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## The Geography Of Trade Relations Between The EU And The ENP Countries: Emerging Patterns And Policy Recommendations

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## THE GEOGRAPHY OF TRADE RELATIONS BETWEEN THE EU AND THE ENP COUNTRIES: EMERGING PATTERNS AND POLICY RECOMMENDATIONS<sup>°</sup>

### ABSTRACT

The European Neighborhood Policy (ENP), launched in 2004, is a unified European Union (EU) policy framework towards the EU neighboring (ENP) countries. The objective of the ENP is to strengthen the prosperity, stability and security of the (enlarged) EU countries and the ENP countries. Even though the ENP is distinct from the process of EU enlargement, the ENP countries operate under conditions of “neighborhood Europeanization”. The objective of the paper is to provide the backdrop against which the success of the ENP undertaking can be evaluated. It does so by providing a deep and comprehensive empirical analysis of the geography of trade relations (i.e. the size, the composition and the direction of exports and imports flows) between the EU and the ENP countries. The findings of the paper illustrate the emerging patterns of trade relations among the EU and the ENP countries, allowing for the provision of specific policy recommendations.

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**KEY-WORDS:** geography, trade, EU countries, ENP countries

**JEL:** F13, F14, F15

## **1. Introduction**

The European Neighborhood Policy (ENP), launched in 2004, is a unified European Union (EU) policy framework towards the EU neighboring countries (COM 104 FINAL, 2003; COM 373 FINAL, 2004; see Kahraman, 2005; Smith, 2005; Kelley, 2006; Avery and Nasshoven, 2008; Kochenov, 2011; COM 303, 2011 and Wesselink and Boschma, 2012a for an overview of the ENP). The objective of the ENP is to strengthen the prosperity, stability and security of the (enlarged) EU, creating a “ring of friends” around the EU. As the Commissioner for Enlargement and European Neighborhood Policy, Štefan Füle, stated, “our Neighborhood Policy provides us with a coherent approach that ensures that the whole of the EU is committed to deeper relations with all our neighbors [...]” (Füle, 2012).

The ENP framework is proposed – in alphabetical order – to Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Occupied Palestinian Territory (hereinafter: Palestine), Syria, Tunisia and Ukraine (hereinafter: the ENP countries; see Map 1). It is

further enriched with the Eastern Partnership (launched in Prague, in May 2009), the – formerly known as the Barcelona Process (launched in Barcelona, in November 1995) – Euro–Mediterranean Partnership or Union for the Mediterranean (re–launched in Paris, in July 2008), and the Black Sea Synergy (launched in Kiev, in February 2008). Currently, the ENP consists of two sub–groups; the ENP East (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) and the ENP South (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria and Tunisia).

Map 1: The EU–ENP area



Source: Authors' elaboration

The ENP is a bilateral policy, between the EU and each ENP country. In particular, following the suspension of the Doha Development Round of the World Trade Organization (see Ferguson, 2008), the European Commission started to pursue Free Trade Agreements (FTAs) (i.e. reduction of tariffs on trade and reduction of restrictions on investment), with targeted economies, in order to protect its markets and to enhance its competitiveness (European Commission, 2006a; see Acar and Tekçe, 2008 and Liargovas, 2011 for a critical discussion). For the EU, FTAs represent a subway to implement Deep and Comprehensive Free Trade Agreements (DCFTAs) with its neighboring countries (Liargovas, 2013). DCFTAs go beyond tariff reductions to cover, more extensively, regulatory issues such as investment protection, public procurement and competition policy (Mohamadieh, 2012). As the EU Trade Commissioner, Karel de Gucht described, “the

DCFTAs represent the EU's support for the process of democratic and economic reform" (de Gucht, 2011).

Therefore, even though the ENP is distinct from the process of EU enlargement (Emerson, 2004; Browning and Joenniemi, 2008), the ENP countries operate under conditions of "neighborhood Europeanization" (Gawrich et al., 2010; Franke et al., 2010; see Axt et al., 2007 and Schimmelfennig, 2012 for a discussion about the "Europeanization" debate). This indicates a misfit (i.e. the so-called "capabilities-expectations" gap; see Havrylyshyn, 2008 and Monastiriotis and Borrell, 2012) between ENP demands (i.e. demands that do not differ much from those of "accession Europeanization"; see Hughes et al., 2004 and Schimmelfennig and Sedelmeier, 2005 for a discussion about the "Europeanization" of the new EU member-states), on the one hand, and ENP rewards (i.e. the possibility of EU membership has been ruled out for the majority of ENP countries), on the other (Lavenex, 2004; Lang, 2007; Mahncke and Gstöhl, 2008). As the (then) Commission President, Romano Prodi, declared, "we have to be prepared to offer [to the ENP countries] more than partnership and less than membership, without precluding the latter" (Prodi, 2002). At this point, it has to be elucidated that the ENP countries have no general obligation to accept the *acquis communautaire* (i.e. the corpus of EU laws and policies). However, and despite the fact that the proper "membership anchor" is missing (Havlik et al., 2012), the acceptance of the *acquis communautaire* is rather necessary in order for the ENP countries to participate in EU programmes and to gain a stake in the EU market (see [http://ec.europa.eu/world/enp/index\\_en.htm](http://ec.europa.eu/world/enp/index_en.htm), for more information).

Given this misfit – and the concomitant skepticism about the ENP capacity to transfer EU values and rules to the neighboring countries – deep(er) economic (in particular, trade) integration between the EU countries and the ENP countries is considered to be a catalyst for the success of the ENP undertaking (COM 726 FINAL, 2006; European Commission, 2006b; COM 60 FINAL, 2007; COM 774, 2007; COM 207, 2010; Dreyer, 2012). Such a certitude – an "endowment" that comes from the era of Jean Monnet (see Monnet, 1976) – keeps step with the well-known dictum of Montesquieu that "the natural effect of trade is to bring about peace" since "two nations who traffic with each other become reciprocally dependent; for if one has an interest in buying, the other has an interest in selling; and thus their union is founded on mutual necessities" (see, Montesquieu, 1748/1750: 326).

