



**TRADE ACTIVITY BETWEEN THE EU AND ITS
NEIGHBORING COUNTRIES: TRENDS AND POTENTIAL**

**Kallioras Dimitris
Anna Maria Pinna**

WORKING PAPERS

2013 / 20

**CENTRO RICERCHE ECONOMICHE NORD SUD
(CRENoS)
UNIVERSITÀ DI CAGLIARI
UNIVERSITÀ DI SASSARI**

CRENoS was set up in 1993 with the purpose of organising the joint research effort of economists from the two Sardinian universities (Cagliari and Sassari) investigating dualism at the international and regional level. CRENoS' primary aim is to improve knowledge on the economic gap between areas and to provide useful information for policy intervention. Particular attention is paid to the role of institutions, technological progress and diffusion of innovation in the process of convergence or divergence between economic areas. To carry out its research, CRENoS collaborates with research centres and universities at both national and international level. The centre is also active in the field of scientific dissemination, organizing conferences and workshops along with other activities such as seminars and summer schools.

CRENoS creates and manages several databases of various socio-economic variables on Italy and Sardinia. At the local level, CRENoS promotes and participates to projects impacting on the most relevant issues in the Sardinian economy, such as tourism, environment, transports and macroeconomic forecasts.

**www.crenos.it
info@crenos.it**

CRENoS – CAGLIARI
VIA SAN GIORGIO 12, I-09100 CAGLIARI, ITALIA
TEL. +39-070-6756406; FAX +39-070- 6756402

CRENoS - SASSARI
VIA TORRE TONDA 34, I-07100 SASSARI, ITALIA
TEL. +39-079-2017301; FAX +39-079-2017312

Title: TRADE ACTIVITY BETWEEN THE EU AND ITS NEIGHBORING COUNTRIES: TRENDS AND POTENTIAL

ISBN: 978 88 84 67 849 2

First Edition: November 2013

© CUEC 2013
Via Is Mirrionis, 1
09123 Cagliari
Tel./Fax 070 291201
www.cuec.it

Trade activity between the EU and its neighboring countries: Trends and potential

Kallioras Dimitris

University of Thessaly, SEED Center

Pinna Anna Maria

University of Cagliari & CRENoS

Abstract

The objective of the paper is to examine whether trade activity intensifies over time as the outcome of signed bilateral trade agreements. Focusing on (the trade component of) the European Neighborhood Policy, the paper conducts an in-depth study of trade activity between the EU and its neighboring countries, attempting to offer a detailed analysis in terms of trade patterns and to investigate whether proximity is combined with higher trade flows, within the framework of a free trade agreement. The analysis utilizes data derived from BACI database and covers the period from 1995 to 2011. The findings of the paper indicate that there is a lot of potential for the expansion of trade activity between the EU and its neighboring countries and accentuate the crucial determinants in this direction.

Keywords: EU, ENP, neighboring countries, trade, trends, potential.

Jel Classification: F13, F14, F15.

• The research was supported by the Project “Sharing Knowledge Assets: Interregionally Cohesive Neighborhoods” (**SEARCH**) within the 7th European Community Framework Programme FP7-SSH-2010.2.2-1 (266834) European Commission.

• E-mail: dkallior@uth.gr. Department of Planning and Regional Development.

+ E-mail: ampinna@unica.it. Department of Economics.

1. Introduction

Neighboring countries provide the easiest market access for the majority of tradable goods as trade costs are, *ceteris paribus*, lower over small distances (Leamer & Levinsohn 1995; Evenett & Keller 2002). Furthermore, when one country is much richer than the other, proximity trade is mutually beneficial as the richer country, usually, offers a wide variety of goods, with superior quality, while the poorer country, usually, offers lower prices and attractive productive locations (Venables & Limão 2002; Ago *et al.* 2006). Free trade agreements (FTAs) are, strongly, based on this argument. Overcoming national borders is meant to create larger economic spaces for exploiting economies of scale, thereby reducing production costs. This means that trade activity among the counterparts involved in a FTA is expected to intensify over time (Burke 1973). The objective of the paper is to examine whether trade activity intensifies over time as the outcome of signed bilateral trade agreements. To this end, focusing on (the trade component of) the European Neighborhood Policy (ENP), the paper conducts an in-depth study of trade activity between the EU and its neighboring countries, attempting to offer a detailed analysis in terms of trade patterns and to investigate whether proximity is combined with higher trade flows, within the framework of a FTA.

The recent (i.e. years 2004, 2007 and 2013) EU enlargements brought the borders of the EU to a set of countries in the East with historically less intensive economic relations. These countries have been part of the (former) Soviet Union and are characterized by lower development levels and significant institutional and structural deficiencies. At the same time, in the Southern and the Eastern rim of the Mediterranean Sea, the EU is faced with countries that are linked to individual EU countries through their colonial past. Both bordering areas, in the EU East and the EU South, have been gaining significance as they “include emerging economies, energy suppliers, or, simply, a large neighboring market, which is crucial for the EU economy” (Petraikos *et al.* 2013, p. 2). Thus, the EU launched, in 2004, the ENP, a unified policy framework towards its neighboring countries (Wesselink & Boschma 2012). The ENP aims at strengthening the prosperity, stability and security of the EU, creating a “ring of friends” around the EU political borders. The ENP framework applies to a wide array of neighboring countries (hereinafter: the ENCs); in particular, to Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine (the ENP East) as well as to Algeria, Egypt, Israel,

Jordan, Lebanon, Libya, Morocco, Occupied Palestinian Territory (hereinafter: Palestine), Syria and Tunisia (the ENP South).

Even though the ENP is a distinct and separate process from the EU enlargement (Emerson 2004; Browning & Joenniemi 2008), the ENCAs operate, in practice, under conditions of “neighborhood Europeanization” (Gawrich *et al.* 2010), tantamount to economic integration. This is because the progressive compliance with the *acquis communautaire* (i.e. the corpus of EU laws and policies) is considered to be a necessary condition for the ENCAs in order to increase their “weight” on the EU market (Havlik *et al.* 2012; Petrakos *et al.* 2013). From the EU perspective, according to the Treaty of Lisbon, forced in 2009, EU policies with a bearing on relations to third countries (such as the ENCAs) should be guided by the policies related to the internal market as well as by a common set of principles and objectives such as the consolidation and support of democracy and the preservation of peace (Koopmann & Wilhelm 2010; Woolcock 2010). From the viewpoint of the ENCAs, even in the absence of the proper “membership anchor”, “the European perspective acts as a very strong stimulus for - and facilitator of - economic, political and institutional development by providing not only the incentives but also the (financial) resources to promote economic restructuring and institutional capacity-building” (Monastiriotis *et al.* 2010, p. 11).

To analyze trade flows between the ENCAs and the EU as well as between the ENCAs and the non-EU countries, the paper utilizes trade data, expressed in value terms, derived, mostly, from BACI¹ database. The analysis covers the period from 1995 to 2011 so as to gauge the latest shifts operated in trade structures in the countries of interest and world-wide and to describe the situation before and after the signature of the various bilateral trade agreements between the EU and the ENCAs.

The remainder of the paper is as follows: The next section reviews concisely the theoretical literature dealing with the impact of international trade on economic growth. Section 3 presents the main trends as regards trade activity between the EU and the ENCAs. Section 4 attempts to explain the trends provided. The last section of the paper offers the conclusions and some policy recommendations.

¹ BACI is a detailed international trade database, which includes more than 200 countries and provides values and quantities of trade at the 6-digit level of the first Harmonized System (HS) classification.

See <http://www.cepii.fr/anglaisgraph/bdd/baci.htm> for details.

2. The impact of international trade on economic growth: Review of the theoretical literature

Long ago, Marshall (1890, p. 225) pointed out that “the causes which determine the economic progress of nations belong to the study of international trade”. Indeed, there is a great body of literature dealing with the impact of international trade on economic growth (see Hofmann 2013 for a comprehensive review), discussing both the static and the dynamic effects of international trade.

Static effects of international trade are closely linked to traditional theories of international trade and to the concept of comparative advantage, in particular. On the basis of the concept of absolute advantage, first mentioned by Smith (1776), the concept of comparative advantage, formulated by Ricardo (1817), refers to the ability of a country to produce a particular commodity at a lower opportunity cost over another country. In order to gain from international trade, countries are expected to export commodities for which their relative prices in an autarchy (i.e. no trade) situation are lower than other countries. Building on the concept of comparative advantage, the Heckscher-Ohlin-Samuelson (H-O-S) model (Heckscher 1919; Ohlin 1933; Samuelson 1948) predicts the patterns of production and trade on the basis of the factor endowments of trading countries. In particular, the H-O-S model supports that countries will export commodities that use their abundant and cheap factor(s) of production in order to gain from international trade. Overall, traditional theories of international trade indicate that gains from international trade should be greatest among countries with the greatest differences either in terms of opportunity costs or in terms of factor endowments. Hence, international trade should cause countries to export commodities distinctly different from the ones they import.

