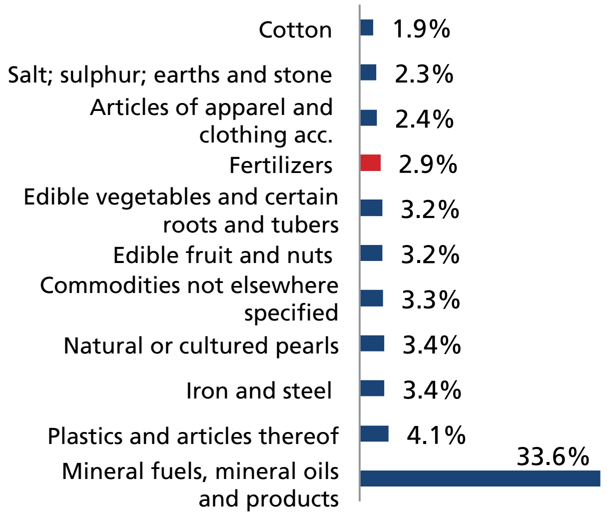
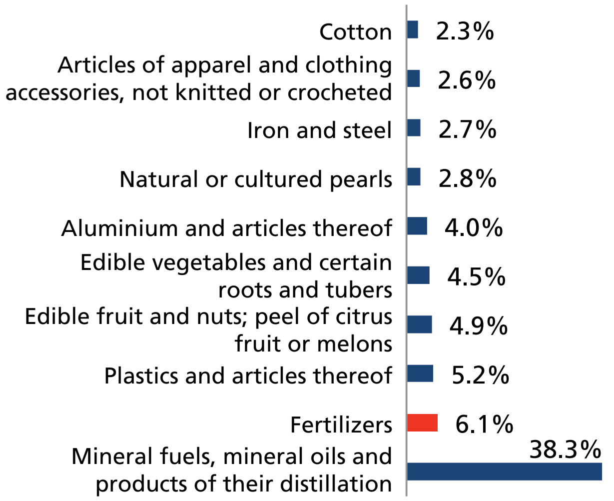


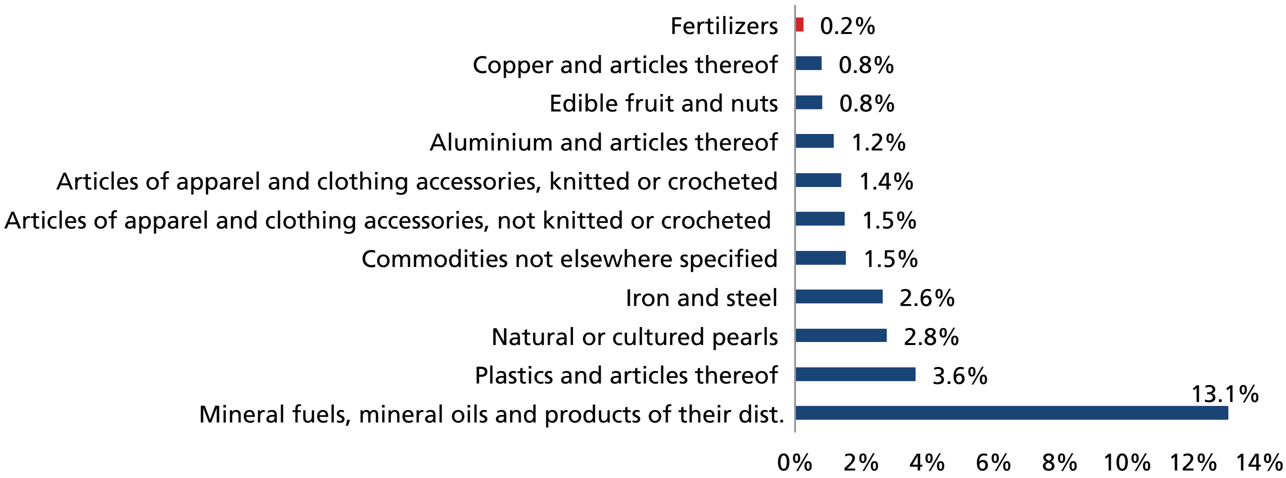
Figure 22- Share in Egypt's Total Manufacturing Exports to the EU



Source: Authors' calculations using the International Trade Center online dataset**.**

Although the EU is a heavy importer of mineral fuels and oils (Figure 23), Egyptian exports falling under this category do not reveal a comparative advantage, nor does their share in Egyptian exports evolve over time.

Figure 23- Share of a Sector in EU's Total Imports



Source: Authors' calculations using the International Trade Center online dataset.

Interestingly, exports of fertilizers to the EU have witnessed the highest increase (Figure 24), and rank first in terms of exports elasticity as well (Figure 25).

Figure 24- Change in Share of Egypt's Total Manufacturing Exports to the EU

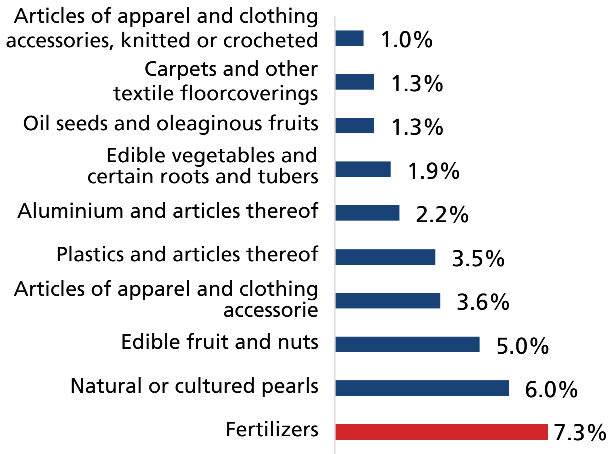
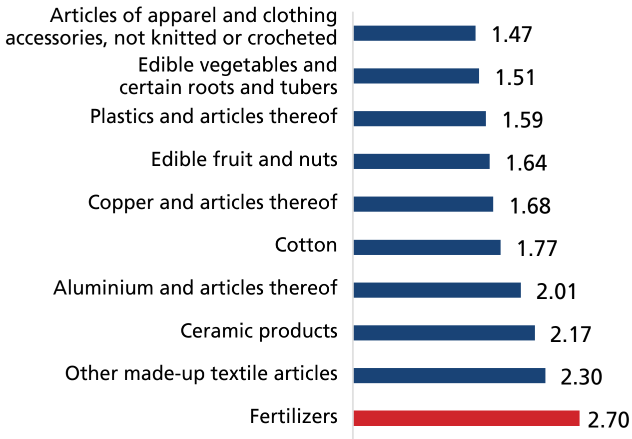


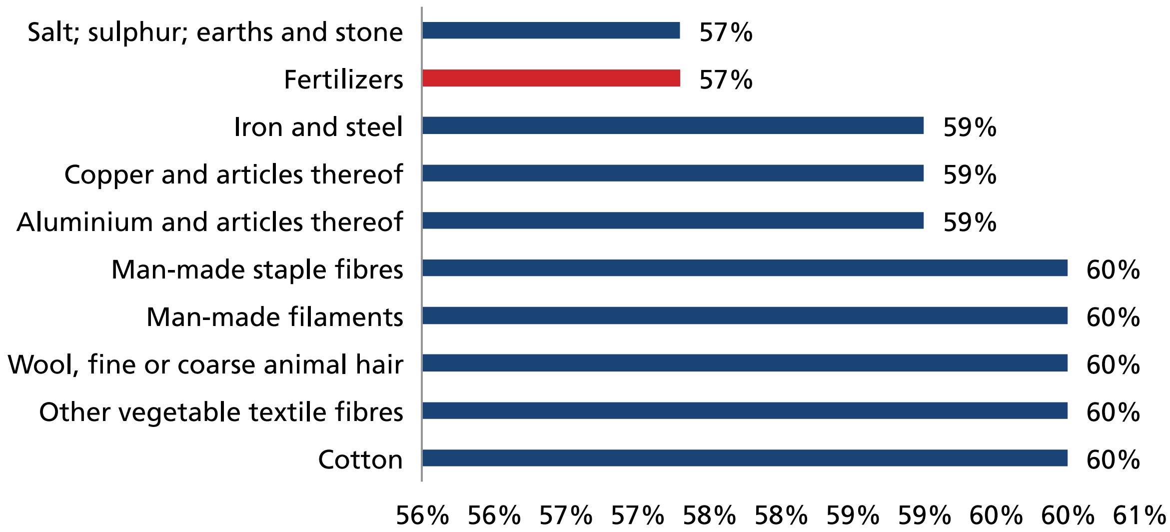
Figure 25- Egyptian Exports' Elasticity (Responsiveness) to EU Demand



Source: Authors' calculations using the International Trade Center online dataset.

Egyptian exports with the highest labor – intensity are cotton and some textile fibers (60%), aluminum, copper and iron and steel (59%), and fertilizers and salts, Sulphur, earths and stone (57%) as shown in Figure 26.

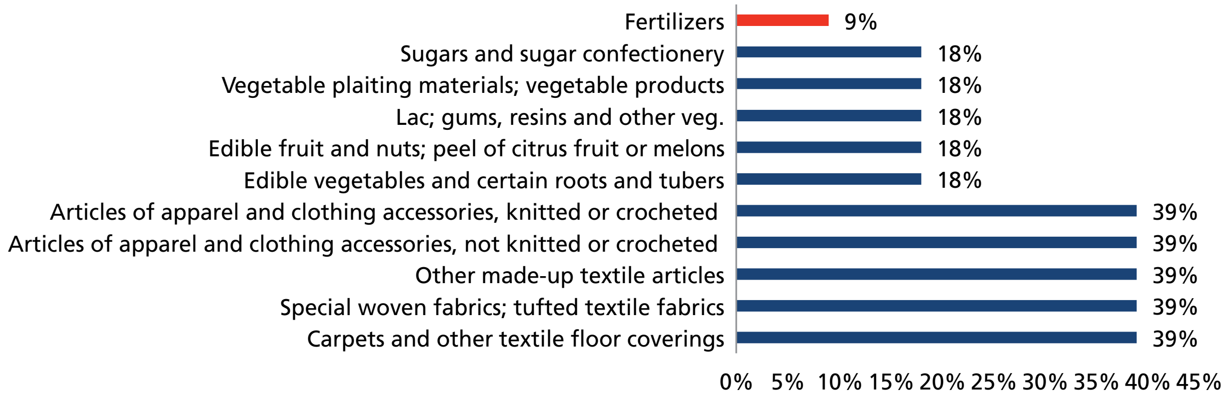
Figure 26- Labor Intensity of Sectors



Source: Authors' calculations using Egypt's Social Accounting Matrix (2000/2001)

The sectors with the highest female employment share (39%) are carpets and other textile floor coverings, articles of apparel and clothing, and some articles of textile and woven fabrics Female labor force participation in the fertilizers sector is very modest (Figure 27).

Figure 27- Female Employment Share by Sector



Source: Authors' calculations using ELMPS dataset

To sum up, fertilizers could be considered a sector with increased potential for export growth and job creation for several reasons. First of all, fertilizers are the second largest sector in Egypt's manufacturing exports to the EU after mineral fuels and oils. In contrast to the latter, fertilizers are labor-intensive, which is one of the most important dimensions to be considered while designing policies for boosting Egypt's exports in general, and to the EU in particular. Fertilizers show the highest elasticity of exports to the EU (highest responsiveness to EU demand for Egypt's manufacturing exports estimated at +2.7 from our gravity model), and have gained an increasing share in Egypt's manufacturing exports to the EU (gaining 7.3% between 2000 and 2016). Furthermore, fertilizers rank seventh in terms of RCA. They are a promising sector as compared to traditional industries such as cotton and textiles and show a relatively advanced ranking overall according to our calculated composite index (fertilizers rank fourth out of 41 manufacturing sectors). They arrive after cotton, carpets and special woven fabrics. We focus therefore in the next sub-section on fertilizers as a potential sector for boosting Egyptian exports to the EU, and for boosting job creation.