The objective of the paper is to provide the backdrop against which the success of the ENP undertaking can be evaluated. It does so by providing a deep and comprehensive empirical analysis of the geography of trade relations<sup>1</sup> (i.e. the size, the composition and the direction of exports and imports flows) between the EU and the ENP countries. The findings of the paper illustrate the emerging patterns of trade relations among the EU and the ENP countries, as an outcome of the gradual dismantling of economic borders between the EU and the ENP countries, allowing for the provision of specific policy recommendations. The analysis utilizes trade data derived from the United Nations (UN) COMTRADE database (see <http://comtrade.un.org/db/>, for details), and refer to the national–sectoral (2–digit SITC classification) level. The sectors included in the analysis (see Table A1 in the Appendix) grossly belong to the primary and the secondary sector of production and may form groups of activities (see Table A2 in the Appendix) according to the intensity of the production factors used (see UNCTAD, 1996). The analysis covers the period 2000–2010 so as to gauge the latest shifts operated in trade structures as a result of the recent economic and political reforms (evolutions) implemented (took place) in the EU economy (i.e. the euro currency, the eastwards enlargement, and the on–going financial and economic crisis) and the ENP countries (i.e. the “color” revolutions, and the Arab “spring”), besides the ENP in itself. The remainder of the paper proceeds as follows. Section 2 provides a brief survey of the literature on economic integration, production structure and growth. Section 3 arrays some stylized facts for the EU and the ENP countries and the level of the average applied tariffs to trade. Section 4 delimits the methodological framework for the empirical analysis. Section 5 conducts the empirical analysis and reports the main findings. Section 6 offers the conclusions of the paper and some policy recommendations.

## **2. Economic integration, production structure and growth: Review of the theoretical literature**

It is widely accepted that the European perspective acts as a very strong stimulus for, and facilitator of, economic, political and institutional development by providing the incentives and resources to promote economic restructuring and institutional capacity–building. It is, thus, no surprise that especially for countries that are in dire need for economic restructuring, sociopolitical transformation and development, the process of European integration, in all of its

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<sup>1</sup> Geography is an integral component of trade theory (Andersen, 2010). The paper adopts the notion (understanding) of geography of trade provided by Grotewold (1961:309). See Grant (1994) for a review of the geographical literature on international trade.

facets (i.e. economic integration, political approximation and policy harmonization), has largely gone unquestioned (Monastiriotis et al., 2010). Indeed, deeper association with the EU brings a large battery of significant political and economic benefits at the domestic national level, strengthening domestic policies and, thus, facilitating political reforms that consolidate the process of political transition, democratization and, in some cases, conflict resolution and normalization of external relations (Monastiriotis et al., 2010).

However, together with the aforementioned benefits, which are, indeed, too strong to be overlooked, the process of European (economic) integration<sup>2</sup> brings, also, effects which are of a less unequivocal character.<sup>3</sup> Economic integration emaciates border obstacles for factor movements and further intensifies itself (self-sustained process) via the reduction of trade costs. Closed borders distort market size (Niebuhr and Stiller, 2002), whereas the abolition of economic barriers generates (releases) all kinds of spatial dynamics that relate to better access to foreign markets and to import competition (Brülhart et al., 2004). Therefore, even though economists accept, almost unanimously, that (the market-based process of) economic integration is a positive-sum game, an on-going debate is currently taking place concerning the distribution of the overall welfare gains (Benko and Lipietz, 1992; Guerrieri and Rossi, 2002; Petrakos et al., 2011).

Such a debate finds fertile ground since the size, the composition and the direction of trade and factor flows determine, to a large extent, the prospects and the limitations for development. To put it differently, in the (emerging) EU economic space, the space of flows (i.e. integration) affects, to a great extent, the space of places (i.e. development) (Petrakos, 2012). On the one hand, there

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<sup>2</sup> Integration is a very wide social, political and economic notion and a number of definitions have been proposed. Pinder (1969: 143–145), *inter alia*, describes integration “as the combination of parts into a whole”. Concerning economic integration, in particular, Maksimova (1976: 33) focuses on “the process of development of deep and stable relationships of the division of labor between national economies”. Holzman (1976: 59) argues that economic integration is “a situation in which the prices of all similar goods and similar factors are equalized”. Pelkmans (1984: 3) considers economic integration as “the elimination of economic frontiers between two or more economies”.

<sup>3</sup> See, for example, the cases of the new EU member-states (Daianu, 1995; Kornai, 2006; Petrakos and Kallioras, 2007; Kallioras and Petrakos, 2010), which provide a quasi-laboratory environment (or, to put it differently, natural experiment-like conditions) for the assessment of the impact of economic integration on regional inequalities.

is the view that economic integration is a long-term process that eventually leads to a reduction in inequalities through the expansion of trade relations, greater mobility of production factors and the diffusion of technology.<sup>4</sup> This view is based on neoclassical-type assumptions about the operation of the economy and claims that the market forces released in the process of economic integration are, overall, beneficial for the least developed economies, leading, thus, to greater cohesion. On the other hand, there is the claim that the costs and the benefits of economic integration are unlikely to be uniformly spread in space. In contrast, more advanced economies are expected to benefit more, while lagging (and, possibly, less favored) economies are more likely to benefit less, or, even, fall further behind. The resulting increase in inequalities is primarily based on internal and external economies of scale, technological progress and structural change.