The theoretical development afforded by the endogenous growth theory (Romer 1986; Lucas 1988), primarily associating economic growth with endogenous - and not exogenous - forces, stimulated a debate about the dynamic effects of international trade. Besides the benefits that may arise in terms of market expansion (Myint 1958) and economies of scale (Krueger 1978), international trade might generate positive externalities and spillover effects by transmitting and disseminating technological progress (Grossman & Helpman 1991) and ideas (Rivera-Batiz & Romer 1991). However, this might not be the case when trading partners are asymmetric in the sense that exhibit considerable differences in terms of endowments and level of technology (Grossman & Helpman 1991; Devereaux & Lapham 1994). International trade might push some

economies to specialize in low value-added sectors (i.e. sectors not associated with increasing returns to scale (IRS) activities), with an, overall, detrimental impact on long-term economic growth (Young 1991; Rivera-Batiz & Xie 1993).

Studying both the traditional and the modern theories of international trade (see Gandolfo 2014 for a comprehensive review), it is evident that the level and the type of specialization are essential parameters accounting for economic growth. In an open economy, specialization is related to the export base of an economy (Tiebout 1956). International trade allows for greater specialization - since domestic demand for some commodities can be served by imports - allowing inherent and acquired comparative advantages to be exploited more intensively (Weinhold & Rauch 1999). Of course, the positive impact of specialization may be weaker in economies that are not specialized in sectors associated with IRS (Paci & Usai 2000), such as the case for the vast majority of the ENCs. Moreover, excessive specialization might convert possible industry-specific shocks into country-specific shocks, with overall negative effect on growth (Kallioras & Petrakos 2010). Diversification, in contrast, might work as a safeguard as downturn movements in some sectors would not be as harmful to the local economy because human and other resources can be diverted to other existing and more secure alternatives (Acemoglu & Zilibotti 1997). Therefore, trading different types of commodities is not neutral with reference to the capability of an economy to promote (sustainable) growth.

Moving from traditional to modern theories of international trade, the idea that developing countries have to increase the variety of their export basket, in order to boost growth, stabilize exports earnings and upgrade value-added, started to prevail (Conkling & McConnell 1973; Amable 2000). This is so as it is recognized that not all commodities are equal and they may have very different effects on growth performance (Hidalgo *et al.* 2007). Hence, there is a growing consensus that patterns of economic development are associated with structural change (i.e. capital deepening) in exports and, thus, increased export diversification. In particular, the WTO (2010) pointed out that specialization in natural resources brings potential negative effects as the latter present negative externalities, arising from their extraction and consumption, and are subject to extreme, though not permanent, price volatility consequences. Trade in capital goods, in contrast, has been recognized an important role in spreading the benefits of technological advances (Eaton and Kortum 2001). In fact, the relative weight of capital goods in total

exports of low-middle income countries (such as the ENC's) has been enormously increasing (moving from 9% to 20% over the period 1995-2008) (WTO 2010). Moving to intermediates, their increased importance in international trade provides another indication of the multi-country nature of commodities. If the chain value is dependent on the actions of many countries, international ties become more important.

Together, the aforementioned arguments suggest that in order to determine the nature and the quality of trade activity between the EU and the ENC's, the analysis of trade by type of product is extremely relevant.

3. The main facts of trade activity among the EU and its neighboring countries

3.1. The importance of neighboring countries for the EU trade activity

The ENC's don't play a key role in EU trade. In the list of the most important exports and imports EU partners, for the year 2011, none of the ENC's are in the first ten positions (Table 1). Despite their proximity, the ENC's don't trade a lot with the EU. Of course, some of them occupy an important position: in particular, Ukraine and Algeria are the most important EU exports and imports partners, respectively; in contrast, Armenia and Georgia (for exports) and Armenia and Jordan (for imports) are the least important ones. The gravity approach suggests that the size of trade activity is proportional to the economic size of the partners involved and inversely proportional to their distance (Tinbergen 1962). Thus, disproportional relative size may provide an explanation for the rather low levels of trade activity between the EU and the each of the ENC's. Of course, disproportional relative size is not an issue for countries such as Norway and Switzerland. Thereafter, a better role for countries which share land borders (Eastern ENC's) and seashores (Southern ENC's) with the EU would be expected. It is quite clear that size, distance and borders play a different role with reference to the ENC's area.

-----Insert Table 1 around here-----

Yet, what would it happen if the ENC's were a single country? Adding the values of EU exports and imports to all ENC's, makes the ENC's (as a whole) the third and the fourth, respectively, most important EU partner. This means that the ENC's as a whole are more important EU trading partners comparing to economies like Japan, Turkey, India and

Brazil, making evident that proximity increases its role with size. This exercise indicates that the neighboring area of the EU suffers the presence of many borders. When taking into account each single ENC, its role in EU trade is weak and not predominant in the global scene. Aggregating the ENCs as a single economic space, things change. ENCs gain a key role in international trade, becoming one of the most important EU partners, both in exports and imports.

3.2. The trade structure of neighboring countries, by origin and destination

During the last fifteen years, the ENCs have increased their trade activity with the EU countries². In particular, the Eastern ENCs and the new EU countries (EU12)³ have been exhibiting the highest increases. Yet, in year 2010, the Southern ENCs and the old EU countries (EU15) have a dominant position, in terms of both exports and imports shares, in relation to the total ENCs and EU shares, respectively. Noteworthy is, also, the fact that while, at the beginning of the period under consideration (year 1995), the ENCs were, mainly, importers, at the end of the period (year 2010), the situation, as regards the EU-ENCs trade relations, is more balanced.

Adopting a wider view, leaving the European perspective, for including all world partners, growth rate trends reveal an increasing role for BRICS economies (i.e. Brazil, Russia, India, China, South Africa), for goods both entering to and exiting from the ENCs. Differences across the sub-regions reflect, clearly, the heterogeneous composition of the ENCs group (Graph 1). For each single ENCs sub-region, trade destinations (origins) are distinguished in “intra” (i.e. trade with the other ENCs sub-regions), “rest of intra” (i.e. trade within the particular ENCs sub-region), and “world”. “World” is further distinguished in the EU15, the EU12, the BRICS, the U.S., and the “rest of the world (RoW) countries”.

-----Insert Graph 1 around here-----

² For the needs of the study, the ENCs were classified in three sub-regions: Eastern ENCs (Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine); Southern ENCs (Algeria, Egypt, Libya, Morocco, and Tunisia); and Middle East ENCs (Jordan, Lebanon, and Syria). Israel is considered to be an outlier as it enjoys a level of economic performance significantly higher even than the corresponding level of many EU countries. Due to lack of data, Palestine is not included in the analysis.

³ These are the countries acceded (to the EU) in the years 2004 and 2007. Croatia (acceded to the EU in the year 2013) is not included in the analysis.

Geographic analysis proves the erosion of the EU shares in ENCs' trade. While in year 1995, the EU15 was the most important partner for the Eastern ENCs, starting from year 2000, the BRICS started their path to become their main export and import partner. The southern ENCs, have always referred to the EU15 countries as their main export and import partner. Starting from year 2005, the BRICS are gaining position, particularly for imports. In the Middle East ENCs, the erosion of the EU15 position has to be coupled with the increasing role of the RoW countries; looking at imports, the BRICS are, also, gaining shares. Concerning Israel, there is no reverse of position in the last fifteen years: the U.S. and the RoW countries have reinforced their position; the EU15 is still the most important source but (together with the U.S.) it is losing its role in favor of the BRICS and the RoW countries.

3.3. ENCs' geographical trade structure by type of product

The increasing role of exchanges of intermediates is one chief characteristic of the globalization wave over the last thirty years. In fact, the relative weight of intermediates in total exports of low-middle income countries has been increasing (moving from 30% to 40% over the period 1995-2008) (WTO 2010). Since the type of goods exchanged is not neutral with reference to the capability that trade has to promote stable and sustainable growth (Hidalgo *et al.* 2007), the analysis distinguishes trade flows by type of product. In particular, the Broad Economic Categories (BEC)⁴ classification allows for distinguishing final and intermediates goods, and within the former group, consumption, capital and primary goods⁵. The geographical composition of exports and imports (Graph 2) for the ENCs' group provides, indeed, valuable insight. Changes in time are reported for consumption (C), capital (K), and primary (P) final products as well as for parts and components (PD) and processed (T) intermediate products.