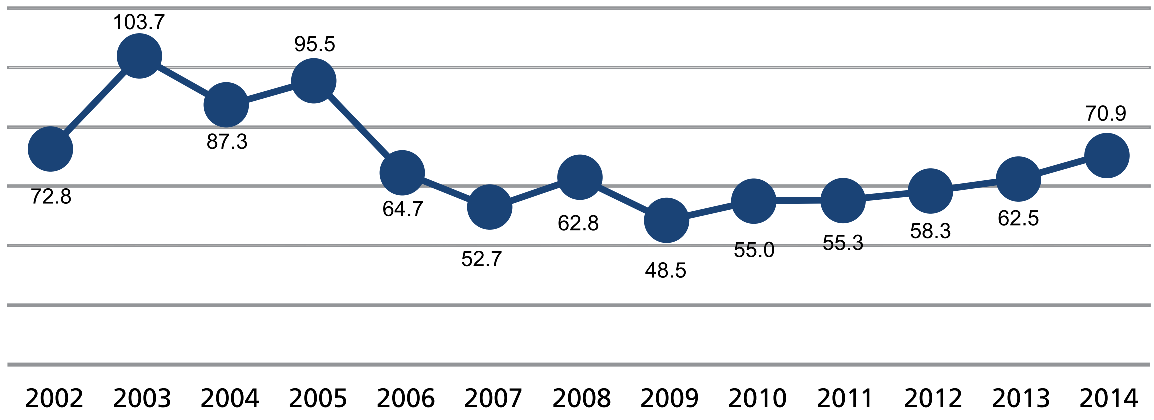
5.2. FERTILIZERS SECTOR ANALYSIS

In this sub-section, an extensive analysis of the fertilizers sector is conducted, in terms of Egypt's self-sufficiency, international trade in fertilizers, production, employment, wages and productivity.

5.2.1. Egypt's Self-Sufficiency in Fertilizers

Due to relative abundance in phosphate rocks and extensive production capabilities, Egypt is largely self-sufficient in the production of phosphate fertilizers and nitrogenous fertilizers. Figure 28 illustrates fertilizers' consumption relative to fertilizers' production in Egypt between 2002 and 2014. This share stands at 70.9 percent in 2014, meaning that nearly 30% of total fertilizers' production is exported.

Figure 28- Fertilizers' Consumption as % of Fertilizers' Production in Egypt (2002-2014)

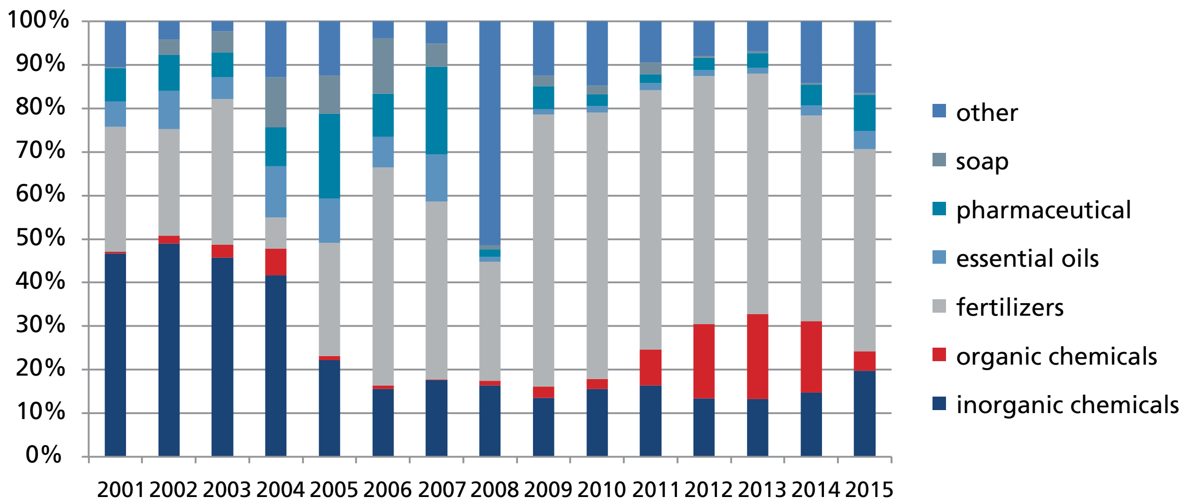


Source: FAO (2016) and World Bank data.

5.2.2. Egypt's International Trade in Fertilizers

Figure 29 depicts the evolution of exports composition of chemicals between 2001 and 2016 at the HS 4 Level. Fertilizers occupy a major share in exports of chemicals since 2006 (50%). This share has increased to over 60% in 2010, and has dropped since 2011 to slightly exceed 46% in 2015. The drop in exports of fertilizers was due to shortage in natural liquefied gas necessary for the production process.

Figure 29- Chemical Exports of Egypt are mainly Fertilizers

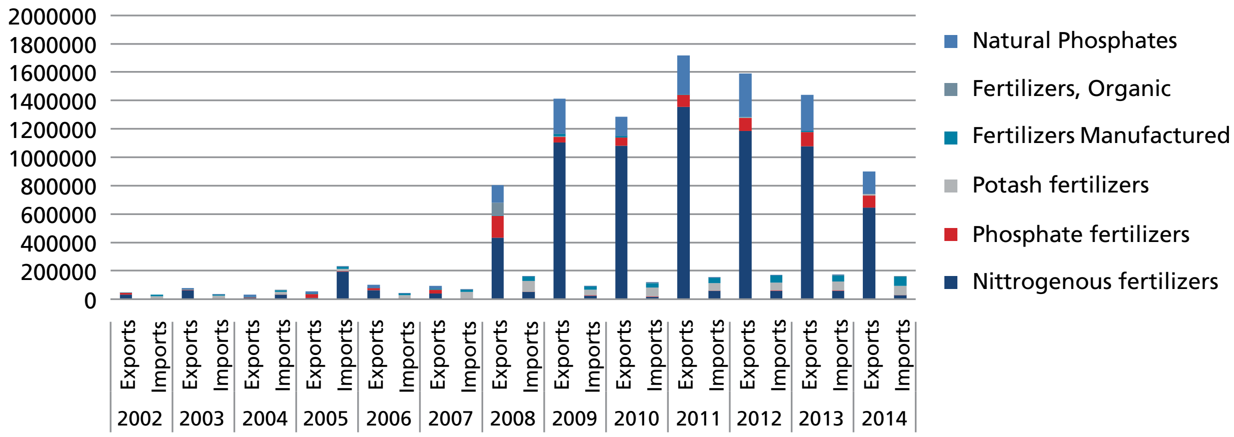


Source: Authors' calculations from the International Trade Center online dataset.

Figure 30 illustrates trade in fertilizers by type between 2002 and 2014. A sharp rise in exports of fertilizers has taken place in 2008 (800,000 EGP from less than 100,000 EGP in 2007). In 2011, exports reached a peak of 1.7 million EGP, before dropping gradually to less than EGP 1 million in 2014. Imports of fertilizers do not exceed 200 thousands EGP.

Nitrogenous fertilizers compose the major share of fertilizers' exports, with an average of 70%, while natural phosphates and phosphate fertilizers represent 30% of exports in the sector.

Figure 30- Exports and Imports of Fertilizers by Type (EGP, 2002-2014)

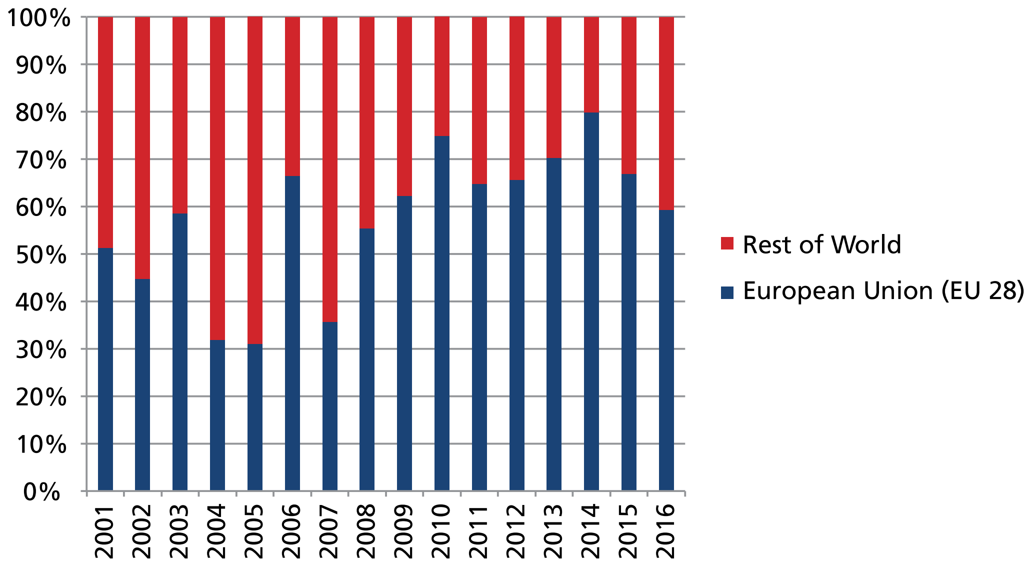


Source: Fertilizers Trade Value, 2015, FAOSTAT.

The demand for phosphate fertilizers is also increasing worldwide, which opens the door for further investments and potential growth in this sector. According to the Chamber of Chemical Industries, the phosphate sector can still absorb 10-fold the amount of current investments.

The EU is the main destination market for fertilizers' exports with 60% to 70% of total exports in the sector being directed to EU markets (Figure 31).

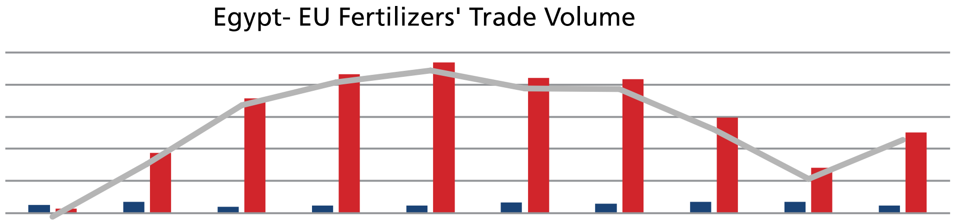
Figure 31- Share of EU in Egypt's Fertilizers Exports (%)



Source: Author's calculations from the International Trade Center online dataset.

Since FY 2008/2009, there is a generally positive (yet decreasing) balance of fertilizers trade with the EU (Figure 32).

Figure 32- Egypt–EU Fertilizers Trade Balance (USD thousand, 2007-2017)



	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Imports	50928	69214	39298	47585	48800	66870	60661	71476	69802	45556
Exports	27670	376036	712057	863326	935443	841997	833608	593112	282748	502697
Trade Balance	-23258	306822	672759	815741	886643	775127	772947	521636	212946	457141

Imports Exports Trade Balance

Source: Product 31, Trade Map, Egypt- EU, International Trade Centre online dataset 2017.

5.2.3. Production, Employment, Productivity and Wages in the Fertilizers Sector

The market for fertilizers includes three public sector companies[20] and a larger number of private sector companies. In the aftermath of the Egyptian Revolution in 2011 and the overall economic slowdown, the number of private sector companies has sharply dropped from 22 in FY 2010/2011 to only 12 two years later (Figure 33).

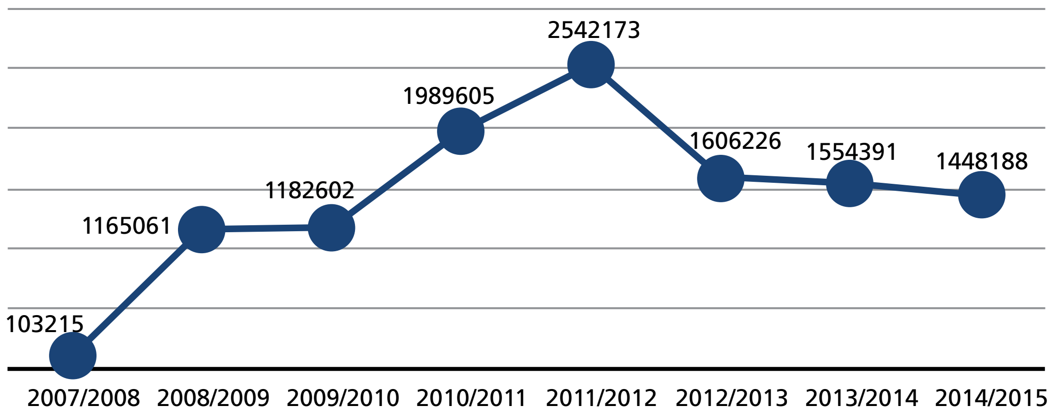
Figure 33- Total Number of Public and Private Fertilizers Companies

Source: Annual Report of Industrial Production, Private Sector, July 2014, Public Business Sector, July 2016, CAPMAS.