In particular, proponents of the neoclassical theory argue that disparities are bound to diminish with growth, through the activation of three convergence mechanisms. The first mechanism is based on the neoclassical growth model (Solow, 1956; Swan, 1956), which assumes constant returns to scale (CRS), diminishing marginal productivity of capital, substitutability between capital and labour and exogenously determined technological progress. These assumptions indicate that, the further away an economy is from its steady-state, the faster will be the growth of income levels. In other words, economies converge towards their steady-states at a declining growth rate because the marginal productivity of capital declines. The second mechanism is the neoclassical trade theory (Heckscher, 1919/1991; Ohlin, 1933; Samuelson, 1949), which is built on the notion of comparative advantage (see Ricardo, 1817). In this framework, economies export products that intensively utilize their abundant (and cheap) production factor and import products that require an intensive use of their scarce (and expensive) production factor. Trade integration, thus, will cause product and factor prices to converge. The third mechanism is the neoclassical factor movement model (Greenwood, 1975; Borjas, 1989; Greenwood et al., 1991), which predicts the equalization of factor prices as low-wage, less advanced economies attract capital and high-wage, more advanced economies attract labour, under the assumption of free factor movement.

Questioning the position of the neoclassical paradigm, other schools of thought tend to argue that growth is a spatially selective and cumulative process that is likely to increase inequalities,

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<sup>4</sup> As Marshall (1890/1982: 225) indicates, “the mysteries of the trade become no mysteries; but are as it were in the air”.



bringing earlier theories of economic space<sup>5</sup> back to the forefront. These approaches stress the importance of initial conditions, interactions and interdependencies for growth, arguing that divergence is the most likely spatial outcome of market dynamics if counteractive policies do not come into play. The endogenous growth theories (Romer, 1986; Lucas, 1988; Barro, 1990) indicate that investment in human resources and knowledge spill-overs may result in increasing returns to capital and divergence. The new economic geography school (Krugman, 1991; Fujita, 1993; Venables, 1996) reaches similar conclusions, assuming increasing returns to scale (IRS), monopolistic competition, labour and capital mobility, and non-zero transportation costs. Under these assumptions, economic activities tend to concentrate in specific economies, which manage to exceed a critical size threshold, driven by agglomeration economies, reduced transport costs and a “home-market” effect (see Krugman, 1980). In particular, there are two tendencies in operation. The first one concerns a centripetal force that strengthens agglomeration of activities that belong to higher ranks in the production chain (i.e. capital-intensive and knowledge-intensive activities) in the more advanced economies, pushing the less advanced economies towards backward specializations (i.e. in labor-intensive and in resource-intensive activities). The second one concerns a centrifugal force that leads to the diffusion of production as capital moves to exploit profit opportunities (emerging for the opening-up of new markets, mainly due to the availability of relatively cheap and immobile labor force) that may exist in less advanced economies. These forces (together) may promote divergence.

Moreover, and besides the previously described debate, economic integration involves, according to the critics of the traditional trade theory, significant welfare losses for the less developed economies due to unequal exchange mechanisms. As integration improves market access and raises incomes, the patterns of consumption and production change and imports increase disproportionately to exports. This has the tendency to produce structural trade deficits, which threaten the stability of the local currencies and contribute to fiscal imbalances<sup>6</sup> (Monastiriotis et al., 2010).

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<sup>5</sup> Such as the big-push theory (Rosenstein-Rodan, 1943), the theory of growth poles (Perroux, 1955), and the cumulative causation theory (Myrdal, 1957).

<sup>6</sup> The recent experience of many peripheral EU economies (i.e. Greece, Portugal, Cyprus and Spain) confirms the truth of the aforementioned criticism (see Gligorov et al., 2012 for details). Indeed, the current turbulence and instability triggered by the public debt of the weaker EU economies has transformed a financial crisis to

Thus, there is (still) widespread (and totally justifiable) scepticism in the less-advanced and peripheral economies regarding their ability to adjust to the requirements of an integrated economic space. Imperfect competition is deemed to result in an uneven distribution of the benefits of economic integration (Lyons et al. 2001; Martin and Ottaviano, 2001; Ciccone, 2002) due to the inability of markets (and policy responses) to create conditions of optimum economic space. Such scepticism questions the neoclassical understanding for the operation of the spatial economy (Melachroinos, 2002; Petrakos, 2008). Yet, in the realm of the real world, the EU experience does not seem to (fully) support the neoclassical claim (Amin et al., 1992; Guerrieri and Rossi, 2002; Petrakos, 2008 and 2012). Core EU economies generate advantages leading to differential growth performance, through the entrenchment of internal and external economies of scale<sup>7</sup>, and operate as hubs for economic activities associated with IRS. Conversely, peripheral EU economies, facing high(er) transaction costs, despite the on-going improvement of transportation and communication technology, host, mainly, economic activities associated with CRS.

Engaged in integration process with distant and more advanced partners, peripheral and less-advanced economies tend to develop (locked-in) an inter-industry type of trade relations (Panteladis, 2002; Kallioras and Petrakos, 2010; Petrakos et al., 2012). This type of trade relations, which imposes a specific economic structure with specialization typically in labor-intensive or resource-intensive economic activities, is the outcome of the inability of peripheral and less-advanced economies to compete (successfully) with their more advanced counterparts in the markets for capital-intensive and knowledge-intensive economic activities<sup>8</sup> (Brühlhart and Elliott, 1998). Even though it provides an alternative (and perhaps the only feasible) route for the exploitation of the locally available skills, it is doubtful whether such a structural differentiation can produce long-term income convergence (Petrakos and Christodoulakis, 2000; Petrakos et al.,

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an economic one, affecting the productive bases and the income levels of the EU economic space in a very unequal way (Petrakos, 2012).

<sup>7</sup> In the nature of both Marshallian (Marshall, 1890/1982) and Jacobian (Jacobs, 1969) external economies.

<sup>8</sup> The question that arises here is whether research and development (R&D) investment in lagging economies is worthwhile (see Rodriguez-Pose, 2001 for a thorough survey on the issue). Besides the apparent inability of lagging economies to invest in R&D activities, since returns on investment in such activities benefit from strong cumulative effects (Dosi, 1988), knowledge derived from R&D investment is likely to spill-over from one area to neighboring areas (Jaffe, 1986).