-----Insert Graph 2 around here-----

⁴ See <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=10> for details. The BACI database contains information on the classification of products according to BEC.

⁵ Capital goods are machinery and equipment that is used for producing other goods and industrial transport equipment, while primary goods are raw materials and resources used in the productive process.

Graph 2 provides an overview for all ENC, not distinguished in sub-regions. In year 1995, the EU was the most important export destination for all types of products. In year 2010, however, the situation has changed substantially. The most extreme case is the Eastern ENC sub-region: the EU has lost its position and the BRICS have become the principal destination and origin. The Eastern ENC shifted to the emerging economies their exports of consumption, capital and intermediate products, while the EU remains the main destination for their primary products (fuel commodities, in particular). When looking at imports, shares are more balanced between the EU15 and the BRICS. The erosion of the EU position, though slower, is still present and it embraces, also, primary products. Similar is the case for the Middle East ENC, where trade for all product types, except for primary goods, has moved to the RoW countries. The EU15 still maintain a prominent position in sourcing capital goods and parts and components. The Southern ENC are the ones where the EU15 still plays an important role in both exports and imports. The EU15 relative presence has been anyhow reducing in time. The BRICS still don't have a role. The EU15 is an important source of demand for consumption, primary goods and parts and accessories, while it is quite important in offering parts and accessories. In Israel, the U.S. hold and reinforce their position as best partner, where the EU follows (their distance is increasing though). During the last years of the analysis, the BRICS start to play a role, particularly in Israeli exports. All in all, the importance of the EU in the ENC's trade has witnessed strong erosion in time, mostly in favor of the BRICS economies.

The aforementioned facts open several questions about the role of EU trade policy and the ENC's trade structure:

- a) How EU trade policy intervenes in reducing the role of borders and distance? Trade policy has an important role in shaping the economic space between trade partners. The EU chose to follow the road of bilateralism (and not the one of multilateralism) in respect to its relation with the ENC. What does this mean for the ENC?
- b) How different are the ENC between themselves and, notably, with respect to the EU? The use of indicators which measure the degree of similarity of trade may explain why there is not much trade between the ENC and the EU. The limited role of each single ENC can be attributed to the fragmented role of their production structure.
- c) How diversified are trade structures of the ENC with respect to sectors and destination? If the ENC trade different types of product in

different origins/destinations, the evaluation of the nature and the quality of their trade relationships may help to evaluate, also, the possible evolution of their trade relation with the EU.

The answers to the aforementioned questions are going to shed light on the reasons why the ENCs lose their role as EU trading partners. The first two explanations raise the point of the fragmentation of the ENCs area. The third one relates to the weaknesses generated by the low level of diversification in the goods which are exported from the neighboring area of the EU.

4. The determinants of trade activity among the EU and its neighboring countries

4.1. Is the EU trade policy keeping the neighboring countries too distant?

In its basic form, the gravity model assumes that only distance and economic size matter in bilateral trade (Tinbergen 1962). Looking at the EU, it could be interesting to analyze how the EU trade policy can contribute to increase/decrease the distance with its neighbors (the ENCs). The EU follows the road of bilateralism in respect to its relation with the ENCs. The main reason for this is its objective to deepen the substance of trade agreements, enhancing more comprehensive trade relations with its neighbors, and, thus, bringing its neighbors gradually closer to the Single Market. Of course, the (recent) emphasis on behalf of the EU towards bilateral agreements, rather than multilateral ones, brings both positive and negative elements (Liargovas 2013). In particular, bilateral agreements seem easier to conclude, can cover more areas, take note of any geopolitical considerations and offer a strong leverage for domestic reform. In contrast, bilateral agreements create discrimination, are not able to solve systemic issues and may complicate the trade environment.

In contrast to the rigid Copenhagen criteria that characterized the EU (eastwards) enlargement policy, the EU started to pursue FTAs, bilaterally with targeted economies. For the EU, FTAs represent a subway to implement Deep and Comprehensive Free Trade Agreements (DCFTAs) with its neighboring countries (Liargovas 2013; Pinna, 2013). DCFTAs, involving tailor-made agreements and conditions, go beyond tariff reductions to cover, more extensively, regulatory issues such as investment protection, public procurement and competition policy. In other words, DCFTAs are, basically, FTAs with serious one-way conditionalities related to progress required on political and institutional issues on behalf of the ENCs. Such conditionalities represent a “carrot

and stick” tactic that considers mandatory *acquis communautaire* compliance as a precondition for trade negotiations (and agreements) (Wesselink & Boschma 2012; Petrakos *et al.* 2013). The political upheaval in the ENP South and the slow reforms in the ENP East (Blockmans & van Vooren 2013), provide a strong proof that the goals of the ENP undertaking (i.e. prosperity, stability and security at the EU external borders) have, still, a long way ahead. This mirrors to the (s)low progress of the DCFTAs, with an impact on the trade component of the ENP.

Without getting into a discussion about the existing non-tariff barriers to trade (see Sklenková 2012), the level of tariff barriers – probably, the most important condition for the success of a FTA – is enough to provide a strong indication about the progress of the DCFTAs between the EU and the ENCs (Dreyer 2012). Yet, in year 2010, the EU imposes relatively high (simple) average tariffs to trade with the ENCs⁶, on both agricultural and manufacturing goods, especially on the former. The reluctance of the EU to remove its tariff barriers to trade with the ENCs leads to deadlock as it raises major hurdles for the ENCs to export, to the EU market, the products on which they mainly specialize. This is so as the EU attempts to create “neighborhood Europeanization” conditions with countries that, on aggregate, form an area which is sensitive in both economic (i.e. low welfare level) and demographic (i.e. high presence of rural population) terms (Petrakos *et al.* 2013).⁷

⁶ See

<http://stat.wto.org/TariffProfile/WSDBTariffPFReporter.aspx?Language=E> for details.

⁷ To better understand the EU-ENCs case, a parallelism with the U.S. -Mexico case can be made (see Hanson 1996). Mexico is for the U.S. its second export destination and its third import origin. The U.S.-Mexico case has many similarities to the EU-ENCs case. The GDP of the U.S. is 13 times higher than Mexican GDP; the EU GDP is 13.5 times higher than the GDP of the ENCs. The population of the U.S. is 2.71 times bigger than Mexican one; the EU population is about 1.78 times bigger than the population of the ENCs. The U.S. manufactured products enjoy duty free import benefits under the North American Free Trade Agreement (NAFTA) giving the U.S. businesses a quality versus cost advantage over other foreign manufacturers. In fact, as of year 2008, all tariffs and quotas were eliminated on U.S. exports to Mexico (and Canada) under the NAFTA. The NAFTA created the world’s largest free trade area, which, in year 2010, links 454 million people producing over \$17.2 trillion worth of goods and services. The NAFTA provides coverage to services with the exception of aviation transport, maritime, and basic telecommunications. The

4.2. *Are the neighboring countries too different in their trade structure?*

Having observed the geographical orientation of the ENC's trade and the catalytic influence of the EU trade policy, it is important to discuss trade asymmetries and dependencies between the EU and the ENC's along with differences across their trade structure. For this purpose, the analysis utilizes the UNCTAD classification (UNCTAD 1996), which classifies commodities into non-fuel primary commodities, fuel primary commodities, labor- and resource-intensive commodities, low-skill, medium-skill, and high-skill capital-intensive commodities. Looking at the sectoral shares of the ENC's exports to the EU (Graph 3), it is evident that many ENC's (i.e. Algeria, Azerbaijan, Belarus, Egypt, Georgia, Libya, and Syria) export mainly (or even, in many cases, almost exclusively) fuel primary commodities (i.e. petroleum and natural gas). Moreover, many ENC's (i.e. Lebanon, Moldova, Morocco, and Tunisia) export, mainly, labor-intensive and resource-based commodities. Only a few countries export mainly low-skill capital-intensive commodities (i.e. Armenia and Ukraine) and high-skill capital-intensive commodities (i.e. Israel and Jordan). Overall, the ENC's present an unbalanced sectoral allocation of exports to the EU. Especially countries such as Algeria, Azerbaijan, Libya and Syria, which export mainly fuel primary commodities, exhibit sectoral shares that surpass even the level of 85%.⁸ The asymmetry that characterizes the EU-ENC's trade relations has its explanation on the revealed comparative advantage (RCA)⁹ of the ENC's against the EU. Indeed, all ENC's exhibit a RCA, against the EU, in non-fuel primary commodities and/or in fuel primary commodities (Petrakos *et al.* 2013). The sector of fuel primary commodities, in particular, is a

agreement also provides intellectual property rights protection in a variety of areas including patent, trademark, and copyrighted material. Additionally, the U.S. investors are guaranteed equal treatment to domestic investors in Mexico (and Canada). The dismantling of trade barriers and the opening of markets has led to economic growth and rising prosperity in all three countries.