20 These are: Delta Co. for Fertilizers, Societe El Nasr d'Engrais et d'Industries Chimiques (SEMADCO) and Egyptian Chemicals Industries (KEMA).

Also, fertilizers production has decreased. In the public sector companies, fertilizers production declined from a peak of EGP 2.5 billion in 2011/2012 to EGP 1.45 in 2014/2015 (Figure 34).

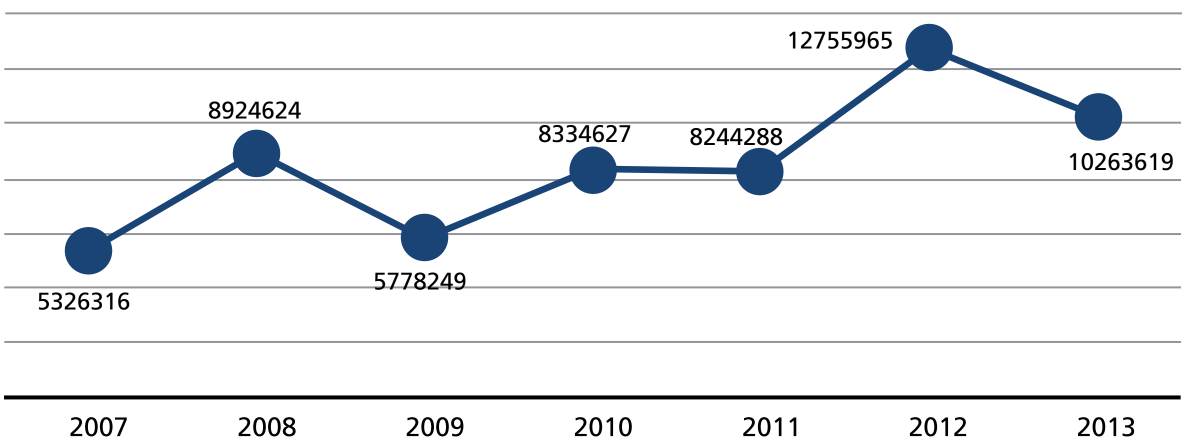
Figure 34- Public Sector Total Production at Market Price (EGP thousand, FY 07/08 – FY 14/15)



Source: Annual Report of Industrial Production, Public Sector, July 2016, CAPMAS.

For the private sector companies, fertilizers production dropped from EGP 12.75 billion in 2012 to EGP 10.2 billion in 2013 (Figure 35).[21]

Figure 35- Private Sector Total Production at market price (EGP thousand, 2007-2013)

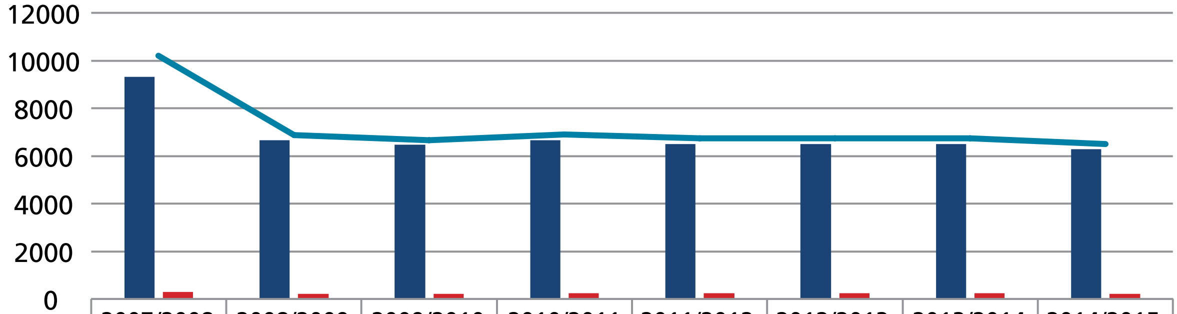


Source: Annual Report of Industrial Production, Private Sector, July 2014, CAPMAS.

21 We are unable to merge most data of the public and private sector since data of the public sector are available in fiscal years and those of the private sector are available in calendar years.

The impact of the economic recession in Egypt has been severe on employment in the fertilizers sector. Employment in public sector companies dropped from 10192 employees in 2007/2008 to 6500 employees in 2014/2015 (Figure 36).

Figure 36- Employment by gender in the Public Sector: Fertilizers (FY 07/08 - FY 14/15)



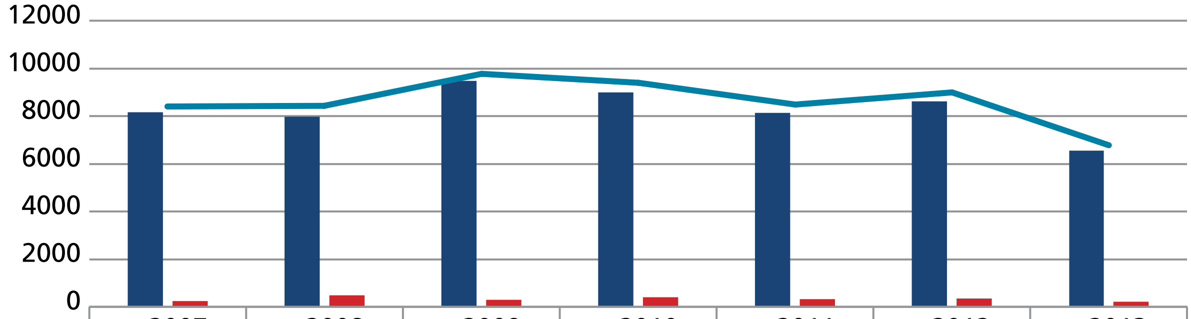
	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015
Male	9306	6668	6461	6660	6498	6487	6509	6273
Female	286	212	209	238	242	243	231	227
Total	10192	6880	6670	6898	6740	6730	6740	6500

Male Female Total

Source: Annual Report of Industrial Production, Public Sector, July 2016, CAPMAS.

Employment in the private sector companies declined from 8396 in 2007 to 6779 in 2013 (Figure 37).

Figure 37- Employment by Gender in the Private Sector: Fertilizers (2007-2013)



	2007	2008	2009	2010	2011	2012	2013
Male	8153	7966	9480	9000	8147	8631	6565
Female	243	474	303	389	328	357	214
Total	8396	8440	9783	9389	8475	8988	6779

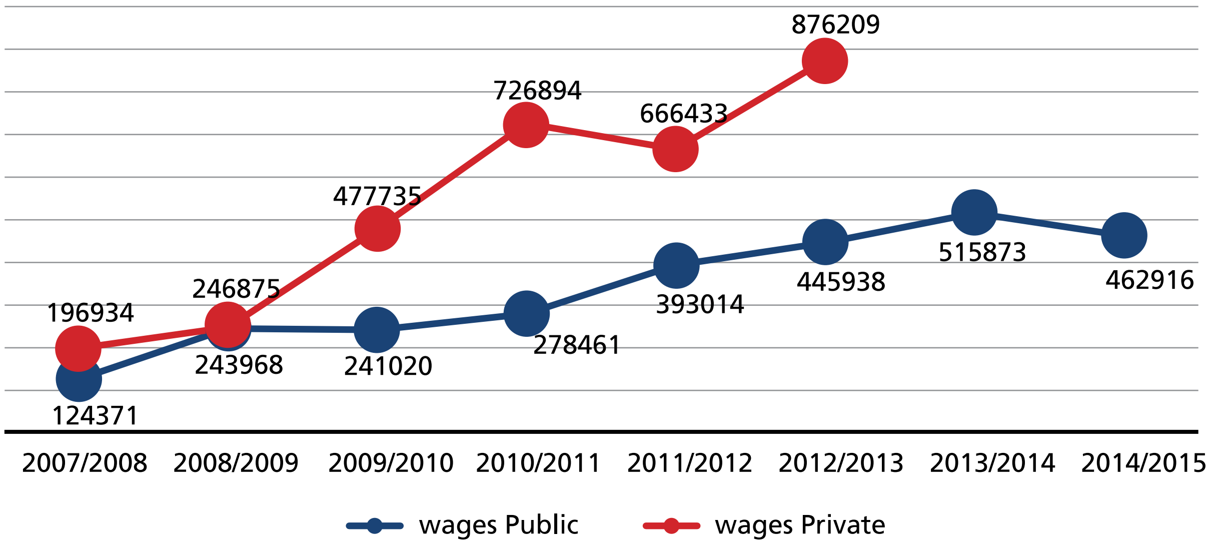
Male Female Total

Source: Annual Report of Industrial Production, Private Sector, July 2014, CAPMAS.

Female labor participation is very low for both public and private sector companies. Currently, only 3% of total employment in the industry are females.

It is worthy to note that labor productivity is much lower for public sector companies than for private firms. With almost the same number of employees, private sector firms produce 10 times higher than public sector firms, indicating low labor productivity in the public sector companies. As for wages, they are nearly twice higher than in the private sector than in the public sector (Figure 38).

Figure 38- Wages in Public and Private Business Sectors: Fertilizers (EGP, FY 07/08 - FY 14/15)



Source: Annual Report of Industrial Production, Private Sector, July 2014, Public Business Sector, July 2016, CAPMAS.

Summing up, fertilizers could be a promising sector for Egypt in terms of both exports and employment. The increased demand for fertilizers worldwide and particularly in the EU, the expected increase in natural liquefied gas necessary for the fertilizers' production process, could attract investments to this sector which is labor intensive by nature.

6. Conclusion and Policy Implications

Reshaping the Euro-Mediterranean relations became a necessity in the aftermath of the Arab Spring in several South Mediterranean Countries (SMCs), including Egypt. The objective of this paper is therefore to study the impact of the Egypt-EU Association Agreement on the manufacturing sector and to point out industries with strong potential for export growth and job creation, in light of the urgent need for sustainable economic growth and social justice in the region.

To do so, we proceeded in three ways. First, we undertook a descriptive analysis of trade and investment flows. Second, we run a gravity-type model to examine the impact of Egypt-EU trade agreement on their bilateral trade and to determine the most sensitive products that are affected by the agreement. Finally, we constructed an index taking into account trade, employment and gender dimensions. We found that fertilizers are one of the most significant products that experienced increases in their market share, are sensitive to the conclusion of the EU-Egypt Association Agreement, and are labor intensive. We provided a brief analysis of the sector in terms of production, trade, and indicators of social justice and inclusion, such as wages, employment, productivity and female participation.

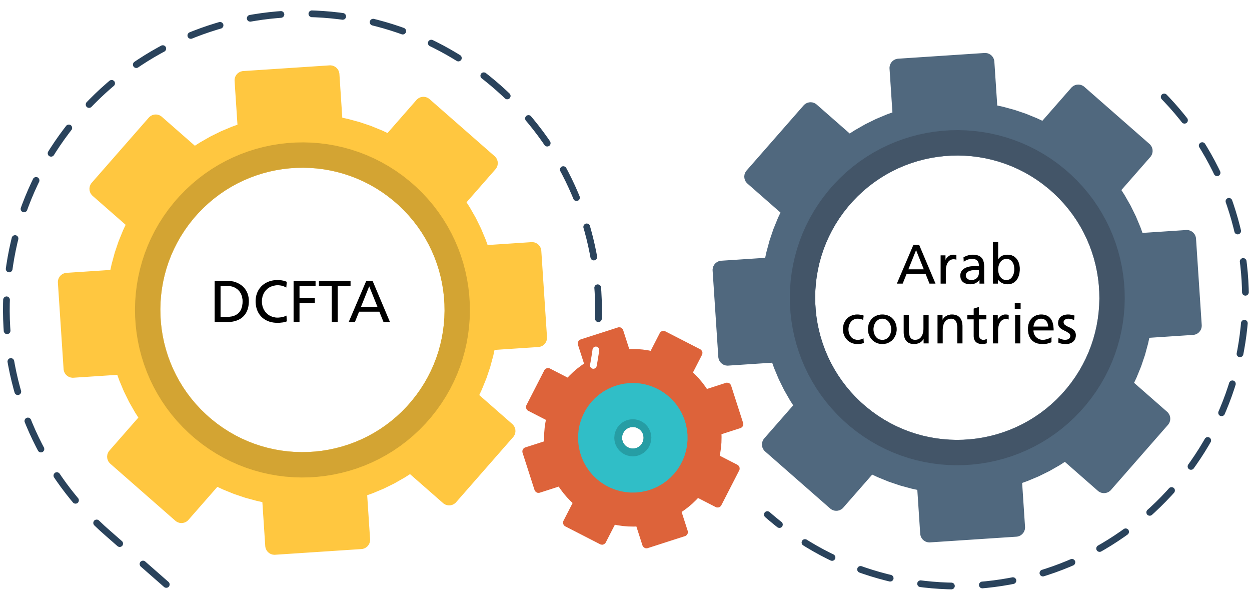
Several policy implications arise from our analysis. The first pertains to the indispensability of carrying out serious exports promotion policies, and to reshape laws and regulations to cater to this objective. A number of reforms were recently carried out with the new Investment Law, which offers generous incentives to local and foreign investors, in addition to related improvements of administrative procedures in sectors of national priority and in export-oriented activities. Sound implementation of these new regulations, in addition to overall political and economic stability should foster business and investment in Egypt. Transparency is one of the major factors that can facilitate carrying out business activities, and reassures domestic as well as foreign investors. Streamlining regulations and eliminating burdensome requirements, digitalizing investment procedures, enhanced customs clearance will provide a real incentive to economic activity. To meet the objective of exports promotion, which has been clearly stated as a national objective in Egypt's development strategy, removing red-tape barriers that still hinder trade and increasing transparency for exporters and importers is a must.