2012). Peripheral and less-advanced economies having weaker productive bases with a high share of sensitive, labor-intensive sectors and unfavorable geographic coordinates are struggling in the process of integration to effectively redeploy their resources in order to gain from the opening of markets (Camagni, 1992; Puga, 2002).

### **3. The EU and the ENP countries: Some stylized facts and the level of tariff barriers to trade**

Even a rough examination of some basic, economic and demographic, stylized facts (see Table 1), highlights the differences that exist between the EU and the ENP countries. By and large, the wider EU area (i.e. the EU and its neighborhood) exhibits a high degree of heterogeneity. Indeed, there is a clear gap in terms of economic performance as the level of the per capita GDP indicator evinces. The per capita GDP level in the EU amounts (year 2010) to \$32,364 per inhabitant, whereas the corresponding level in the ENP countries amounts to (only) \$4,263 per inhabitant. The GDP per capita level in the ENP countries is significantly lower even comparing to the figure (\$11,891 per inhabitant) that corresponds to the new EU member-states (coming from the former Eastern bloc). Among the ENP countries, Israel is considered to be a significant outlier as it enjoys a level of economic performance (\$28,506 per inhabitant) significantly higher than the corresponding level of many EU countries.

The aforementioned gap in terms of economic performance becomes of paramount importance taking into consideration the fact that while (year 2010) the population of the ENP countries is equivalent to 55.7% of the EU population (279.749 and 501.826 million inhabitants, respectively), the GDP level of the ENP countries is equivalent to (only) 7.3% of the EU GDP (\$1,192,653 and \$16,241,135 million, respectively). Moreover, population in the ENP countries has been increasing (period 2000–2010) at a rate of 11.3%, while the corresponding growth rate in the EU countries is 3.8%. In contrast, the level of per capita GDP in the ENP countries has been recording (period 2000–2010) a real growth rate of 24.9%, while the corresponding real growth rate in the EU countries is 48.7%. So, the EU attempts to create “neighborhood Europeanization” conditions with countries that, on aggregate, have (relatively) high population figures and enjoy low levels of economic performance.

The aforementioned mismatch generates concern when the discussion takes a (macro-)regional perspective. There are a couple of reasons that “legitimize” such concern. The first one has to do with the (not very encouraging) experience of the EU spatial pattern of economic performance.

Indeed, despite the serious and well-funded interventions at the structural and the regional level, the “core-periphery” spatial pattern of economic performance remains rather inalterable (coupled, in fact, by a “west-east” pattern) (Barrios and Strobl, 2005; Petrakos, 2008 and 2012). Hence, the unbalanced spatial pattern of economic performance in the wider EU area is expected to become (even) more pronounced. The second one has to do with the noteworthy high presence of rural population in the ENP countries. Indeed, rural population in the ENP area represents the 39.6% of the total population (share that corresponds approximately to 110.8 million inhabitants). This share, which is analogous to the respective of the new EU member-states (37.9%), stresses out the impact, on the EU-ENP trade relations, of the possible restrictions that may arise from the Common Agricultural Policy (CAP) (see [http://ec.europa.eu/agriculture/faq/index\\_en.htm#2](http://ec.europa.eu/agriculture/faq/index_en.htm#2), for details) (Dreyer, 2012; Liargovas, 2013), the most significant sectoral EU policy in terms of funds available.

Table 1: Some economic and demographic stylized facts for the EU and the ENP countries, years 2000 and 2010

	GDP (m. \$; 2010)	GDP pc (\$/inh.; 2010)	GDP pc real growth (%; 2000- 2010)	population (m. inh.; 2010)	population growth (%; 2000- 2010)	rural population (% population.; 2010)
Austria	379,069	45,181	60.1	8.390	4.7	32.5
Belgium	469,374	43,078	55.2	10.896	6.3	2.5
Bulgaria	47,714	6,333	132.1	7.534	-7.8	27.5
Cyprus	23,132	28,779	60.3	0.804	15.8	40.8
Czech Rep.	192,032	18,254	170.2	10.520	2.4	26.5
Denmark	311,989	56,245	48.5	5.547	3.9	13.2
Estonia	19,217	14,341	116.5	1.340	-2.2	30.5
Finland	238,041	44,378	66.4	5.364	3.6	16.4
France	2,560,002	39,448	50.7	64.895	6.8	14.8
Germany	3,280,530	40,116	58.6	81.777	-0.5	26.2
Greece	301,083	26,607	71.3	11.316	3.7	38.8
Hungary	128,632	12,863	68.3	10.000	-2.1	31.0
Ireland	206,612	46,170	52.7	4.475	17.6	38.1
Italy	2,060,965	34,075	38.6	60.483	6.2	31.8
Latvia	24,010	10,723	73.6	2.239	-5.6	32.3
Lithuania	36,306	11,045	150.5	3.287	-6.1	33.0
Luxembourg	53,334	105,195	61.8	0.507	16.2	14.8
Malta	8,256	19,845	46.5	0.416	9.1	5.3
Netherlands	779,356	46,904	57.9	16.616	4.3	17.3
Poland	469,440	12,294	112.8	38.184	-0.7	39.1
Portugal	228,571	21,486	47.1	10.638	4.0	39.5
Romania	161,624	7,539	9.0	21.438	-4.5	47.2
Slovakia	87,268	16,071	127.8	5.430	0.8	45.2
Slovenia	46,908	22,893	56.0	2.049	3.0	50.0
Spain	1,407,405	30,549	54.1	46.071	14.4	22.7