⁸ Looking at the ENC's imports, it is revealed that the ENC's, mainly, import, from the EU, medium-skill capital-intensive commodities. Moreover, it can be observed that all ENC's mainly import, from the EU, products other than the ones that mainly export (to the EU).

⁹ RCA against a partner country (or the world) refers to the proportion of the country under consideration exports' in a specific sector divided by the proportion of a partner country (or world) exports' in the same specific sector (Balassa 1965).

key-sector for the EU-ENCs trade relations, given that the EU is a major energy importer (Ratner *et al.* 2013).

-----Insert Graph 3 around here-----

It is evident that the ENC countries have developed an inter-industry type of trade relations with the EU.¹⁰ The persistency of the inter-industry type of trade relations between the EU and the ENC countries has its explanation on the diachronic evolution of the sectoral shares of the corresponding trade activity. Indeed (Graph 4), the sectoral composition of exports flows from the ENP countries to the EU remains, more or less, unchanged (i.e. high levels of positive correlation) over time. The rather low changes in the sectoral composition of the ENC countries' exports to the EU provide strong indication that the ENC countries, in their great majority, have not (successfully) implemented export-led growth strategies towards the diversification (expansion) of their exports bases (Havlik *et al.* 2012; Boschma and Capone, 2013; Petrakos *et al.* 2013). Thus, the ENC countries are in weak position to penetrate into the EU markets: on the one hand they are unable (with the exceptions of Israel and Jordan) to compete with their EU counterparts in the markets for capital-intensive products and on the other hand they face the tariff (and non-tariff) barriers imposed on behalf of the EU on imports of labor-intensive and resource-intensive products due to the conditionalities related to the DCFTAs. This means that especially the ENC countries that do not exhibit RCA in the sector of fuel primary commodities are "urged" to find new markets to export their products.

-----Insert Graph 4 around here-----

4.3. How diversified are the neighboring countries' trade structures?

Slight trade between the ENC countries and the EU could also be explained by the level of diversification in ENC countries trade structures. Export diversification is variously defined as the change in the composition of a country's existing export product mix or export destination (Ali *et al.* 1991), or as the spread of production over many sectors (Berthelemy and Chauvin 2000). There are well known (political and economic) risks (Collier 2002) in concentrating exports in a few primary commodities; it

¹⁰ Inter-industry trade means that more trade occurs between sectors rather than within sectors (Grubel & Lloyd 1971).

exposes a country to the negative effects of unfavorable characteristics of world demand and to the negative supply-side features of these primary products. Evaluating (Table 2) the level of sectorial concentration/diversification, using the Herfindahl Index¹¹, it becomes evident that, in terms of exports, the vast majority of the ENCs exhibit, in year 2010, higher levels of concentration either in the EU market or in the BRICS market, comparing to the world market. The same stands for imports, even though the differences are, in general, smaller. Overall, imports are more diversified than exports in all markets under consideration.

-----Insert Table 2 around here-----

The point that can be made here is quite intuitive: if a country concentrates its flows in few destinations and, on top of this, only some sectors are considered, the vulnerability of the whole trading system increases. Providing a brief analysis of the best export and import partner for each ENC, looking at both the world and the EU market, may deepen the aforementioned point (see also, Pinna 2013). In particular, looking at exports (Table 3), a good number of ENCs, especially the Southern ones (i.e. Algeria, Egypt, Libya, and Syria), mainly export in their main destination fuel primary commodities. The respective share matters for about 80%. The eastern ENCs mainly export machinery or agricultural products. Middle East ENCs and Israel have no predominant sector; it depends on the destination. In general, at the world level, even when the first destination does not have a big share, in seven out of fifteen ENCs, the first exporting sector accounts for more than 50% of total exports in the country. When concentrating in the EU market, in eight out of fifteen ENCs, the best exporting industry accounts for more than 80% of total exports. Apparently, when such a sectorial concentration is recorded in the destination where exports are higher, the presence of export differentiation in other destinations has a smaller weight. Moving to imports (Table 4), machinery and textile products predominate. The corresponding

¹¹ Herfindahl Index is a measure of concentration/diversification and is calculated, in particular, by squaring the share of each sector in the total trade activity, and then summing the resulting numbers (Hirschman 1964). It takes values in interval [0, 1]. Values close to 0 indicate high levels of diversification.

percentages are not so high, comparing to exports, verifying that imports are more diversified than exports.

-----Insert Table 3 around here-----

-----Insert Table 4 around here-----

5. Conclusions and policy recommendations

The gradual dismantling of economic borders between the EU and the ENC's allows for the expansion of the EU-ENC's trade activity. Yet, despite the fact that the EU-ENC's trade activity is growing over time, there are a couple of findings that generate concerns about its progress. The first finding is that the vast majority of the ENC's don't play a key role in EU trade, despite their proximity. The role of ENC's in EU trade is weak, and not predominant in the global scene. However, aggregating the ENC's as a single economic space, things change. ENC's gain a key role in international trade, becoming one of the most important EU partners, in both exports and imports terms. Such an exercise indicates that the neighboring area of the EU suffers the presence of many (economic) borders. The second finding is that the EU loses, over time, its relative position in the ENC's' trade activity. In contrast, the corresponding shares of the BRICS, especially, and the RoW countries are getting increased. Such a trend must be alarming for the EU since the BRICS may, also, increase their political influence in the ENC's' area.

The trends that characterize trade activity between the EU and the ENC's may attribute to the EU trade policy and to the ENC's' trade structures. The DCFTAs among the EU and the ENC's do not seem to provide a solid stimulus in the process of "neighborhood Europeanization". In particular, the reluctance on behalf of the EU to remove its tariff barriers, especially the ones imposed on agricultural products, does not favor trade creation conditions, raising major hurdles for the ENC's to export, to the EU market, the products on which they, mainly, specialize. The EU might examine the possibility that mandatory *acquis communautaire* compliance related to political requirements should not be a precondition for the progress of the FTAs with the ENC's. Of course, besides the EU external trade policy, the ENC's trade structures have, also, an impact on the EU-ENC's trade activity. By and large, the ENC's, presenting high degree of geographical and sectorial concentration, especially in exports, are locked-in an inter-industry type of trade integration with their more advanced EU counterparts. This type of trade relations is, mostly, the outcome of the inability of the

ENCs to diversify and expand their export bases, implementing export-led growth strategies. Even though, for the moment, it provides the only feasible route for the conduct of trade activity with the EU, it is doubtful whether such type of trade integration can narrow the welfare gap between the ENCs and the EU.

The in-depth study of the EU-ENCs trade activity reveals that, in relative terms, the latter is not intensified over time, within the ENP framework. The trends recorded cast doubts on the mainstream win-win models of trade and provide support to alternative theories relating trade outcomes on structural and development gaps, initial conditions, market size, scale effects and geographical coordinates. There is a lot of potential, however, for the increase of the EU-ENCs trade activity. Yet, there is one condition: EU policy-makers need to abandon the idea that the ENCs can be integrated to the EU economic space without altering the basic model of integration and without incurring any costs for anyone.

References

- Acemoglu D. and Zilibotti F. (1997), Was Prometheus unbound by chance? Risk, diversification and growth, *Journal of Political Economy*, 105: 709-751.
- Ago T., Isono I. and Tabuchi T. (2006), Locational disadvantage of the hub, *Annals of Regional Science*, 40: 819-848.
- Ali, Alwang and Siegel (1991), Is export diversification the best way to achieve export growth and stability? A look at three African Countries, *World Bank Working Papers* No. 729, 1991.
- Amable B. (2000), International specialisation and growth, *Structural Change and Economic Dynamics*, 11: 413-431.
- BACI Database, <http://www.cepii.fr/anglaisgraph/bdd/baci.htm>, (retrieved in February, 2012).
- Balassa B. (1965), Trade liberalization and revealed comparative advantage, *The Manchester School*, 33(2): 99-123.
- Berthelem and Chauvin (2000), Structural changes in Asia and growth prospects after the crisis, *CEPII Working papers*, No. 00-09, 2000.