Promoting exports from Egypt to the EU – Egypt's main trade partner- heavily relies on compliance to EU and to international standards. Compliance remains one of the major barriers hindering exports promotion in Egypt, especially to SMEs, which usually have difficulties accessing the information and complying with norms and standards. Enhancing trade with the EU to realize the objectives of the Association Agreement while promoting SMEs for inclusion and social justice requires assistance to these small-scale potential exporters, which can be provided by both the EU and the concerned national authorities. At the institutional level, enhancing compliance also requires Egypt to take advanced steps regarding its quality infrastructure, and to work on the international accreditation of the national standards body.

Our findings from the empirical analysis highlight an important fact: the importance of South-South integration as a motor for North-South integration. In this context, the Agadir Agreement as well as GAFTA are both combined with the EU Association Agreement for a significant effect on trade between Egypt and the EU. The result is interesting, since the purpose of the Agadir Agreement was to facilitate integration between Arab states and the EU under the broader EU-Mediterranean process. One of its important characteristics is that it uses the EU's rules of origin, which should foster exports from the member Arab countries to the EU.

At the sector level, our findings suggest that fertilizers reveal a strong potential for increased production and exports, particularly to the EU for a number of reasons: first of all, Egypt is endowed in phosphate rocks, whose demand is on the rise worldwide for production of fertilizers. The expected increase in natural liquefied gas necessary for the fertilizers' production process, could attract investments to this sector. Additionally, exports in the sector have witnessed an increase over the past 10 years, particularly to the EU. The sector also includes a number of private sector firms, which contribute to most of the production within the industry. Fertilizers reveal some drawbacks including its low female participation compared to traditional sectors like textiles and woven fabrics, in addition to its low share in the EU imports overall. However, in contrast to traditional sectors such as cotton and textiles, it is a new and promising sector that could be included in future agreements on conformity assessments. Finally, in contrast to fuel and oils – Egypt's main exports to the EU- fertilizers are labor-intensive and have shown sensitivity to the conclusion of the Egypt-EU Association Agreement, as suggested by our empirical analysis.

Finally, to reach a DCFTA, Three main lessons can be learnt from the Ukrainian case in order to improve the implementation of the DCFTA with Arab countries and especially Egypt. First, and most importantly, there has been a clear political will from both sides. This was particularly crucial because both the required funds and technical assistance might be present but without a political support, nothing can be implemented. Second, the DCFTA covered various trade-related issues. Hence, the DCFTA was perceived as a comprehensive reform for improving the performance of the economy. This does not contradict the fact that the DCFTA countries should focus first on reforms that are directly related to export-driven growth, access to the EU market, competitiveness gains and attractiveness for FDI inflows. Third, the government of Ukraine particularly focused on behind the border barriers and regulations which are substantial in the Arab countries and in particular in Egypt.



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Agreements

1. Free Trade Agreement between Egypt and EFTA States
2. Egypt- EU Association Agreement
3. EU/Egypt Action Plan
4. EC-Egypt Bilateral Cooperation Agreement

APPENDIX 1: UKRAINE DCFTA

Introduction

With the launch of EaP initiative in 2009, relations between the EU and the Eastern European countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) have received new impetus for development. It was stated that the main purpose was to create the necessary conditions to foster political and economic integration between the EU and the interested partner countries. Since not all the partners have shown willingness to open their markets and ensure comprehensive harmonization of their economic and legal framework with the EU, the EU showed more flexibility allowing negotiations and cooperation programs to be conducted bilaterally. The EaP offers upgrade of relations within three major dimensions, namely:

a. Association Agreement (AA),
b. Agreement on a Deep and Comprehensive Free Trade Area (DCFTA), and
c. Visa Facilitation and Readmission agreements.

The AA talks have been launched with all EaP countries except for Belarus, and four of them have been involved in the DCFTA talks. The most intensive dialogue with the EU was reached with Moldova, Ukraine and Georgia, while the other partners i.e. Belarus, Azerbaijan and Armenia have shown interest only in sectoral cooperation rather than comprehensive integration programs. Since Ukraine made the highest progress, the EU takes it as a leading partner in the EaP region and affirms that Ukraine's model can be an example for the Eastern partners in their European integration and EU convergence.

Structure of the DCFTA between EU-Ukraine

The DCFTA between the EU and Ukraine came into force in 1st of January 2016, as part of the broader Association Agreement signed in 2014. The DCFTA Section of the Association Agreement contains 15 chapters and over 20 protocols, annexes, addendums and declarations. These Chapters concern:

1. National treatment and access to market of goods
2. Trade defense measures
3. Technical barriers to trade (TBT)
4. Sanitary and phyto-sanitary measures (SPS)
5. Customs issues and trade facilitation
6. Right of establishment, services, e-commerce
7. Current payments and capital movement
8. Public procurement
9. Intellectual property
10. Competition policy (anti-monopoly measures, state aid)
11. Trade relations in energy
12. Transparency
13. Trade and sustainable development
14. Dispute settlement
15. Intermediation mechanism

Main Provisions of the Agreement between Ukraine and the EU

a. Import duties and quotas

The first provision of agreement between the two entities includes liberalization of trade in goods. For industrial products, the EU committed to apply zero duties on all industrial products imported to the EU from Ukraine from the date when the Agreement comes into force. Ukraine will gradually reduce its import duties on industrial products over transition periods. After expiration of transition periods and special regime periods, that is in 15-year period from the date when the Agreement comes into force, final import duties in Ukraine will be set at zero for all industrial products. As per agriculture products, trade will be significantly liberalized but some import duties will be preserved. Hence, EU agreed to provide substantial quotas on duty-free exports of key Ukrainian agricultural products. Tariff quotas with duty-free exports within quota are envisaged for a number of other agricultural products including some dairy products, cereals, honey, selected vegetables and juices. In turn, Ukraine will gradually liberalize import duties on agricultural products within quite long transition periods. For majority of agricultural products, zero import tariffs are envisaged in the end of transition.

b. Export Duties:

Parties agreed that Ukraine will eliminate its export duties over the 10-year period. At the end of transition, there would be no export duties in EU-Ukraine bilateral trade. Regarding the export subsidies, Ukraine does not apply export subsidies and – according to the WTO commitments – will not be able to apply them in the future. To remove trade distortions, the EU committed to remove agricultural export subsidies in the trade with Ukraine by changing respective EU acquis.

c. Trade Defense measures:

The Agreement allows applying all standard trade defense measures like anti-dumping, safeguard and countervailing measures in EU-Ukraine bilateral trade in line with the WTO rules and practices. These measures will be applied in accordance with WTO Agreements, in particular Articles VI and XIX of GATT 1994, Agreement on Safeguards, Agreement on Implementation of Article VI (antidumping), and Agreement on Subsidies and Countervailing Measures. In addition, Ukraine and the EU agreed to establish transparency requirements, mechanisms for revision and consultations, as well as to apply 'lower rate' rules for antidumping and safeguard duties.

d. Establishment of Businesses, Trade in Services and E-Commerce

DCFTA envisages mutual liberalization of business establishment and cross-border service provision in majority of sectors, excluding mining, manufacturing and processing of nuclear materials, manufacture and trade of weapons, audio-visual services and various service sectors related to air transportation. Major liberalization is expected in financial sector and communication.

e. Protection of intellectual property rights

In the sphere of intellectual property rights (IPR), considerable reforms are seen, aimed at establishment innovation-conducive and efficient level of IPR protection. The DCFTA contains Ukraine's commitment to approximate its IPR protection legislation with the EU acquis. Particular attention was paid to the geographical indication. Accordingly, Ukraine committed to abandon usage of geographical indications that belong to the European producers, so it will refrain from usage of approximately 3000 names of products including nearly 15 ones currently used by Ukrainian producers.

f. Reforms in TBT and SPS spheres

The DCFTA envisages considerable convergence of Ukraine's regulatory framework in TBT and SPS area, including approximation to EU procedures in standardization, metrology, accreditation, and conformity assessment. Ukraine committed to implement principles and practices embedded in a number of TBT and SPS related EU Directives.

Also, it committed to conduct administrative and institutional reforms required for implementation of the Agreement on Conformity Assessment and Acceptance of Industrial Products (ACAA). The Parties agreed to include the ACAA as addendum to the DCFTA.

In TBT sphere, the country will gradually embed European standards into national standards, eliminate national standards that contradict European standards, including intrastate standards (GOSTs) adopted before 1992. In SPS sphere, the DCFTA envisages an establishment of the Committee on SPS Management for regular monitoring of approximation progress and development of recommendations.

g. Other Regulatory changes

It was stated that the deepness of the DCFTA is to be achieved by elimination of 'behind the border' obstacles to trade through processes of regulatory approximation, thus opening the EU internal market to Ukraine. Apart from TBT, SPS and IPR spheres, major regulatory reforms are expected in Ukraine's competition policy, state aid, public procurement, and sustainable development covering ecological, labor and social issues. The DCFTA doesn't contain exact details of legal approximation, but makes references to the respective EU Directives. The Ukrainian government is responsible for embedment of key principles and parameters of the directives into the national legislation and for their proper implementation. For Ukraine it is important that that the country will receive EU technical and financial assistance to implement these reforms, lowering associated fiscal and administrative burden.

Implications of EU-Ukraine DCFTA

Since the Association Agreement negotiation in 2012, the EU has become the main trading partner to Ukraine, replacing Russia the previous main trade partner. In 2014, Ukraine's export to the EU were €14 billion compared to €12[22] in 2010. The most growing categories were food products, chemicals and machinery and textile and clothing. In 2014, EU exports to Ukraine were €17m, the main growing categories were fuels, food products, chemical and pharmaceuticals, and textiles and clothing.