Sweden	458,552	48,897	47.2	9.378	5.7	14.9
United Kingdom	2,261,713	36,343	11.8	62.232	5.7	20.5
EU	16,241,135	32,364	48.7	501.826	3.8	26.3
EU-15 <sup>a</sup>	14,996,596	37,625	44.5	398.585	5.4	23.3
EU-10 <sup>b</sup>	1,213,151	11,891	94.5	102.021	-2.1	37.9
Algeria	161,979	4,567	27.1	35.468	16.2	28.0
Armenia	9,371	3,031	208.3	3.092	0.5	35.9
Azerbaijan	51,774	5,718	298.9	9.054	12.5	46.6
Belarus	54,713	5,765	-48.2	9.490	-5.1	25.4
Egypt	218,894	2,698	-17.3	81.121	19.9	56.6
Georgia	11,667	2,621	101.8	4.452	0.8	47.3
Israel	217,333	28,506	22.5	7.624	21.2	8.2
Jordan	27,574	4,560	43.8	6.047	26.0	17.5
Lebanon	39,006	9,228	46.3	4.227	13.0	12.9
Libya <sup>d</sup>	62,360	9,957	-50.3	6.263	19.7	n/a
Moldova	5,809	1,631	69.2	3.562	-2.1	53.1
Morocco	90,805	2,796	83.1	32.482	11.6	42.6
Palestine	n/a	n/a	n/a	n/a	n/a	n/a
Syria	59,147	2,893	29.1	20.447	27.9	44.3
Tunisia	44,291	4,199	35.0	10.549	10.3	33.9
Ukraine	137,929	3,007	11.8	45.871	-6.7	31.3
ENP	1,192,653	4,263	24.9	279.749	11.3	39.6
ENP East	271,264	3,592	36.7	75.521	-3.6	34.6
ENP South <sup>c</sup>	704,056	3,581	14.2	196.604	18.0	42.7

n/a: not available

- a. The "old" EU member-states
- b. The "new" EU member-states excl. Cyprus and Malta
- c. Excl. Israel
- d. Data for Libya concern years 2000 and 2009

Sources: World Bank / Authors' elaboration

Together with the economic and demographic stylized facts of the EU and the ENP countries, it is crucial to take into consideration the level of the tariff barriers to trade (i.e. tariffs imposed by the EU) in order to provide a proper interpretation of the findings accruing from the study of the geography of the EU-ENP trade relations. Tariffs indicate the level of protection, distorting the (free) market within an economy. Yet (year 2010), the EU imposes relatively high (simple) average tariffs to trade with the ENP countries, especially on agricultural goods (see Table 2, and <http://stat.wto.org/TariffProfile/WSDBTariffPFReporter.aspx?Language=E>, for details). This indicates that the goal of DCFTA, still, has a long way ahead. Given the high shares of agricultural population in the ENP countries as well as the political upheaval in the ENP South and the slow reforms in the ENP East (Blockmans and van Vooren, 2013), it is doubtful whether the resistance (diffidence) on behalf of the EU to remove its (agricultural) tariff (and, also, non-tariff) trade barriers is able to guarantee the success of the ENP undertaking.

Table 2: Simple average tariffs imposed, by the EU, on agricultural and non-agricultural goods, year 2010

	Simple average tariffs imposed on agricultural goods (%; 2010)	Simple average tariffs imposed on non-agricultural goods (%; 2010)
Algeria	12.9	3.0
Armenia	13.8	4.7
Azerbaijan	11.7	2.9
Belarus	10.2	3.9
Egypt	12.8	4.5
Georgia	10.8	3.5
Israel	13.6	4.2
Jordan	13.1	3.9
Lebanon	12.7	4.2
Libya	n/a	n/a
Moldova	11.9	4.7
Morocco	12.1	5.2
Palestine	n/a	n/a
Syria	n/a	n/a
Tunisia	11.5	5.0
Ukraine	11.1	3.9

n/a: not available

Sources: WTO / Authors' elaboration

#### 4. The geography of trade relations between the EU and the ENP countries: Delimitation of the methodological framework

Empirical research in international trade literature has undergone a significant resurgence, especially after the enunciation of the new trade theory. This is because, in contrast to the traditional trade theory of comparative advantage, the new trade theory provided a new framework of thinking emphasizing that much of international trade involves the two-way exchange of goods within industries that belong to developed countries (see Krugman, 1979 and 1980, *inter alia*; see also Linder, 1961 and Grubel and Lloyd, 1975 for earlier empirical findings which provided the basis for the formation of new trade theory). The proliferation of empirical papers in trade literature has been based, mainly, on the wide use of trade indicators. The latter, being able to provide information in a rather straightforward and reliable manner (Markusen, 1992), are, indeed, extremely popular in trade literature because trade data themselves are “so widely available, relative reliable and highly disaggregated”<sup>9</sup> (Brühlhart, 1998: 780–781).

<sup>9</sup> Despite whatever problems may arise (e.g. the differences in valuation of exports and imports i.e. the report of exports in free on board (f.o.b.) terms and the report of imports in cost, insurance and freight (c.i.f.) terms; see Grotewold, 1961 for details).

A broad definition of a trade indicator is that it is an index or a ratio which can be used to “describe and assess the state of trade flows and trade patterns of a particular economy or economies and can be used to monitor these flows and patterns over time or across economies / regions” (Mikic and Gilbert, 2009: 4). Trade indicators, as the result of using trade data, are, often, the most available input for evidence-based policy-making (i.e. the “use of statistical techniques in obtaining sound and transparent data to be used in the consultative process between government and other stakeholders in any area of policy-making”) (Scott, 2005; Mikic and Gilbert, 2009: 4; EUROSTAT, 2010). Indeed, stakeholders in policy-making agree that the “lack of reliable information leads to the dissemination of ideology instead of knowledge” (CESifo, 2007:22).