- Blockmans S. and van Vooren (2013), Editorial, *CEPS European Neighborhood Watch: Thinking ahead for Europe*, 90.
- Boschma R. and Capone G. (2013), Mind your step: The heterogeneous effect of relatedness on the diversification process in EU and ENP countries, *SEARCH Working Paper*, 2/09.
- Browning C. S. and Joenniemi P. (2008), Geostrategies of the European Neighborhood Policy, *European Journal of International Relations*, 14(3): 519-551.
- Burke J. D. (1973), The effects of economic integration on the geographic concentration of trade: A case study, *Tijdschrift voor Economische en Sociale Geografie*, 64(4): 258-269.
- Collier (2002), Primary commodity dependence and Africa's future, Annual Bank Conference on Development Economics, Proceedings 2002, edited by B. Pleskovic and N. Stern. New York: OUP.
- Conkling E. C. and McConnell J. E. (1973), A co-operative approach to problems of trade and development: The Central American experience, *Tijdschrift voor Economische en Sociale Geografie*, 64(6): 363-377.
- Devereux M. B. and Lapham B. J. (1994), The stability of economic integration and endogenous growth, *Quarterly Journal of Economics*, 109(1): 299-305.
- Dreyer I. (2012), Trade policy in the EU's neighborhood: Ways forward for the Deep and Comprehensive Free Trade Agreements, *Notre Europe Study & Research*, 90.
- Eaton J. and Kortum S. (2001), Trade in capital goods, *European Economic Review*, 45(1): 1195-1235.
- Emerson M. (2004), European Neighborhood Policy: Strategy of placebo? *CEPS Working Document*, 215.
- Evenett S. J. and Keller W. (2002), On theories explaining the success of the gravity equation, *Journal of Political Economy*, 110: 281-316.
- Gandolfo G. (2014) (ed.), *International trade theory and policy*, Berlin: Springer.
- Gawrich A., Melnykovska I. and Schweickert R. (2010), Neighborhood Europeanization through ENP: The case of Ukraine, *Journal of Common Market Studies*, 48(5): 1209-1235.
- Grossman G. and Helpman E. (1991), Trade, knowledge spillovers and growth, *European Economic Review*, 35(2): 517-526.
- Grubel H. G. and Lloyd P. J. (1971), The empirical measurement of intra-industry trade, *Economic Record*, 47(4): 494-517.

- Hanson G. H. (1996), Integration and the location of activities: Economic integration, intraindustry trade, and frontier regions, *European Economic Review*, 40: 941-949.
- Havlik P., Astrov V., Holzner M., Hunya G., Mara I., Richter S., Stöllinger R. and Vidovic H. (2012), European Neighborhood – Challenges and opportunities for EU competitiveness, *WIIW Research Reports*, 382.
- Heckscher E. (1919), The effects of foreign trade on the distribution of income, *Ekonomisk Tidskrift*, 21: 497-512.
- Hidalgo C. A., Klinger B., Barabási A. L. and Hausmann R. (2007), The product space conditions the development of nations, *Science*, 317: 482-487.
- Hirschman A. O. (1964), The paternity of an index, *American Economic Review*, 54(5): 761.
- Hofmann P. (2013), The impact of trade on technological change and long-run growth, in Hofmann P. (ed.) *The impact of international trade and FDI on economic growth and technological change*, Berlin: Springer Verlag, 29-100.
- Kallioras D. and Petrakos G. (2010), Growth, integration and structural change in the regions of the EU new member-states, *Annals of Regional Science*, 45(3): 667-680.
- Koopmann G. and Wilhelm M. (2010), EU trade policy in the age of bilateralism, *Intereconomics*, 45(5): 305-312.
- Krueger A. O. (1978) (ed.), *Foreign trade regimes and economic development: Liberalization attempts and consequences*, Cambridge Mass.: Ballinger for the NBER.
- Leamer E. E. and Levinsohn J. (1995), International trade theory: The evidence, *NBER Working Paper*, 4940.
- Liargovas P. (2013), EU trade policies towards neighboring countries, *SEARCH Working Paper*, 2/01.
- Lucas R. E. (1988), On the mechanics of economic development, *Journal of Monetary Economics*, 22: 3-42.
- Marshall A. (1890) (ed.), *Principles of economics*, London: Macmillan.
- Monastiriotis V., Petrakos G., Kallioras D., Djurdjev B., Arsenovic D. and Dragisevic V. (2010), *Serbia's integration with the EU: Analysis of the impact on Vojvodina*, Report submitted to the Vojvodina Centre for Strategic Economic Studies (Vojvodina-CESS).
- Myint H. (1958), The classical theory of international trade and the underdeveloped countries, *Economic Journal*, 68(270): 317-337.

- Ohlin B. (1933) (ed.), *Interregional and international trade*, Cambridge Mass.: Harvard University Press.
- Paci R. and Usai S. (2000), Technological enclaves and industrial districts: An analysis of the regional distribution of innovative activity in Europe, *Regional Studies*, 34(2): 97-114.
- Petrakos G., Kallioras D. and Artelaris P. (2013), The geography of trade relations between the EU and the ENP countries: Emerging patterns and policy recommendations, *SEARCH Working Paper*, 2/07.
- Pinna A. M. (2013), Is the EU the best trade partner for its neighbors? *SEARCH Working Paper*, 2/02.
- Ratner M., Belkin P., Nichol J. and Woehrel S. (2013), *Europe's Energy Security: Options and Challenges to Natural Gas Supply Diversification*, CRS Report for Congress.
- Ricardo D. (1817) (ed.), *On the principles of political economy and taxation*, London: John Murray.
- Rivera-Batiz L. A. and Romer P. M. (1991), Economic integration and endogenous growth, *Quarterly Journal of Economics*, 106: 531-556.
- Rivera-Batiz L. A. and Xie D. (1993), Integration among unequals, *Regional Science and Urban Economics*, 23: 337-354.
- Romer P. M. (1986), Increasing returns and long-run growth, *Journal of Political Economy*, 94(5): 1002-1038.
- Samuelson P. A. (1948), International trade and the equalization of factor prices, *Economic Journal*, 58: 163-184.
- Sklenková V. (2012), Integration potential of the European Neighborhood Policy, *Slovak Journal of Political Sciences*, 12(1): 21-41.
- Smith A. (1776) (ed.), *An inquiry into the nature and causes of the wealth of nations*, London: Strahan and Cadell.
- Tiebout C. M. (1956), Exports and regional economic growth, *Journal of Political Economy*, 64: 160-164.
- Tinbergen J. (1962) (ed.), *Shaping the world economy*, New York: The Twentieth Century Fund.
- UNCTAD (1996), *Trade and development report 1996*, New York and Geneva: UN.
- Venables A. J. and Limão N. (2002), Geographical disadvantage: a Heckscher-Ohlin-von Thünen model of international specialization, *Journal of International Economics*, 58: 239-263.

- Weinhold D. and Rauch J. E. (1999), Openness, specialization and productivity growth in less developed countries, *Canadian Journal of Economics*, 32: 1009-1027.
- Wesselink E. and Boschma R. (2012), Overview of the European Neighborhood Policy: Its history, structure and implemented policy measures, *SEARCH Working Paper*, 1/04.
- Woolcock S. (2010), EU trade and investment policymaking after the Lisbon Treaty, *Intereconomics*, 45(1): 22-25.
- WTO, <http://stat.wto.org/TariffProfile/WSDBTariffPFReporter.aspx?Language=E> (retrieved in February 2013).
- WTO (2010), *World Trade Report 2010*, Geneva: WTO.
- Young A. (1991), Learning by doing and the dynamics effects of international trade, *Quarterly Journal of Economics*, 106(2): 369-405.