22 Vosta.M, 2016, "Ukraine- EU Deep and Comprehensive Free Trade Area as Part of Eastern Partnership Initiative

APPENDIX 2: LIST OF COUNTRIES

Afghanistan	Costa Rica	India	Mongolia	Sao Tome and Principe
Angola	Czech Rep.	Ireland	Mozambique	Suriname
Albania	Germany	Iran	Mauritania	Slovakia
United Arab Emirates	Djibouti	Iraq	Mauritius	Slovenia
Argentina	Dominica	Iceland	Malawi	Sweden
Armenia	Denmark	Israel	Malaysia	Swaziland
Antigua and Barbuda	Dominican Rep.	Italy	Namibia	Seychelles
Australia	Algeria	Jamaica	Niger	Syria
Austria	Ecuador	Jordan	Nigeria	Chad
Azerbaijan	Egypt	Japan	Nicaragua	Togo
Burundi	Eritrea	Kazakhstan	Netherlands	Thailand
Belgium and Lux.	Spain	Kenya	Norway	Tajikistan
Benin	Estonia	Kyrgyzstan	Nepal	East Timor
Burkina Faso	Ethiopia	Cambodia	New Zealand	Tonga
Bangladesh	Finland	Kiribati	Oman	Trinidad and Tobago
Bulgaria	Fiji	St Kitts Nevis	Pakistan	Tunisia
Bosn. and Herzeg.	France	Korea	Panama	Turkey
Belarus	Micronesia	Kuwait	Peru	Taiwan
Belize	Gobon	Lao Rep.	Philippines	Tanzania
Bolivia	United Kingdom	Lebanon	Palau	Uganda
Brazil	Georgia	Liberia	Papua New Guinea	Ukraine
Brunei Darussalam	Ghana	Saint Lucia	Poland	Uruguay
Bhutan	Guinea	Sri Lanka	Puerto Rico	United States of America
Botswana	Gambia	Lesotho	Portugal	Uzbekistan
Cen. Afr. Rep.	Guinea-Bissau	Lithuania	Paraguay	St Vinc. and Grenad
Canada	Greece	Luxembourg	Romania	Venezuela
Switzerland	Grenada	Latvia	Russia	Vietnam
Chile	Guatemala	Morocco	Rwanda	Vanuatu
China	Guyana	Moldova	Saudi Arabia	Samoa
Côte d'Ivoire	Hong Kong	Madagascar	Sudan	Yemen
Cameroon	Honduras	Maldives	Senegal	Serbia and Mont.
Congo	Croatia	Mexico	Singapore	South Africa
Colombia	Haiti	Marshall Isl.	Solomon Islands	Congo Demo. Rep.
Comoros	Hungary	Macedonia	Sierra Leone	Zambia
Cabo Verde	Indonesia	Mali	El Salvador	Zimbabwe

APPENDIX 3. LIST OF SECTORS

Code	Product label
'01	Live animals
'02	Meat and edible meat offal
'03	Fish and crustaceans, molluscs and other aquatic invertebrates
'04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere ...
'05	Products of animal origin, not elsewhere specified or included
'06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage
'07	Edible vegetables and certain roots and tubers
'08	Edible fruit and nuts; peel of citrus fruit or melons
'09	Coffee, tea, maté and spices
'10	Cereals
'11	Products of the milling industry; malt; starches; inulin; wheat gluten
'12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal ...
'13	Lac; gums, resins and other vegetable saps and extracts
'14	Vegetable plaiting materials; vegetable products not elsewhere specified or included
'15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal ...
'16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates
'17	Sugars and sugar confectionery
'18	Cocoa and cocoa preparations
'19	Preparations of cereals, flour, starch or milk; pastrycooks' products
'20	Preparations of vegetables, fruit, nuts or other parts of plants
'21	Miscellaneous edible preparations
'22	Beverages, spirits and vinegar
'23	Residues and waste from the food industries; prepared animal fodder
'24	Tobacco and manufactured tobacco substitutes
'25	Salt; sulphur; earths and stone; plastering materials, lime and cement
'26	Ores, slag and ash
'27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral ...
'28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, ...
'29	Organic chemicals
'30	Pharmaceutical products

'31	Fertilisers
'32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring ...
'33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations
'34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial ...
'35	Albuminoidal substances; modified starches; glues; enzymes
'36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations
'37	Photographic or cinematographic goods
'38	Miscellaneous chemical products
'39	Plastics and articles thereof
'40	Rubber and articles thereof
'41	Raw hides and skins (other than furskins) and leather
'42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles ...
'43	Furskins and artificial fur; manufactures thereof
'44	Wood and articles of wood; wood charcoal
'45	Cork and articles of cork
'46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork
'47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or ...
'48	Paper and paperboard; articles of paper pulp, of paper or of paperboard
'49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, ...
'50	Silk
'51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric
'52	Cotton
'53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn
'54	Man-made filaments; strip and the like of man-made textile materials
'55	Man-made staple fibres
'56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof
'57	Carpets and other textile floor coverings
'58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery
'59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable ...
'60	Knitted or crocheted fabrics
'61	Articles of apparel and clothing accessories, knitted or crocheted
'62	Articles of apparel and clothing accessories, not knitted or crocheted
'63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags

'64	Footwear, gaiters and the like; parts of such articles
'65	Headgear and parts thereof
'66	Umbrellas, sun umbrellas, walking sticks, seat-sticks, whips, riding-crops and parts thereof
'67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles ...
'68	Articles of stone, plaster, cement, asbestos, mica or similar materials
'69	Ceramic products
'70	Glass and glassware
'71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad ...
'72	Iron and steel
'73	Articles of iron or steel
'74	Copper and articles thereof
'75	Nickel and articles thereof
'76	Aluminium and articles thereof
'78	Lead and articles thereof
'79	Zinc and articles thereof
'80	Tin and articles thereof
'81	Other base metals; cermets; articles thereof
'82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal
'83	Miscellaneous articles of base metal
'84	Machinery, mechanical appliances, nuclear reactors, boilers; parts thereof
'85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television ...
'86	Railway or tramway locomotives, rolling stock and parts thereof; railway or tramway track fixtures ...
'87	Vehicles other than railway or tramway rolling stock, and parts and accessories thereof
'88	Aircraft, spacecraft, and parts thereof
'89	Ships, boats and floating structures
'90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical ...
'91	Clocks and watches and parts thereof
'92	Musical instruments; parts and accessories of such articles
'93	Arms and ammunition; parts and accessories thereof
'94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; ...
'95	Toys, games and sports requisites; parts and accessories thereof
'96	Miscellaneous manufactured articles
'97	Works of art, collectors' pieces and antiques

'99	Commodities not elsewhere specified

APPENDIX 4. LIST OF VARIABLES

Common Legal Origin			Com. Lang	Contig.	GAFTA	AGADIR	EU-Egypt	Colony
AFG	GNB	PAN	ARE	ISR	ARE	JOR	AUT	GBR
AGO	GNQ	PER	BHR	LBY	BHR	MAR	BEL	SBN
ANT	GRC	PHL	COM	PAL	DZA	TUN	BGR	TUR
ARG	GTM	PRT	DJI	SDN	IRQ		CYP	
BDI	GUF	PRY	DZA		JOR		CZE	
BEL	HND	QAT	IRQ		KWT		DEU	
BEN	HTI	RWA	JOR		LBN		DNK	
BFA	IDN	SEN	KWT		LBY		ESP	
BOL	IRN	SLV	LBN		MAR		EST	
BRA	IRQ	STP	LBY		OMN		FIN	
CAF	ITA	SUR	MAR		PAL		FRA	
CHL	JOR	SYC	MRT		QAT		GBR	
CIV	KWT	SYR	NER		SAU		GRC	
CMR	LBN	TCD	OMN		SYR		HRV	
COG	LBY	TGO	PAL		TUN		HUN	
COL	LUX	TUN	QAT		YEM		IRL	
COM	MAC	TUR	SAU				ITA	
CPV	MAR	URY	SDN				LTU	
CRI	MDG	VEN	SOM				LUX	
DJI	MEX	YEM	SYR				LVA	
DOM	MLI	ZAR	TCD				MLT	
DZA	MLT		TUN				NLD	
ECU	MOZ		YEM				POL	
ERI	MRT						PRT	
ESP	MTQ						ROM	
ETH	MUS						SVK	
FRA	NER						SVN	
GAB	NIC						SWE	
GIN	NLD							
GLP	OMN							

APPENDIX 5. INDEX FOR EXPORT SECTORS

Product code	Product label	RCA	Share in EU imports	Share in Egypt exports to EU	Change in Share	Elas.	Lab intensity	Female share	Share in Egypt total exports	Index
’52	Cotton	14.37	0.00	0.02	0.00	1.77	0.60	0.14	0.02	16.92
’57	Carpets and other textile floor coverings	10.75	0.00	0.01	0.01	0.00	0.15	0.39	0.01	11.32
’58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery	9.38	0.00	0.00	0.00	0.87	0.15	0.39	0.00	10.80
’31	Fertilisers	7.07	0.00	0.06	0.07	2.70	0.57	0.09	0.03	10.60
’07	Edible vegetables and certain roots and tubers	8.16	0.00	0.05	0.02	1.51	0.45	0.18	0.03	10.40
’25	Salt; sulphur; earths and stone; plastering materials, lime and cement	9.46	0.00	0.01	-0.03	0.00	0.57	0.09	0.02	10.13
’08	Edible fruit and nuts; peel of citrus fruit or melons	6.94	0.01	0.05	0.05	1.64	0.45	0.18	0.03	9.34
’13	Lac; gums, resins and other vegetable saps and extracts	9.54	0.00	0.00	0.00	-1.06	0.45	0.18	0.00	9.11
’63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags	5.46	0.00	0.02	0.00	2.30	0.15	0.39	0.01	8.32
’69	Ceramic products	3.81	0.00	0.01	0.00	2.17	0.42	0.01	0.01	6.44
’14	Vegetable plaiting materials; vegetable products not elsewhere specified or included	6.69	0.00	0.00	0.00	-0.93	0.45	0.18	0.00	6.39

'17	Sugars and sugar confectionery	4.99	0.00	0.00	0.00	0.00	0.49	0.18	0.01	5.68
'12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal ...	4.05	0.00	0.01	0.01	0.00	0.45	0.18	0.01	4.71
'62	Articles of apparel and clothing accessories, not knitted or crocheted	2.44	0.01	0.03	0.04	1.47	0.15	0.39	0.02	4.54
'53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn	3.76	0.00	0.00	0.00	0.00	0.60	0.14	0.00	4.50
'76	Aluminium and articles thereof	1.52	0.01	0.04	0.02	2.01	0.59	0.01	0.02	4.22
'74	Copper and articles thereof	1.52	0.01	0.00	0.00	1.68	0.59	0.01	0.01	3.83
'10	Cereals	3.03	0.00	0.01	-0.01	0.00	0.45	0.18	0.01	3.67
'61	Articles of apparel and clothing accessories, knitted or crocheted	2.02	0.01	0.02	0.01	1.02	0.15	0.39	0.02	3.64
'27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral ...	3.11	0.13	0.38	-0.44	0.00	0.02	0.04	0.34	3.58
'39	Plastics and articles thereof	1.10	0.04	0.05	0.03	1.59	0.42	0.09	0.04	3.37
'51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric	1.10	0.00	0.00	0.01	1.41	0.60	0.14	0.00	3.27
'70	Glass and glassware	2.01	0.00	0.00	0.01	0.75	0.42	0.01	0.01	3.22
'41	Raw hides and skins (other than furskins) and leather	2.49	0.00	0.01	0.01	0.00	0.42	0.09	0.00	3.03
'20	Preparations of vegetables, fruit, nuts or other parts of plants	2.32	0.00	0.00	0.01	0.00	0.49	0.18	0.01	3.02
'54	Man-made filaments; strip and the like of man-made textile materials	1.44	0.00	0.00	0.00	0.80	0.60	0.14	0.00	2.99
'28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, ...	1.99	0.01	0.02	0.01	0.00	0.57	0.09	0.01	2.70

’55	Man-made staple fibres	1.86	0.00	0.00	0.00	0.00	0.60	0.14	0.00	2.61
’68	Articles of stone, plaster, cement, asbestos, mica or similar materials	2.16	0.00	0.00	0.00	0.00	0.42	0.01	0.01	2.61
’11	Products of the milling industry; malt; starches; inulin; wheat gluten	1.84	0.00	0.00	0.00	0.00	0.45	0.18	0.00	2.47
’34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificial ...	1.61	0.00	0.00	0.00	0.00	0.57	0.09	0.01	2.29
’24	Tobacco and manufactured tobacco substitutes	1.00	0.00	0.00	0.00	0.90	0.11	0.01	0.00	2.02
’71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad ...	1.33	0.03	0.03	0.06	0.00	0.42	0.01	0.03	1.91
’72	Iron and steel	1.07	0.03	0.03	-0.02	0.00	0.59	0.01	0.03	1.74
’99	Commodities not elsewhere specified	1.11	0.02	0.00	0.00	0.00	0.37	0.01	0.03	1.53
’96	Miscellaneous manufactured articles	1.04	0.00	0.00	0.00	0.00	0.37	0.01	0.00	1.43
’15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal ...	1.34	0.00	0.00	0.00	-0.65	0.49	0.18	0.01	1.38
’09	Coffee, tea, maté and spices	1.35	0.00	0.00	0.00	-0.70	0.45	0.18	0.00	1.29
’21	Miscellaneous edible preparations	1.02	0.00	0.00	0.00	-0.78	0.49	0.18	0.00	0.92
’46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	1.00	0.00	0.00	0.00	-0.89	0.42	0.09	0.00	0.63
’04	Dairy produce; birds’ eggs; natural honey; edible products of animal origin, not elsewhere ...	1.57	0.01	0.00	0.00	-2.61	0.45	0.18	0.01	-0.39

Policy Paper

"THE IMPACT OF EGYPT-EU FREE TRADE AGREEMENT ON EGYPT'S MANUFACTURING EXPORTS AND EMPLOYMENT"[23]

Omneia Helmy[24] **Nora Aboushady**[25] **Chahir Zaki**[26]

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23 We are grateful to Safiya Galal for excellent research assistance.