Therefore, the estimation of a series of trade indicators, and the consequent descriptive statistical analysis of the findings derived<sup>10</sup>, provides a solid basis for the empirical study of the geography of the EU-ENP trade relations. Since there is almost no empirical trade literature focusing on the ENP, the paper aspires to fill in (part of) the gap in the corresponding literature.<sup>11</sup> Among the plethora of trade indicators (see the exceptional handbook of commonly used trade indicators offered by Mikic and Gilbert, 2009), the empirical analysis in the present paper is based on: (a) the Index of Trade Intensity, (b) the Index of Trade Openness, (c) the Index of Trade Balance, (d) the Index of Revealed Comparative Advantage, (e) the Index of Intra Industry Trade, and (f) the Index of Trade Composition Change. The wide variety of the aforementioned indicators covers many aspects of trade activity, offering a rather comprehensive picture, even though each indicator is subject to many considerations. At this point, it has to be clarified that since the ENP is a bilateral policy (i.e. the ENP countries do not constitute a unified trade bloc), the analysis concerns each

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<sup>10</sup> Due to lack of space, the actual results of the analysis are not provided in the paper (instead, there is a graphical depiction). However, they are available upon request.

<sup>11</sup> The literature looking at the ENP focuses, mainly, on political (i.e. diplomacy and security) issues; moreover, the literature that focuses on the economic aspects of the ENP seems to adopt a rather narrow focus / perspective without getting into specific empirical analyses (Vincentz, 2007; Monastiriotis and Borrell, 2012) regarding the geography of trade flows. In particular, the empirical papers dealing with the economic aspects (trade aspects, in particular) of the ENP either adopt a narrative approach or attempt to provide *ex ante* assessments concerning the effects of trade liberalization on the ENP countries. Exceptions to this general rule are the studies of Sekarev (2011), Havlik et al. (2012) and Moga and Fotea (2012) as well as some research projects dealing with ENP issues (see Wesselink and Boschma, 2012b, for an overview).

ENP country separately and not the ENP area as a unified group. The same practice is followed for the EU (even though the EU constitutes a unified trade bloc), also, in order for internal differentiations (i.e. between the EU countries) to be detected.

The Index of Trade Intensity (see Box 1) assesses the importance of a trade partner in terms of the overall trade profile of the economy (Brown, 1949; Kojima, 1964; Drysdale and Garnaut, 1982). The index is expressed as the percentage share of the bilateral trade (exports and/or imports) between two countries in relation to the total (world) trade (exports and/or imports) of the country under consideration. When no trade activity is conducted between a country under consideration and a (partner) country, the index takes its minimum value (i.e. 0). When a country under consideration has trade transactions only with a partner country, the index takes its maximum value (i.e. 100).

Box 1: Index of Trade Intensity

$$ITI_{c-p,t} = \frac{XV_{c-p,t} + MV_{c-p,t}}{XV_{c-w,t} + MV_{c-w,t}} * 100 \quad \text{or} \quad ITI_{c-p,t} = \frac{XV_{c-p,t}}{XV_{c-w,t}} * 100 \quad \text{or} \quad ITI_{c-p,t} = \frac{MV_{c-p,t}}{MV_{c-w,t}} * 100$$

*XV* denotes exports values  
*MV* denotes imports values  
*C* denotes country under consideration  
*P* denotes partner economy  
*W* denotes world economy  
*t* denotes year under consideration

*ITI* takes values in the interval [0, 100], from no trade with a (partner) country to trade only with the partner country

Source: Adjustment from Brown (1949), Kojima (1964) and Drysdale and Garnaut (1982)

The Index of Trade Openness (see Box 2), often called Index of Trade Dependence, measures the importance of international trade for an economy and gives an indication of the degree to which an economy is open to trade<sup>12</sup> (Frankel and Romer, 1999). The index is expressed as the value of

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<sup>12</sup> It is important to have in mind that the index is subject to major considerations. There is a concern in the literature about the suitability of a single measure of openness to proxy something as complex and multifaceted as a country's trade regime (see Edwards, 1998; and Greenaway et al., 2002). Moreover, there is a concern that the index may be misleading since trade openness is, often, correlated with trade liberalization and market size. Dollar and Kraay (2003: 7) recognize that "growth in trade volumes may also reflect many factors other than trade liberalization" and, thus, the index of trade openness is an "imperfect proxy" of trade liberalization. Samman (2005:3) supports that «increased trade can be the result of policies not specifically related to trade». Alesina et al. (2005: 1504) remark that "market size and country size are uncorrelated in a



trade (i.e. exports and/or imports), with a specific partner country, or the world in general, in relation to the value of gross domestic product (GDP)<sup>13</sup>. The calculations can be performed either in current prices (nominal openness) or in purchasing power parity (PPP) prices (real openness) (Alesina et al., 2005)<sup>14</sup>. In any case, the index takes its minimum value (i.e. 0) when the economy of the country under consideration is totally closed. The index takes higher values as the economy of the country under consideration becomes more open.

Box 2: Index of Trade Openness

$$ITO_{c-p,t} = \frac{XV_{c-p,t} + MV_{c-p,t}}{GDP_{c,t}} \quad \text{or} \quad ITO_{c-p,t} = \frac{XV_{c-p,t}}{GDP_{c,t}} \quad \text{or} \quad ITO_{c-p,t} = \frac{MV_{c-p,t}}{GDP_{c,t}}$$

*XV* denotes exports values  
*MV* denotes imports values  
*GDP* denotes Gross Domestic Product  
*c* denotes country under consideration  
*p* denotes partner economy  
*t* denotes year under consideration  
*ITO* takes values greater than (or equal to) 0, from no openness with a (partner) country to perfect openness with a partner country

Source: Adjustment from Frankel and Romer (1999)

The Index of Trade Balance (see Box 3), also called Index of Net Exports, is the difference, in value terms, between the exports and the imports of a country under consideration concerning trade activity with a specific partner country or the world, in general (Sullivan and Sheffrin, 2003). A

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world of complete free trade; in models with increasing returns to scale (IRS), market size depends both on country size and trade openness”.

<sup>13</sup> Sachs and Warner (1995) propose a policy openness indicator. This indicator is subject to major criticism (see Rodriguez and Rodrik, 2001; Berg and Krueger, 2003; and Wacziarg and Welch, 2003). Frankel and Romer (1999) proposed an indicator of constructed openness to trade (see, also, Rodrik et al., 2002 and Dollar and Kraay, 2003).