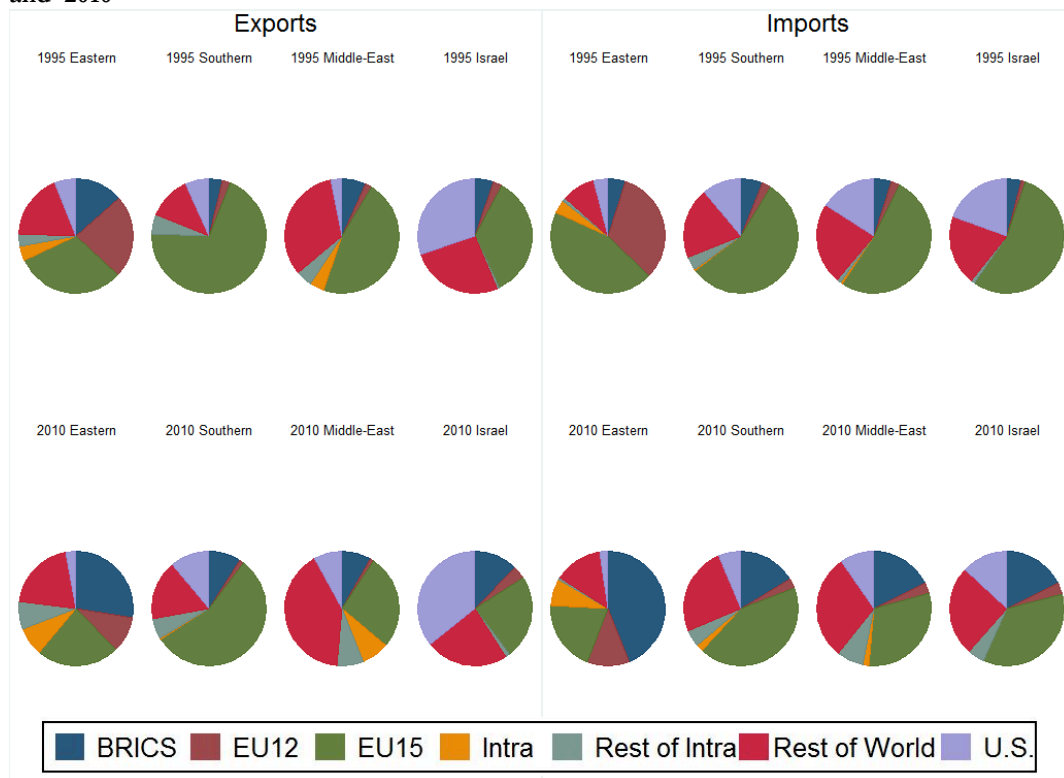
Appendix

Table 1. Major EU export and import partners, year 2011

EU exports to (year 2011)			EU imports from (year 2011)		
rank	partner	volume (million €)	rank	partner	volume (million €)
1	U.S.	260,553	1	China	292,130
2	China	136,222	2	Russia	198,343
3	Switzerland	121,671	3	U.S.	184,246
4	Russia	108,434	4	Norway	93,450
5	Turkey	72,671	5	Switzerland	91,205
6	Japan	48,968	6	Japan	67,452
7	Norway	46,529	7	Turkey	47,593
8	India	40,425	8	India	39,315
9	Brazil	35,729	9	Brazil	37,776
10	UAE	32,615	10	South Korea	36,101
19	Ukraine	21,196	12	Algeria	27,678
21	Algeria	17,205	24	Ukraine	14,987
22	Israel	16,836	25	Azerbaijan	14,842
24	Morocco	15,168	29	Israel	12,645
25	Egypt	13,944	33	Libya	10,437
31	Tunisia	10,931	35	Tunisia	9,874
38	Belarus	7,218	36	Egypt	9,511
43	Lebanon	5,267	39	Morocco	8,689
55	Jordan	3,258	51	Belarus	4,220
57	Syria	3,020	57	Syria	3,071
60	Azerbaijan	2,862	81	Moldova	842
65	Libya	2,066	88	Georgia	614
67	Moldova	1,858	100	Lebanon	411
72	Georgia	1,588	109	Armenia	319
107	Armenia	641	111	Jordan	313
3	ENCs as a whole	123,059	4	ENC's as a whole	118,454
10	<i>Eastern ENCs</i>	35,364	11	<i>Eastern ENCs</i>	35,825
5	<i>Southern & Middle East ENCs (without Israel)</i>	70,859	6	<i>Southern & Middle East ENCs (without Israel)</i>	69,984
5	<i>Southern & Middle East ENCs (with Israel)</i>	87,695	6	<i>Southern & Middle East ENCs (with Israel)</i>	82,629

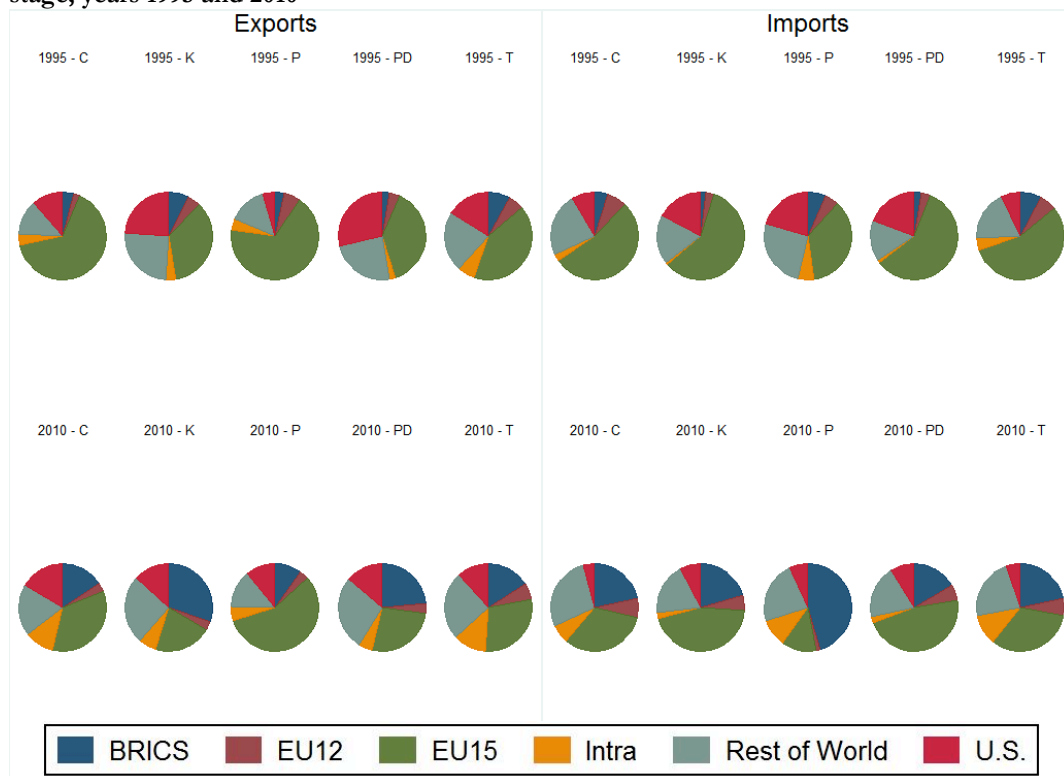
Sources: EUROSTAT (COMEXT, statistical regime 4) / Authors' elaboration
http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_122530.xls

Graph 1. ENC's sub-regions' exports and imports composition by world destination, years 1995 and 2010



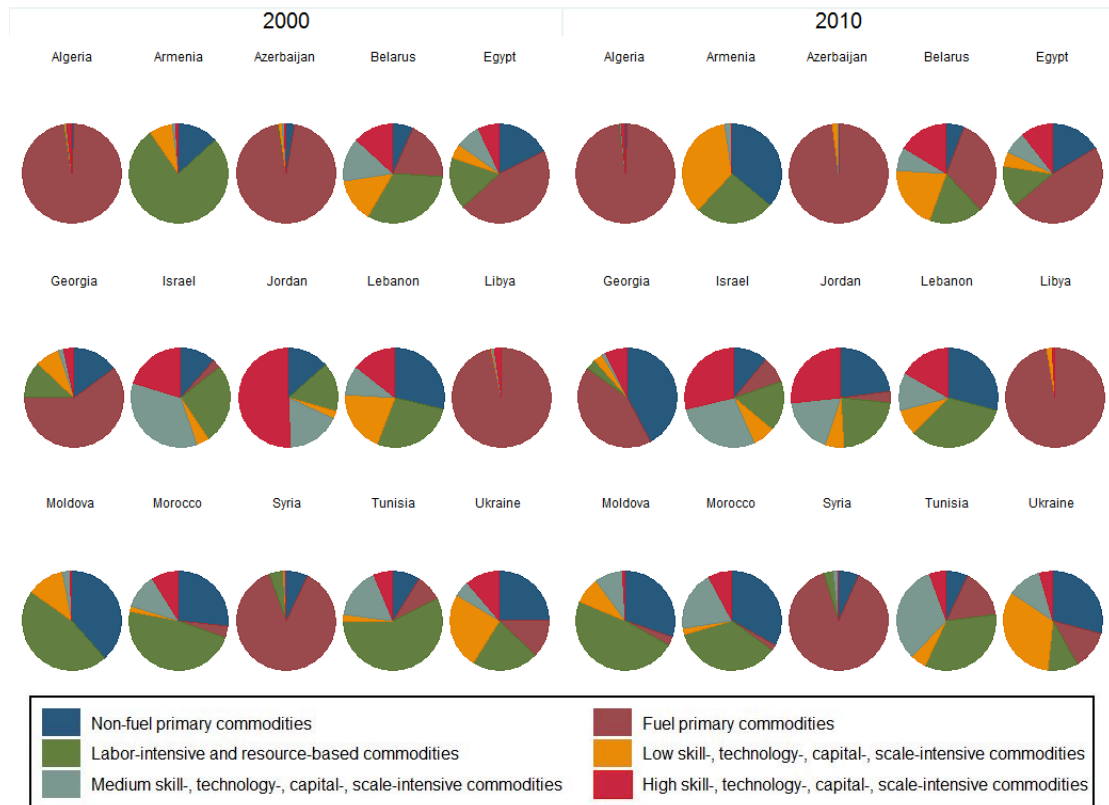
Sources: BACI Database / Authors' elaboration