24 Professor, Faculty of Economics and Political Science, Cairo University. Email: omneia.helmy@feps.edu.eg

25 Assistant Professor, Faculty of Economics and Political Science, Cairo University. Email: nora.aboushady@feps.edu.eg

26 Associate Professor, Faculty of Economics and Political Science, Cairo University. Email: chahir.zaki@feps.edu.eg

1. INTRODUCTION

Egypt enjoyed preferential access to the European market with the entry into force of the Bilateral Cooperation Agreement in 1977. With the launching of the Barcelona process in 1995, preferential agreements were gradually transformed into bilateral reciprocal trade agreements between the European Union and South Mediterranean Countries (SMCs), including Egypt. In this context, Egypt signed the Association Agreement with the EU in 2001. The agreement entered into force on January 1st, 2004 and covered the manufacturing sector in addition to selected agricultural products.

In the aftermath of the Arab Spring, reshaping Egypt-EU relations became a necessity. Trade and investment flows were not enough to foster sustainable and inclusive economic growth. Egyptian exports of manufacturing products remain limited due to difficulties in compliance with EU standards and prevalence of technical barriers to trade. Additionally, exports of agricultural products and trade in services remain mostly excluded from the Association Agreement. EU investments are also heavily allocated towards the oil sector, which limits the potential for job-rich growth. Egypt-EU cooperation framework needs therefore to better reflect necessities, priorities and cater to opportunities in Egypt.

The objective of this paper is therefore to study the impact of Egypt-EU Association Agreement on the manufacturing sector and to point out industries with strong potential for export growth and job creation. We also analyze opportunities for enhancing Egypt-EU investment and trade and –eventually- paving the way for a Deep and Comprehensive Free Trade Agreement (DCFTA) in light of the urgent need for social inclusion in Egypt.

To do so, we proceed in three ways. First, we undertake a descriptive analysis of trade and investment flows. Second, we run a gravity-type model to examine the impact of Egypt-EU trade agreement on their bilateral trade and to determine the most sensitive products that are affected by the agreement. Finally, we construct an index for Egypt's main exports taking into account trade, employment and gender dimensions. We found that fertilizers are one of the most significant products that experienced increases in their market share, are sensitive and that are labor intensive.

Our work is divided into 6 main sections. In Section 2, we briefly track the historical evolution of economic relations between Egypt and the EU since the 1970's to date. In Section 3, we highlight the main investment and trade-related reforms undertook by the Egyptian government over the period 2004-2017 and analyze Egypt-EU investment and trade relations. Section 4 provides an empirical analysis of bilateral trade between Egypt and the EU and an assessment of the impact of Egypt-EU free trade area on Egyptian manufacturing exports using a gravity-type model. In Section 5, an Egyptian manufacturing sector with strong potential for export growth and job creation is identified by conducting sector analysis. We choose fertilizers as a potential sector to thrive within Egypt-EU investment and trade relations, since it fulfills a set of specific criteria suggesting potential growth and contribution to employment. Finally, Section 6 concludes with some policy implications.

2. HISTORICAL EVOLUTION OF EGYPT-EU ECONOMIC RELATIONS

Table (1) briefly tracks the historical evolution of Egyptian-European economic relations since the 1970s to date.[27]

Table 1- The Evolution of Egypt-EU Economic Relations

Year (s)	Main Developments	Benefits to Egypt
1977 - 1995	• Egypt-EC (European Community) Cooperation Agreement • Additional protocols were signed to organize trade relations in certain sectors.	• Egyptian industrial exports enjoyed free access to the European community market, while agricultural exports benefited from substantial tariff concessions. • The 1987 Protocol granted Egypt preferential treatment in access to the EU market by means of tariff quotas and export calendars for its traditional flows. • Egypt received nearly 31% of the total funds available for the Mediterranean region which were directed mainly to restructuring programs with a total amount of 99.7 MECU.[28] • Egypt had also benefited from funds external to the protocols amounting to 450 MECU[29] allocated to food aid.
1995 - 2001	• Euro-Mediterranean Partnership (EMP) • MEDA Program[30] • MEDA II Program	• Bilateral MEDA programs and MEDA regional program to support economic reform in SMCs, including Egypt. • Under the framework of MEDA II, the revised version of MEDA, the EIB allocated €330 million as loans to support infrastructure projects in water, energy and transport sectors. • Between 2000 and 2017, the EIB has established credit lines worth €1,137 million to support small and medium enterprises (SMEs).
2001	• The Egypt-EU Association Agreement	• Egyptian exports enjoy an immediate removal of all customs duties and other charges upon entry into force of the Agreement (2014). At the same time, Egyptian imports are subject to gradual removal of tariffs by category of product. • In the following years, Egypt- EU trade doubled from €11.4 billion in 2004 to €27.3 billion in 2016 to represent 31.3% of Egypt's total trade value in 2016.

27 For more information, kindly refer to our detailed study on: "The Impact of Egypt-EU Free Trade Agreement on Egypt's Manufacturing Exports and Employment".

28 Institut MEDEA, EU-Egypt Relations, http://www.medea.be/en/countries/egypt/eu-egypt-relations/

29 http://www.medea.be/en/countries/egypt/eu-egypt-relations/

30 The term MEDA stands for *mesures d'accompagnement.*

2004	• The European Neighborhood Policy (ENP) and its revision following the Arab Uprising	• The European Neighborhood Instrument (ENI) is considered a key financial instrument for the EU-Egypt cooperation between 2014 and 2020. Between 2014 and 2016, EU bilateral funding to Egypt through the ENI totaled €320 million. • Egypt is also eligible for additional funding under several EU thematic programs and instruments. From 2014-2017, Egypt has received €4 million through the European Instrument for Democracy and Human Rights. Egypt is also eligible for Erasmus + programs for promoting higher education.
2008	• The Union for the Mediterranean (UFM)	• Egypt is a beneficiary in many UFM labelled projects that ranged in cost from €100 million in the Imbaba Urban Upgrading Project to €700,000 in the Skills for Success – Employability Skills for Women project.
2014 - 2016	• Deep and Comprehensive Trade Agreements (DCFTA)	• EU and Egypt began talks about a DCFTA in June 2013. Yet, it is worthy to mention that negotiations on trade in services are currently on hold.[31]

Source: Compiled and summarized by the authors.

3. ANALYSIS OF EGYPT-EU INVESTMENT AND TRADE RELATIONS

In this section, we highlight the main investment and trade-related reforms undertook by the Egyptian government over the period 2004-2017, and provide an analysis of Egypt-EU trade and investment relations. The analysis reveals that there is still large potential for enhancing these relations and using them to respond to the urgent need for economic growth and social inclusion in Egypt.

3.1. Egypt Investment-Related Reforms

Between 2004 and 2017, the Egyptian government undertook a series of investment-related reforms to improve the business environment and encourage investment, especially in export-oriented sectors (Table 2).

31 Loo.G, (2015), "Enhancing the Prospects of the EU's Deep and Comprehensive Free Trade Areas in the Mediterranean: Lessons from the Eastern Partnership", CEPS, June.

Table 2- Reforms for Doing Business in Egypt (2004- 2017)

Year	Reforms
2004	• Egypt introduced computerized company contract models for use in business incorporation and created a single access point for business registration with approval in 24 hours
2007-2009	• Egypt lowered registration fees, improved the process at the one-stop shop and reduced the minimum capital requirement • Improved access to credit: the credit bureau I-score was established in 2007 and later improved. Borrowers' right to inspect their own data in the credit bureau was guaranteed in 2008, and the credit bureau added retailers to its database in 2009.
2010	• Egypt reduced the cost to start a business
2014	• The role of the Egyptian Regulatory Reform and Development Authority (ERRADA) is reactivated to review all investment-related regulations and eliminate burdensome regulations. • Egypt issues Decree Law 56/2014 that amends the Competition Law 3/2005 to reinforce the role of the Competition Authority
2015	• Law 5/2015 regarding national preferences for Egyptian products in government contracts expanded the scope of application of national preferences to all supply and project agreements and extended it to public companies. • Egypt issues Decree-Law 87/2015 on electricity to separate between regulation and provision and allows for privatization of electricity generation • New Investment Law-decree 17/2015 is issued to provide further incentives to investors and introduce new dispute settlement mechanisms
2016	• Decrees no.991/2015 and 49/2016 (in force March 2016), mandating special import requirements for a list of 25 categories of goods. The most significant category of products covered by the decrees in terms of value of EU exports to Egypt is milk and dairy products. • Egypt strengthened minority investor protections by barring subsidiaries from acquiring shares issued by their parent company. • Egypt adopted a flexible exchange rate regime • Energy prices were increased • Value-Added Tax was introduced • Lower prices of investment land for specific activities in Upper Egypt
2017	• The New Investment Law no. 72 of 2017 was introduced • Investors were granted strong safeguards and generous incentives • Land may be allocated free of charge or benefit from a 50% refund from the State for some strategic activities and under specific conditions • Quota of foreign workers per production unit was increased from 10% to 20% • Special incentives were granted to investment projects in under-developed geographic locations, export-oriented projects, labor-intensive activities, SMEs, communication and information technology activities, environment protection, healthcare, social care, cultural care, technical education, scientific research and training

Source: World Bank, 2017 Doing Business.

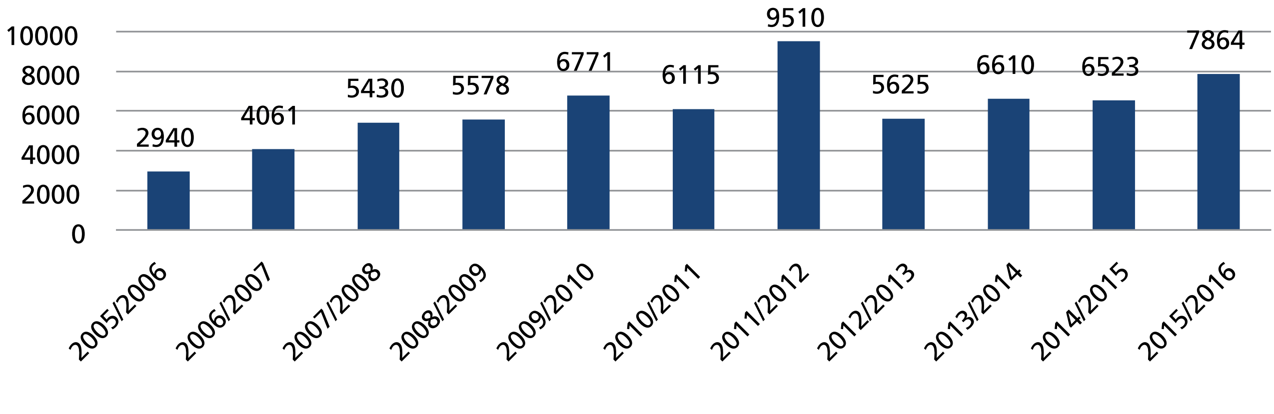
Notwithstanding the above-mentioned reforms, Egypt maintains a number of regulatory barriers to foreign investment. Regulatory barriers arise mainly from "horizontal" laws and regulations affecting all industries. Some barriers are "sector" specific, while others are rather "modal". Other barriers arise from the "stage of supply" regulations.

3.2. Egypt-EU Investment Relations

The EU is the main investor in Egypt, accounting for more than 62% of total inward FDI flows in FY 2015/2016. There are currently 22 bilateral investment treaties (BITs) signed between Egypt and most of the EU countries (Ministry of Finance, Monthly Bulletin, September 2017). Among EU Member States, UK, France, the Netherlands, Germany and Spain have been the most important sources of FDI for Egypt (Central Bank of Egypt, Annual Report 2015/2016).