<sup>14</sup> Alcalá and Ciccone (2004) advocated the use of the latter version as the raise in the productivity of the tradable sectors (comparing to the respective productivity of the non-tradable sectors) will cause a rise in the relative prices of the products of the non-tradable sectors and, thus, a decline in the figure of the index (given that the demand for the products of the non-tradable sectors remains inelastic). Even though there is an on-going discussion in the literature (see Rodrik et al., 2002 and Berg and Krueger, 2003), no clear guidance is offered on this point.

positive balance (i.e. exports higher than imports) is, also, known as trade surplus, whereas a negative balance (i.e. imports greater than exports) is, also, known as trade deficit.

### Box 3: Index of Trade Balance

$$ITB_{c,p,t} = XV_{c,p,t} - MV_{c,p,t}$$

$XV$  denotes exports values  
 $MV$  denotes imports values  
 $c$  denotes country under consideration  
 $p$  denotes partner country  
 $t$  denotes year under consideration

$ITB$  takes values from  $-\infty$  to  $+\infty$ ; values greater than 0 indicate positive trade balance (i.e. exports higher than imports)

Source: Adjustment from Sullivan and Sheffrin (2003)

The Index of Revealed Comparative Advantage (see Box 4) calculates the relative (dis)advantage of a country under consideration in a specific sector (Balassa, 1965; for further interpretation see Kunimoto, 1977). The index draws its roots from the concept of comparative advantage<sup>15</sup>. The index is expressed as the proportion of country under consideration exports' in a specific sector divided by the proportion of a partner country (or world) exports' in the same specific sector.<sup>16</sup> When the index takes values greater than 1, a comparative advantage is "revealed"<sup>17</sup>. Otherwise, the country under consideration has a comparative disadvantage.

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<sup>15</sup> An earliest version the index was introduced by Liesner (1958).

<sup>16</sup> Vollrath (1991) offers three alternative ways of measuring a country's revealed comparative advantage: the relative trade advantage, the logarithm of the relative export advantage, and the revealed competitiveness. Zaghini (2003) advocates the use of the Lafay index of international specialization (Lafay, 1992). Hoen and Oosterhaven (2006) indicate the index of revealed comparative advantage has some problematic properties and propose an additive revealed comparative advantage.

<sup>17</sup> Balassa (1965: 116) indicates that "comparative advantages appear to be the outcome of a number of factors, some measurable, others not, some easily pinned down, others less so ... one wonders, therefore, whether more could not be gained if ... one took the observed pattern of trade as a point of departure". However, a problem of implementing the index arises when the observed trade patterns are distorted by

#### Box 4: Index of Revealed Comparative Advantage

$$RCA_{c-p,i,t} = \frac{\frac{XV_{c-p,i,t}}{XV_{c-p,t}}}{\frac{XV_{p,i,t}}{XV_{p,t}}}$$

$XV$  denotes exports values  
 $C$  denotes country under consideration  
 $p$  denotes partner economy  
 $t$  denotes year under consideration  
 $i$  denotes sector under consideration

$RCA$  takes values greater than (or equal to) 0; values greater than 1 indicate relatively better exporting performance and a possible comparative advantage

Source: Adjustment from Balassa (1965)

The Index of Intra-Industry Trade (see Box 5) matches the value of the exports of a specific sector to the value of the imports of the same specific sector, for a country under consideration (Grubel and Lloyd, 1971 and 1975). The index deals with the causes of exporting and importing products that grossly belong to the same industry.<sup>18</sup> The new trade theory (see Krugman, 1979 and 1980), giving rise to imperfectly competitive markets, made possible the theoretical explanation of intra-industry trade.<sup>19</sup> Theoretical models suggest that intra-industry trade is determined by both country-specific factors (such as the level of income and the ability to attract foreign investments) and industry-specific factors (such as the range of product differentiation and the potential to exploit economies of scale) (for further details see Caetano and Galego, 2007)<sup>20</sup>. The index takes

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government interventions (i.e. imports' restrictions, exports' subsidies), which cause misinterpretations of the underlying comparative advantage(s) (see the relative discussion provided by Greenaway and Milner, 1993 and Ferto and Hubbard, 2003).

<sup>18</sup> It has to be noted at this point that reservations have been expressed about the appropriateness of the index when trade activity takes place between developing countries or between developed and developing countries (see Nilsson, 1997 and 1999).

<sup>19</sup> However, it has been shown that intra-industry trade can be explained in the neoclassical framework, also (Bhagwati and Davies, 1994).

<sup>20</sup> The literature on intra-industry trade discerns between vertical intra-industry trade and horizontal intra-industry trade (see Abd-El-Rahman, 1991; Brühlhart and Elliott, 2002; and Okubo, 2007). Moreover, Havrylyshyn and Kenzel (1997) developed another version of intra-industry trade taking into consideration the level of technology.

values in the interval [0, 1]. Values close to 0 indicate that trade activity between a country under consideration and a partner country is an inter–industry one (i.e. concerns products that grossly belong to different sectors). Values close to 1 indicate that trade activity between a country under consideration and a partner country is an intra–industry one (i.e. concerns products that grossly belong to the same sectors).