Graph 2. ENC's sub-regions' exports and imports composition by world destination and stage, years 1995 and 2010



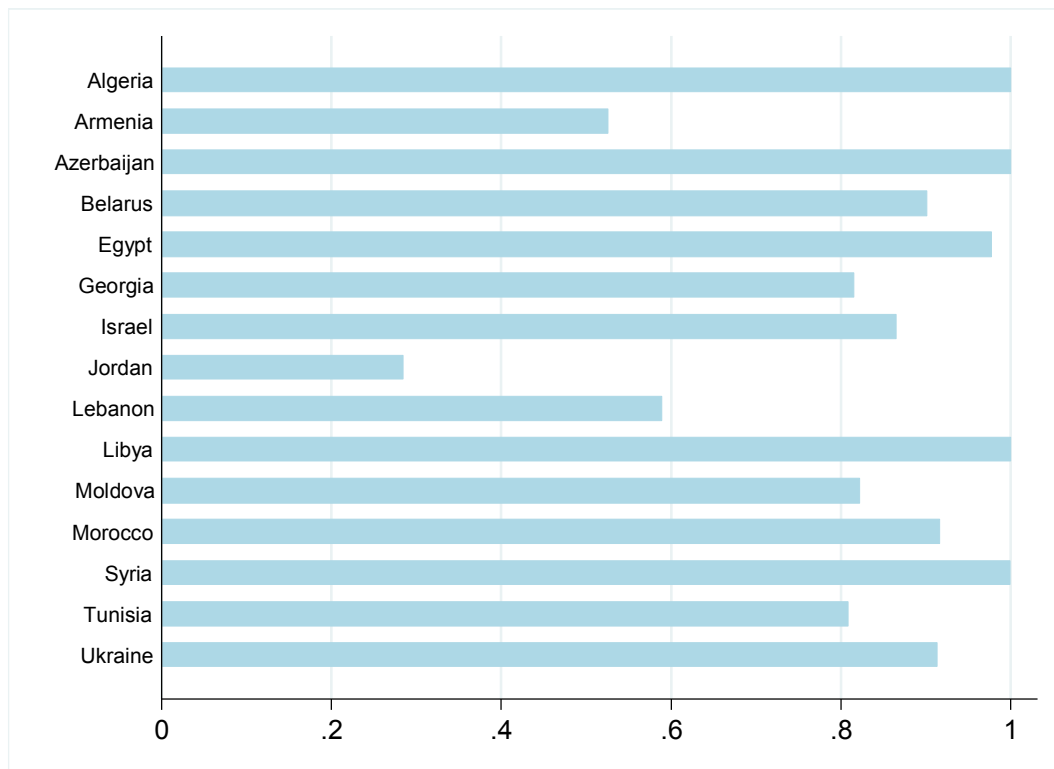
Sources: BACI Database / Authors' elaboration

Graph 3. ENCs' exports sectoral shares (%) to the EU, years 2000 and 2010



Sources: BACI Database / UNCTAD (1996) / Authors' elaboration

Graph 4. Sectoral shares' correlation of the ENCs' exports to the EU, period 2000-2010



Sources: BACI Database / Authors' elaboration

Table 2 Sectoral diversification (Herfindahl Index) in terms of exports and imports, years 1995 and 2010

	Exports			Imports		
	1995			1995		
	world market	EU27 market	BRICS market	world market	EU27 market	BRICS market
Algeria	0.47	0.57	0.26	0.07	0.07	0.08
Armenia	0.19	0.28	0.77	0.17	0.12	0.24
Azerbaijan	0.19	0.21	0.84	0.14	0.13	0.25
Belarus	0.13	0.13	0.12	0.05	0.05	0.12
Egypt	0.14	0.18	0.35	0.06	0.07	0.06
Georgia	0.34	0.14	0.19	0.17	0.17	0.26
Israel	0.10	0.06	0.09	0.06	0.06	0.08
Jordan	0.13	0.12	0.47	0.04	0.06	0.08
Lebanon	0.06	0.05	0.15	0.03	0.04	0.08
Libya	0.63	0.68	0.72	0.06	0.07	0.22
Moldova	0.13	0.16	0.23	0.05	0.05	0.17
Morocco	0.11	0.14	0.67	0.04	0.06	0.08
Syria	0.42	0.55	0.57	0.07	0.09	0.07
Tunisia	0.18	0.24	0.90	0.05	0.07	0.07
Ukraine	0.10	0.07	0.49	0.04	0.04	0.09
	2010			2010		
	world market	EU27 market	BRICS market	world market	EU27 market	BRICS market
Algeria	0.56	0.65	0.46	0.07	0.07	0.08
Armenia	0.12	0.22	0.21	0.03	0.06	0.06
Azerbaijan	0.80	0.95	0.35	0.05	0.09	0.05
Belarus	0.11	0.40	0.09	0.10	0.10	0.23
Egypt	0.07	0.12	0.17	0.05	0.07	0.05
Georgia	0.08	0.14	0.12	0.05	0.09	0.06
Israel	0.09	0.06	0.12	0.04	0.06	0.05
Jordan	0.08	0.11	0.54	0.04	0.08	0.05
Lebanon	0.07	0.17	0.83	0.05	0.07	0.04
Libya	0.79	0.82	0.97	0.06	0.09	0.05
Moldova	0.07	0.09	0.09	0.04	0.05	0.09
Morocco	0.09	0.11	0.33	0.04	0.05	0.06
Syria	0.27	0.76	0.15	0.05	0.08	0.05
Tunisia	0.09	0.12	0.36	0.05	0.06	0.08
Ukraine	0.08	0.08	0.07	0.06	0.05	0.17

Sources: BACI Database / Authors' elaboration

Table 3. Best sector in the ENCs' best export destination, years 1995 and 2010

World market						
1995		2010				
Best destination	Best sector in the best destination	Best sector share	Best destination	Best sector in the best destination	Best sector share	
Algeria	Italy	Crude Petroleum and Natural Gas Production	75%	U.S. & Puerto Rico	Crude Petroleum and Natural Gas Production	74%
Armenia	Belgium & LUX	Other Manufacturing Industries	79%	Russia	Beverage industries	55%
Azerbaijan	Turkey	Manufacture of textiles	27%	Italy	Crude Petroleum and Natural Gas Production	99%
Belarus	Germany	Manufacture of industrial chemicals	29%	Russia	Food manufacturing	26%
Egypt	Italy	Crude Petroleum and Natural Gas Production	51%	Italy	Crude Petroleum and Natural Gas Production	34%
Georgia	Turkey	Iron and steel basic industries	82%	Turkey	Iron and steel basic industries	50%
Israel	U.S. & Puerto Rico	Other Manufacturing Industries	41%	U.S. & Puerto Rico	Other Manufacturing Industries	37%
Jordan	Iraq	Food manufacturing	72%	Iraq	Food manufacturing	17%
Lebanon	Saudi Arabia	Agriculture and livestock production	34%	CH & Liechtenstein	Non-ferrous metal basic industries	74%
Libya	Italy	Crude Petroleum and Natural Gas Production	81%	Italy	Crude Petroleum and Natural Gas Production	87%
Moldova	Russia	Beverage industries	40%	Russia	Agriculture and livestock production	24%
Morocco	France	Manufacture of wearing apparel, except footwear	39%	France	Manufacture of electrical machinery apparatus...	25%
Syria	Germany	Crude Petroleum and Natural Gas Production	87%	Germany	Crude Petroleum and Natural Gas Production	91%
Tunisia	France	Manufacture of wearing apparel, except footwear	55%	France	Manufacture of electrical machinery apparatus...	38%
Ukraine	Turkey	Iron and steel basic industries	38%	Russia	Manufacture of transport equipment	21%
EU27 market						
1995		2010				
Best destination	Best sector in the best destination	Best sector share	Best destination	Best sector in the best destination	Best sector share	
Algeria	Italy	Crude Petroleum and Natural Gas Production	75%	Italy	Crude Petroleum and Natural Gas Production	91%
Armenia	Belgium & LUX	Other Manufacturing Industries	79%	Bulgaria	Metal Ore Mining	100%
Azerbaijan	Italy	Agriculture and livestock production	57%	Italy	Crude Petroleum and Natural Gas Production	99%
Belarus	Germany	Manufacture of industrial chemicals	29%	Netherlands	Petroleum refineries	98%
Egypt	Italy	Crude Petroleum and Natural Gas Production	51%	Italy	Crude Petroleum and Natural Gas Production	34%
Georgia	Italy	Iron and steel basic industries	59%	Bulgaria	Metal Ore Mining	92%
Israel	UK	Other Mining	15%	Belgium & LUX	Other Mining	40%
Jordan	Italy	Other Mining	29%	Italy	Non-ferrous metal basic industries	50%
Lebanon	France	Manufacture of wearing apparel, except footwear	31%	France	Manufacture of machinery except electrical	84%
Libya	Italy	Crude Petroleum and Natural Gas Production	81%	Italy	Crude Petroleum and Natural Gas Production	87%
Moldova	Romania	Food manufacturing	53%	Romania	Manufacture of electrical machinery apparatus...	34%
Morocco	France	Manufacture of wearing apparel, except footwear	39%	France	Manufacture of electrical machinery apparatus...	25%
Syria	Germany	Crude Petroleum and Natural Gas Production	87%	Germany	Crude Petroleum and Natural Gas Production	91%
Tunisia	France	Manufacture of wearing apparel, except footwear	55%	France	Manufacture of electrical machinery apparatus...	38%
Ukraine	Italy	Iron and steel basic industries	34%	Italy	Iron and steel basic industries	61%