Unlike the rest of FDI inflows to Egypt, FDI originating from the EU has only slightly dropped in the year of the uprising (FY 2010/2011), before picking up sharply in the following year (FY 2011/2012). In FY 2012/2013, EU direct investment in Egypt has dropped sharply again for political reasons,[32] before modestly picking up in the years to follow (Figure 1).

Figure 1- Total EU Investment Inflows to Egypt in million USD (FY2005/2006-FY2015/2016)



Source: Ministry of Finance, Monthly Bulletin, July 2016.

To sum up, boosting investors' confidence in the Egyptian economy and attracting more sustainable and diversified domestic and foreign investments require effective implementation of investment-related reforms and lower regulatory barriers to foreign investment.

32 The sudden drop in FY 2012/2013 could be explained by the political setup during this year with the dominance of the Muslim Brotherhood party in both legislative and executive powers. With the ouster of Mohamed Mursi in July 2013, EU FDI started to pick up again.

3.3. Egypt Trade-Related Reforms

Over the past decade, Egypt carried out serious reforms to streamline standards and other non-tariff measures (NTMs). However, Egypt remains among the group of developing countries with the highest frequency index and coverage ratio of NTMs (UNCTAD, 2013).

Administrartive barriers appear to be the most important impediments to trade. The cost of some red tape procedures for exports and imports is relatively high and time-consuming (Table 3). According to the Doing Business dataset, Egyptian procedures create a lengthier than necessary clearance process for imported and exported goods as compared to MENA and OECD countries. Egypt's cost of importing is much higher than the OECD and the MENA region. However, Egypt's cost of exporting is lower than the MENA region.

Table 3- Egypt Export and Import Procedures, 2017

Indicator	Egypt	MENA	OECD
Time to export (hours)	88	74.3	2.4
Cost to export (US$ per container)	100	243.6	35.4
Time to import (hours)	265	94.5	3.5
Cost to import (US$ per container)	1,000	266.2	25.6

Source: World Bank Doing Business Indicators (2018).

Regarding Egyptian exports, negotiations are ongoing between Egypt and the EU on the Agreement on Conformity Assessment and Acceptance (ACAA) in priority industrial sectors. [33] The ultimate objective is to support Egyptian manufacturers to use the ACAA agreement for better exporting to the EU and other regional markets.

Also, in the Egypt-EU Association Agreement, local component requirements (a minimum of 60% from Egypt or the EU) for the rules of origin under Mediterranean countries allow for the use of inputs from third countries (diagonal accumulation of origin) for the remaining 40% content. However, Egyptian exports suffer from a number of difficulties to access the EU market.

The EU, Egypt's main trade partner, has a particularily high index of non-tariff measures (NTMs) which are mostly sanitary and phyto-sanitary measures (SPS) and technical barriers (TBs) such as certification, testing and labeling requirements. The challenges

33 Formally declared as ACAA priority sectors by Egypt to the European Commission are **toys** (Directive 2009/48/EC) and **gas appliances** (Directive 2009/142/EC). Other sectors include **electrical products** (Low voltage Directive 2006/95/EC and electromagnetic Compatibility, Directive 2004/108/EC); **machinery** (Directive 2006/42/EC); **pressure equipment** (pressure equipment directive (PED) 97/23/EC and Simple Pressure Vessels Directive (SPVD) 2009/105/EC); **construction materials** (Regulation 305/2001/EU); **medical appliances** (Directive 93/42/EEC and its amendments).

facing Egyptian exporters, which vary between technical requirements, conformity issues, export related barriers and rules of origin, often too strict for Egyptian exporters to be able to comply with. In addition to standard-related trade barriers, a number of procedural obstacles persist at the borders and at the destination market.

3.4. Egypt-EU Trade Relations

The EU is Egypt's main trading partner, with a share of nearly 35% of Egypt's total exports and imports. In 2016, Egyptian merchandize exports to the EU were about USD 6 billion, while imports from the EU to Egypt reached USD 18.8 billion.

While Egyptian merchandize imports from the EU are diversified among machinery, chemicals, transportation equipment, metals, animal and vegetable products, Egyptian merchandize exports to the EU are mainly mineral fuels. However, the share of mineral fuels in Egyptian exports to the EU (22 percent in 2016), is declining in favor of exports of chemicals and textiles. Being labor intensive, enhancing trade in these sectors carries a potential for Egypt to exploit its comparative advantage and foster exports and employment.

4. IMPACT OF EGYPT-EU FTA ON EGYPTIAN MANUFACTURING EXPORTS: A GRAVITY MODEL

In this section, the impact of Egypt-EU FTA on Egyptian manufacturing exports will be empirically assessed using a gravity type model.

4.1. Methodology

The methodology used in this study draws on the pioneering work of Tinbergen (1962) and Anderson (1979): the gravity model. This model is an essential tool in the empirics of international trade to predict bilateral trade flows using multiple determinants of trade (Mac Callum, 1995; Feenstra et al., 2001; Feenstra, 2002; Evenett and Keller, 2002; Anderson and van Wincoop, 2003; Santos Silva and Tenreyro, 2006).

For Egypt-EU bilateral trade in manufacturing, we use the UN Comtrade database for 175 countries, including Egypt, with 99 sectors (two-digit HS commodities) for the period 1995 – 2015[34]. Our estimable equation is:

34 For a description of the list of countries and sectors included in the dataset, kindly refer to our detailed study on: "The Impact of Egypt-EU Free Trade Agreement on Egypt's Manufacturing Exports and Employment", Appendix 2 and Appendix 3.

$$lnX_{ijkt} = \beta_0 + \beta_1 lnGDP/cap_{it} + \beta_2 lnGDP/cap_{jt} + \beta_3\, lnDist_{ij} + \beta_4 Contig_{ij} + \beta_5 Com\ leg_{ij} + \beta_6 Col_{ij} + \beta_7 Com.Lang_{ij} + \beta_8 GAFTA_{ijt} + \beta_9 Agadir_{ijt} + \beta_{10} EgyptEU_{ijt} + \beta_{11} COMESA_{ijt} + \sigma t + \sigma j + \varepsilon_{ijkt}$$

where X_{ijkt} is the bilateral trade flow between Egypt and country *j* in year *t* for sector *k*; and are country *i* and j's real gross domestic product per capita in year *t*; $lnDist_{ij}$ is the bilateral distance between the two countries; $Contig_{ij}$, Col_{ij}, $Com\ Leg_{ij}$, and $Com.\ Lang_{ij}$ are dummy variables that take the value of 1 if the two countries share common borders, had previous colonial links, have common legal origin. We introduce three variables of trade policy measuring the most important agreements of Egypt which are: *Egypt-EU* a dummy variable that takes the value of 1 to capture the association agreement between Egypt and EU countries (changing over time as each EU member joined in a specific year); *Agadir* a dummy variable that takes the value of 1 for Tunisia, Jordan and Morocco starting 2005, *GAFTA* a dummy variable that takes the value of 1 for GAFTA countries starting 1998 and *COMESA* a dummy variable that takes the value of 1 for COMESA countries.[35]

4.2. Empirical Findings

Our main findings show that classical gravitational variables have the expected sign and level of significance (Table 4). Indeed, the GDP/capita of the importer exerts a positive and statistically significant effect on Egypt's exports. Distance is associated to trade negatively, while contiguity, common language, common legal origin and colonial links boost trade between Egypt and its trade partners.

For trade policy variables, we run a separate regression for each agreement then combine them together. When each agreement is introduced alone, GAFTA, COMESA and Agadir are highly positive and significant while Egypt-EU agreement is slightly significant and negative. By contrast, when they are combined together, the three agreements are positive and significant with GAFTA showing the highest coefficient, followed by Agadir and then the Egypt-EU Association (Table 4). This result is interesting as Agadir agreement is linked to the EU through an Association Agreement or an FTA. Its purpose was to facilitate integration between Arab states and the EU under the broader EU-Mediterranean process. One of its important characteristics is that it uses the EU's rules of origin. The EU allows its Mediterranean FTA partners to cumulate value-added regardless the place where value was added, for the purpose of preferential tariffs, as long as it was in an FTA partner country. By contrast, the US only considers value added domestically in the country exporting to the US. These conflicting regimes give the EU an advantage in its competition with US and make the EU in a better position than US with respect to Agadir countries. This also explains why GAFTA coefficient is significant and has a high level.

35 For a list of these variables, kindly refer to our detailed study on: "The Impact of Egypt-EU Free Trade Agreement on Egypt's Manufacturing Exports and Employment", Appendix 4.

It is important to note also that COMESA agreement exerts a positive impact on Egypt's trade showing how African countries, despite a small share in Egypt's exports, represent a potential important destination for Egyptian exporters. To sum up, our empirical estimates show that Egypt-EU FTA exerts a positive and significant effect on Egypt's exports, even when combined with COMESA, GAFTA and Agadir agreements.

Table 4- Aggregate Results

	Ln(Trade)	Ln(Trade)	Ln(Trade)	Ln(Trade)	Ln(Trade)	Ln(Trade)
Ln(GDPcap imp)	0.764***	0.669***	0.775***	0.769***	0.796***	0.708***
	(0.00711)	(0.00728)	(0.00711)	(0.00766)	(0.00766)	(0.00844)
Ln(Dist)	-1.198***	-1.024***	-1.151***	-1.208***	-1.203***	-0.961***
	(0.0171)	(0.0173)	(0.0172)	(0.0180)	(0.0171)	(0.0184)
Contig.	0.846***	1.558***	1.056***	0.830***	0.596***	1.346***
	(0.0740)	(0.0746)	(0.0744)	(0.0745)	(0.0771)	(0.0782)
Colony	2.983***	3.924***	3.035***	2.988***	2.944***	3.876***
	(0.0693)	(0.0710)	(0.0692)	(0.0694)	(0.0693)	(0.0709)
Com. Lang	2.725***	-0.0480	2.485***	2.707***	2.724***	0.140**
	(0.0343)	(0.0621)	(0.0357)	(0.0359)	(0.0343)	(0.0623)
Com. Leg	0.296***	0.237***	0.258***	0.299***	0.282***	0.177***
	(0.0239)	(0.0237)	(0.0239)	(0.0239)	(0.0239)	(0.0238)
GAFTA		3.713***				3.746***
		(0.0694)				(0.0725)
Agadir			1.856***			1.132***
			(0.0764)			(0.0778)
Egypt-EU				-0.0760*		0.324***
				(0.0422)		(0.0425)
COMESA					0.444***	0.737***
					(0.0387)	(0.0387)
Constant	9.017***	8.415***	8.557***	9.058***	8.755***	7.519***
	(0.188)	(0.187)	(0.189)	(0.189)	(0.189)	(0.191)
Sector dummies	YES	YES	YES	YES	YES	YES
Year dummies	YES	YES	YES	YES	YES	YES
Observations	191,033	191,033	191,033	191,033	191,033	191,033
R-squared	0.303	0.313	0.305	0.303	0.303	0.315

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

We rely on the last regression to estimate product level elasticities that show which products are more responsive than others to EU demand. Elasticities represent the coefficient associated to the Egypt-EU association dummy variable. The estimated elasticities range from -2.6 to +2.7, with fertilizers being the most responsive product. Thus, our estimates of product level elasticities show that fertilizers are the most responsive products to EU demand.

5. IDENTIFYING AN EGYPTIAN MANUFACTURING SECTOR WITH POTENTIAL FOR EXPORT GROWTH AND JOB CREATION: SECTOR ANALYSIS

The purpose of this section is to identify an Egyptian manufacturing sector with a strong potential for export growth and job creation, by analyzing the Egyptian manufacturing sectors' export performance, labor intensity and female labor force participation; in addition to the demand structure in the EU.

5.1. Identifying the Sector

In order to identify an Egyptian manufacturing sector with a strong potential for export growth and job creation, we develop an index based on eight criteria. These criteria are classified into three main categories: trade (supply) performance, demand structure, and social dimension, and assigned equal weights to avoid the choice of any arbitrary weights.[36]

Our calculations reveal that fertilizers could be considered a sector with increased potential for export growth and job creation for several reasons. First of all, fertilizers are the second largest sector in Egypt's manufacturing exports to the EU after mineral fuels and oils. In contrast to mineral fuels and oils, fertilizers are labor-intensive, which is one of the most important dimensions to be considered while designing policies for boosting Egypt's exports in general, and to the EU in particular.