Sources: BACI Database / Authors' elaboration

Table 4. Best sector in the ENCs' best import origin, years 1995 and 2010

world market						
1995		2010				
Best origin	Best sector in the best origin	Best sector share	Best origin	Best sector in the best origin	Best sector share	
Algeria	France	Manufacture of transport equipment	17%	France	Manufacture of transport equipment	17%
Armenia	U.S. & Puerto Rico	Agriculture and livestock production	69%	Russia	Crude Petroleum and Natural Gas Production	31%
Azerbaijan	Turkey	Food manufacturing	45%	Russia	Manufacture of transport equipment	14%
Belarus	Germany	Manufacture of machinery except electrical	18%	Russia	Crude Petroleum and Natural Gas Production	53%
Egypt	U.S. & Puerto Rico	Agriculture and livestock production	43%	U.S. & Puerto Rico	Agriculture and livestock production	29%
Georgia	Turkey	Food manufacturing	54%	Turkey	Manufacture of other chemical products	11%
Israel	U.S. & Puerto Rico	Manufacture of electrical machinery apparatus...	22%	U.S. & Puerto Rico	Manufacture of machinery except electrical	17%
Jordan	U.S. & Puerto Rico	Agriculture and livestock production	36%	Saudi Arabia	Crude Petroleum and Natural Gas Production	54%
Lebanon	Italy	Manufacture of machinery except electrical	15%	U.S. & Puerto Rico	Petroleum refineries	41%
Libya	Italy	Petroleum refineries	19%	Italy	Petroleum refineries	37%
Moldova	Russia	Crude Petroleum and Natural Gas Production	35%	Ukraine	Food manufacturing	19%
Morocco	France	Manufacture of textiles	14%	France	Manufacture of transport equipment	15%
Syria	Italy	Manufacture of machinery except electrical	43%	China	Manufacture of machinery except electrical	16%
Tunisia	France	Manufacture of textiles	18%	France	Manufacture of electrical machinery apparatus...	19%
Ukraine	Germany	Manufacture of machinery except electrical	23%	Russia	Crude Petroleum and Natural Gas Production	53%
EU27 market						
1995		2010				
Best origin	Best sector in the best origin	Best sector share	Best origin	Best sector in the best origin	Best sector share	
Algeria	France	Manufacture of transport equipment	17%	France	Manufacture of transport equipment	17%
Armenia	Germany	Non-ferrous metal basic industries	46%	Germany	Manufacture of machinery except electrical	27%
Azerbaijan	Germany	Food manufacturing	20%	Germany	Manufacture of transport equipment	31%
Belarus	Germany	Manufacture of machinery except electrical	18%	Germany	Manufacture of machinery except electrical	34%
Egypt	Germany	Manufacture of machinery except electrical	27%	Germany	Manufacture of machinery except electrical	27%
Georgia	Romania	Petroleum refineries	98%	Germany	Manufacture of transport equipment	31%
Israel	Belgium & LUX	Other Mining	70%	Belgium & LUX	Other Mining	38%
Jordan	Germany	Manufacture of machinery except electrical	22%	Germany	Manufacture of machinery except electrical	34%
Lebanon	Italy	Manufacture of machinery except electrical	15%	Italy	Petroleum refineries	35%
Libya	Italy	Petroleum refineries	19%	Italy	Petroleum refineries	37%
Moldova	Germany	Manufacture of machinery except electrical	24%	Romania	Petroleum refineries	43%
Morocco	France	Manufacture of textiles	14%	France	Manufacture of transport equipment	15%
Syria	Italy	Manufacture of machinery except electrical	43%	Italy	Petroleum refineries	47%
Tunisia	France	Manufacture of textiles	18%	France	Manufacture of electrical machinery apparatus...	19%
Ukraine	Germany	Manufacture of machinery except electrical	23%	Germany	Manufacture of machinery except electrical	19%

Sources: BACI Database / Authors' elaboration

Ultimi Contributi di Ricerca CRENoS

I Paper sono disponibili in: <http://www.crenos.it>

- 13/19 *Claudia Cigagna, Giovanni Sulis* “On the potential interaction between labour market institutions and immigration policies”
- 13/18 *Romana Gargano, Edoardo Otranto* “Financial Clustering in Presence of Dominant Markets”
- 13/17 *Ettore Panetti*, “Financial Liberalization with Hidden Trades”
- 13/16 *Adriana Di Liberto*, “Length of stay in the host country and educational achievement of immigrant students: the Italian case”
- 13/15 *Audrius Bitinas, Alessandro Fiori Maccioni* “Lithuanian pension system’s reforms following demographic and social transitions”
- 13/14 *Guillermo Baquero, Malika Hamadi, Andréas Heinen* “Competition, Loan Rates and Information Dispersion in Microcredit Markets”
- 13/13 *Paul A. Bekker, Federico Crudu*, “Jackknife Instrumental Variable Estimation with Heteroskedasticity”
- 13/12 *Claudio Deiana*, “Health Shocks and Labour Transitions Across Europe”
- 13/11 *Stefano Usai, Emanuela Marrocu, Raffaele Paci*, “Networks, proximities and inter-firm knowledge exchanges”
- 13/10 *Claudio Detotto, Bryan C. McCannon, Marco Vannini*, “A Note on Marginal Deterrence: Evidence”
- 13/09 *Riccardo Marselli, Bryan C. McCannon, Marco Vannini*, “Bargaining in the Shadow of Arbitration”
- 13/08 *Maria Chiara Di Guardo, Emanuela Marrocu, Raffaele Paci*, “The Concurrent Impact of Cultural, Political, and Spatial Distances on International Mergers and Acquisitions”
- 13/07 *Fabio Cerina, Tadasbi Morita, Kazubiro Yamamoto*, “Integration and Welfare with Horizontal Multinationals”
- 13/06 *Gerardo Marletto*, “Car and the city: Socio-technical pathways to 2030”
- 13/05 *Anna Bussu, Claudio Detotto*, “The effect of socio-economic and emotional factors on gambling behaviour”
- 13/04 *Luc Bauwens, Edoardo Otranto*, “Modeling the Dependence of Conditional Correlations on Volatility”
- 13/03 *Oliviero A. Carboni, Claudio Detotto*, “The economic consequences of crime in Italy”
- 13/02 *Pasqualina Arca, Gianfranco Atzeni, Luca Deidda*, “Economics of bankruptcy exemption: Signaling value of collateral, cost of credit and access to credit”
- 13/01 *Miguel Casares, Luca Deidda, Jose E. Galdon-Sanchez*, “Business cycle and monetary policy analysis with market rigidities and financial frictions”
- 12/36 *Maria Chiara Di Guardo, Raffaele Paci*, “M&A and knowledge flows in the European Union’s Neighboring Countries”
- 12/35 *Raffaele Paci, Emanuela Marrocu*, “Tourism and regional growth in Europe”
- 12/34 *Fabio Cerina*, “Endogenous Growth and Sustainable Tourism”

Finito di stampare nel mese di Dicembre 2013
Presso **Copy...Right! studio grafico & stampa digitale**
Via Turritana 3/B – Tel. 079.200395 – Fax 079.4360444
07100 Sassari

www.crenos.it

ISBN 978-88-84-67-849-2