Fertilizers show the highest elasticity of exports to the EU (highest responsiveness to EU demand for Egypt's manufacturing exports estimated at +2.7 from our gravity model), and have gained an increasing share in Egypt's manufacturing exports to the EU (gaining 7.3% between 2000 and 2016).

Furthermore, fertilizers rank seventh in terms of RCA. They are a promising sector as compared to traditional industries such as cotton and textiles and show a relatively

36 For more information about the composition of the index and the calculated index for Egypt's manufacturing exports, please refer to the detailed study on: "The Impact of Egypt-EU Free Trade Agreement on Egypt's Manufacturing Exports and Employment", Table 12 and Appendix 5.

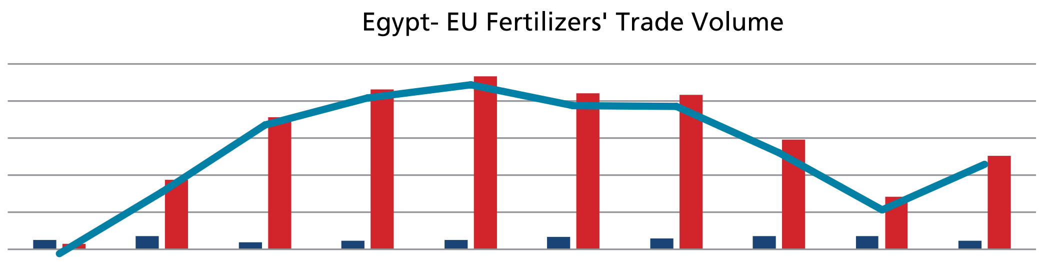
advanced ranking overall according to our calculated composite index (fertilizers rank fourth out of 41 manufacturing sectors). They arrive after cotton, carpets and special woven fabrics. We focus therefore in the next sub-section on fertilizers as a potential sector for boosting Egyptian exports to the EU, and for boosting job creation.

5.2. Fertilizers Sector Analysis

An extensive analysis of the fertilizers sector in terms of Egypt's self-sufficiency, international trade in fertilizers, production, employment, wages and productivity reveal that Egypt is largely self-sufficient in the production of phosphate fertilizers and nitrogenous fertilizers. Nearly 30% of total fertilizers' production is exported **(**FAO, 2016).

The EU is the main destination market for fertilizers' exports with 60% to 70% of total exports in the sector being directed to EU markets. Since FY 2008/2009, there is a generally positive (yet decreasing) balance of fertilizers trade with the EU (Figure 2).

Figure 2- Egypt–EU Fertilizers Trade Balance (USD thousand, 2007-2017)



	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017
Imports	50928	69214	39298	47585	48800	66870	60661	71476	69802	45556
Exports	27670	376036	712057	863326	935443	841997	833608	593112	282748	502697
Trade Balance	-23258	306822	672759	815741	886643	775127	772947	521636	212946	457141

Imports Exports Trade Balance

Source: Product 31, Trade Map, Egypt- EU, International Trade Centre online dataset 2017.

The market for fertilizers includes three public sector companies[37] and a larger number of private sector companies. In the aftermath of the Egyptian Revolution in 2011 and the overall economic slowdown, the number of private sector companies has sharply dropped from 22 in FY 2010/2011 to only 12 two years later.

37 These are: Delta Co. for Fertilizers, Societe El Nasr d'Engrais et d'Industries Chimiques (SEMADCO) and Egyptian Chemicals Industries (KEMA).

Also, fertilizers production has decreased. In the public sector companies, fertilizers production declined from a peak of EGP 2.5 billion in 2011/2012 to EGP 1.45 in 2014/2015 (Annual Report of Industrial Production, Public Sector, July 2016, CAPMAS). For the private sector companies, fertilizers production dropped from EGP 12.75 billion in 2012 to EGP 10.2 billion in 2013 (Annual Report of Industrial Production, Private Sector, July 2014, CAPMAS).[38]

The impact of the economic recession in Egypt has been severe on employment in the fertilizers sector. Employment in public sector companies dropped from 10192 employees in 2007/2008 to 6500 employees in 2014/2015, and employment in the private sector companies declined from 8396 in 2007 to 6779 in 2013. Female labor participation is very low for both public and private sector companies. Currently, only 3% of total employment in the industry are females.

It is worthy to note that labor productivity is much lower for public sector companies than for private firms. With almost the same number of employees, private sector firms produce 10 times higher than public sector firms, indicating low labor productivity in the public sector companies. As for wages, they are nearly twice higher than in the private sector than in the public sector.

Summing up, fertilizers could be a promising sector for Egypt in terms of both exports and employment. The increased demand for fertilizers worldwide and particularly in the EU, the expected increase in natural liquefied gas necessary for the fertilizers' production process, could attract investments to this sector which is labor intensive by nature.

6. CONCLUSION AND POLICY IMPLICATIONS

Reshaping the Euro-Mediterranean relations became a necessity in the aftermath of the Arab Spring in several South Mediterranean Countries (SMCs), including Egypt. The objective of this paper is therefore to study the impact of the Egypt-EU Association Agreement on the manufacturing sector and to point out industries with strong potential for export growth and job creation, in light of the urgent need for sustainable economic growth and social justice in the region.

To do so, we proceeded in three ways. First, we undertook a descriptive analysis of trade and investment flows. Second, we run a gravity-type model to examine the impact of Egypt-EU trade agreement on their bilateral trade and to determine the most sensitive products that are affected by the agreement. Finally, we constructed an index taking

38 We are unable to merge most data of the public and private sector since data of the public sector are available in fiscal years and those of the private sector are available in calendar years.

into account trade, employment and gender dimensions. We found that fertilizers are one of the most significant products that experienced increases in their market share, are sensitive to the conclusion of the EU-Egypt Association Agreement, and are labor intensive. We provided a brief analysis of the sector in terms of production, trade, and indicators of social justice and inclusion, such as wages, employment, productivity and female participation.

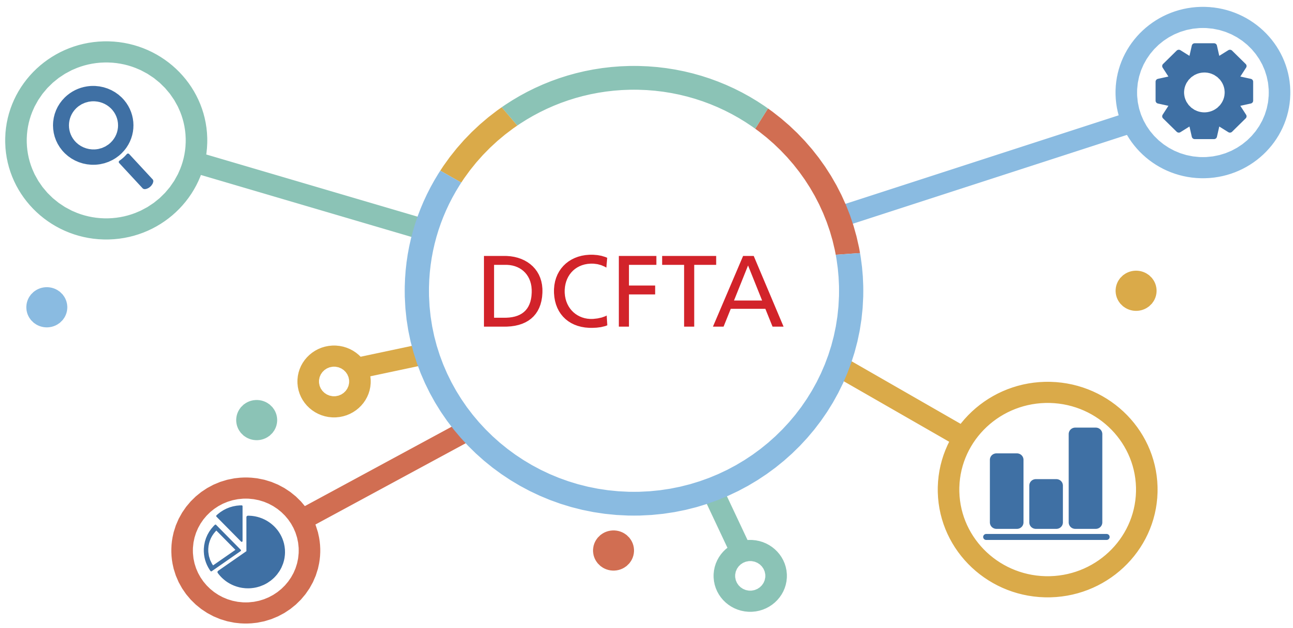
Several policy implications arise from our analysis. The first pertains to the indispensability of carrying out serious exports promotion policies, and to reshape laws and regulations to cater to this objective. A number of reforms were recently carried out with the new Investment Law, which offers generous incentives to local and foreign investors, in addition to related improvements of administrative procedures in sectors of national priority and in export-oriented activities. Sound implementation of these new regulations, in addition to overall political and economic stability should foster business and investment in Egypt. Transparency is one of the major factors that can facilitate carrying out business activities, and reassures domestic as well as foreign investors. Streamlining regulations and eliminating burdensome requirements, digitalizing investment procedures, enhanced customs clearance will provide a real incentive to economic activity. To meet the objective of exports promotion, which has been clearly stated as a national objective in Egypt's development strategy, removing red-tape barriers that still hinder trade and increasing transparency for exporters and importers is a must.

Promoting exports from Egypt to the EU – Egypt's main trade partner- heavily relies on compliance to EU and to international standards. Compliance remains one of the major barriers hindering exports promotion in Egypt, especially to SMEs, which usually have difficulties accessing the information and complying with norms and standards. Enhancing trade with the EU to realize the objectives of the Association Agreement while promoting SMEs for inclusion and social justice requires assistance to these small-scale potential exporters, which can be provided by both the EU and the concerned national authorities. At the institutional level, enhancing compliance also requires Egypt to take advanced steps regarding its quality infrastructure, and to work on the international accreditation of the national standards body.

Our findings from the empirical analysis highlight an important fact: the importance of South-South integration as a motor for North-South integration. In this context, the Agadir Agreement as well as GAFTA are both combined with the EU Association Agreement for a significant effect on trade between Egypt and the EU. The result is interesting, since the purpose of the Agadir Agreement was to facilitate integration between Arab states and the EU under the broader EU-Mediterranean process. One of its important characteristics is that it uses the EU's rules of origin, which should foster exports from the member Arab countries to the EU.

At the sector level, our findings suggest that fertilizers reveal a strong potential for increased production and exports, particularly to the EU for a number of reasons: first of all, Egypt is endowed in phosphate rocks, whose demand is on the rise worldwide for production of fertilizers. The expected increase in natural liquefied gas necessary for the fertilizers' production process, could attract investments to this sector. Additionally, exports in the sector have witnessed an increase over the past 10 years, particularly to the EU. The sector also includes a number of private sector firms, which contribute to most of the production within the industry. Fertilizers reveal some drawbacks including its low female participation compared to traditional sectors like textiles and woven fabrics, in addition to its low share in the EU imports overall. However, in contrast to traditional sectors such as cotton and textiles, it is a new and promising sector that could be included in future agreements on conformity assessments. Finally, in contrast to fuel and oils – Egypt's main exports to the EU- fertilizers are labor-intensive and have shown sensitivity to the conclusion of the Egypt-EU Association Agreement, as suggested by our empirical analysis.

Finally, to reach a DCFTA, Three main lessons can be learnt from the Ukrainian case in order to improve the implementation of the DCFTA with Arab countries and especially Egypt. First, and most importantly, there has been a clear political will from both sides. This was particularly crucial because both the required funds and technical assistance might be present but without a political support, nothing can be implemented. Second, the DCFTA covered various trade-related issues. Hence, the DCFTA was perceived as a comprehensive reform for improving the performance of the economy. This does not contradict the fact that the DCFTA countries should focus first on reforms that are directly related to export-driven growth, access to the EU market, competitiveness gains and attractiveness for FDI inflows. Third, the government of Ukraine particularly focused on behind the border barriers and regulations which are substantial in the Arab countries and in particular in Egypt.



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Agreements

1. Free Trade Agreement between Egypt and EFTA States
2. Egypt- EU Association Agreement
3. EU/Egypt Action Plan
4. EC-Egypt Bilateral Cooperation Agreement