Box 5: Index of Intra–Industry Trade

$$IIT_{c\_p,t} = \left( 1 - \frac{\sum_{i=1}^n |XV_{c\_p,i,t} - MV_{c\_p,i,t}|}{\sum_{i=1}^n |XV_{c\_p,i,t} + MV_{c\_p,i,t}|} \right)$$

*XV* denotes exports values  
*MV* denotes imports values  
*C* denotes country under consideration  
*i* (= 1, ..., *n*) denotes sectors under consideration  
*t* denotes year under consideration  
*p* denotes partner country  
 $\Sigma$  is a symbol for sum  
*IIT* takes values in the interval [0,1], from no intra-industry trade (perfect inter-industry trade) to perfect intra-industry trade (no inter-industry trade)

Source: Adjustment from Grubel and Lloyd (1971 and 1975)

The Index of Trade Composition Change (see Box 6), is an endeavour to estimate the reaction of a country under consideration to the (changing/emerging) conditions of the (international) economic environment, in terms of trade activity (Finger and Kreinin, 1979; Havlik, 1995; Jackson and Petrakos, 2001). The index correlates the trade (exports and/or imports) shares of a country under consideration, in an initial (base) and a final year. The index takes values in the interval [-1, 1]. Values close to 1 indicate an almost perfect positive correlation (i.e. no change recorded as regards the trade shares of the country under consideration), values close to -1 indicate an almost perfect negative correlation (i.e. the trade shares of the country under consideration are completely the opposite), and values close to 0 indicate no correlation between the trade shares of a country under consideration, between a base and a final year.

**Box 6: Index of Trade Composition Change**

$$TCC_{c\_p,ib\_tf} = COR_{i=1}^n \left( \frac{XV_{c\_p,i,ib} + MV_{c\_p,i,ib}}{XV_{c\_p,ib} + MV_{c\_p,ib}}, \frac{XV_{c\_p,i,tf} + MV_{c\_p,i,tf}}{XV_{c\_p,tf} + MV_{c\_p,tf}} \right) \text{ or}$$

$$TCC_{c\_p,ib\_tf} = COR_{i=1}^n \left( \frac{XV_{c\_p,i,ib}}{XV_{c\_p,ib}}, \frac{XV_{c\_p,i,tf}}{XV_{c\_p,tf}} \right) \quad TCC_{c\_p,ib\_tf} = COR_{i=1}^n \left( \frac{MV_{c\_p,i,ib}}{MV_{c\_p,ib}}, \frac{MV_{c\_p,i,tf}}{MV_{c\_p,tf}} \right)$$

*XV* denotes exports values  
*MV* denotes imports values  
*C* denotes country under consideration  
*i* (= 1, ..., *n*) denotes sectors under consideration  
*ib* denotes the base year under consideration  
*tf* denotes the final year under consideration  
*p* denotes partner country  
*COR* is a symbol for correlation  
*TCC* takes values in the interval [-1, 1], from perfect negative correlation to perfect positive correlation; values close to 0 indicate no correlation

Source: Adjustment from Finger and Kreinin (1979), Havlik (1995) and Jackson and Petrakos (2001)

**5. The geography of trade relations between the EU and the ENP countries: The emerging patterns**

The EU–ENP trade relations expanded significantly during the period 2000–2010 (see Table 3). During the period 2000–2010, the value of the EU–ENP trade flows has almost tripled.

Table 3: The value of the EU–ENP trade flows, Years 2000 and 2010

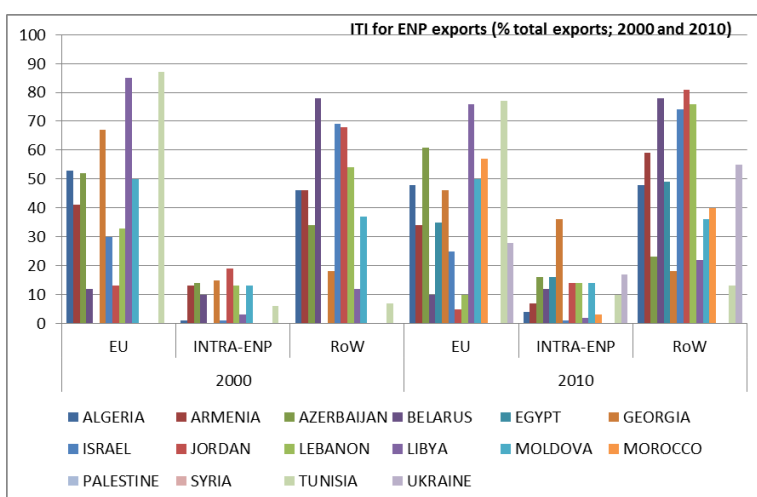
EU exports to ENP (bn. \$; 2000)	EU exports to ENP (bn. \$; 2010)	EU imports from ENP (bn. \$; 2000)	EU imports from ENP (bn. \$; 2010)
58,055	153,729	57,003	148,313

Sources: UN COMTRADE Database / Authors' elaboration

In fact, the EU is the most important trade partner for the majority of the ENP countries. However, it loses its shares over time. The juxtaposition of the spatial allocation of the ENP exports and imports shares for the years 2000 and 2010 (see Figures 1 and 2) reveals that the EU shares are getting decreased in 8 and 9 ENP countries (out of 12 for which data are available), respectively. In

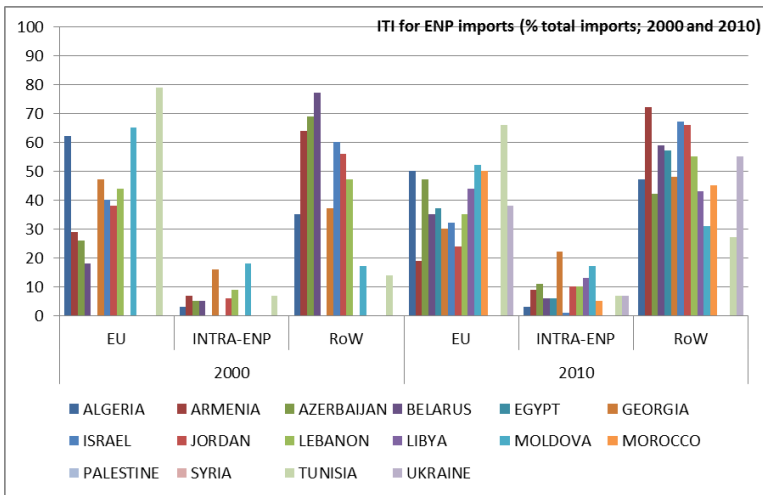
contrast, the shares of the RoW (i.e. rest of the world) countries are getting increased, mainly due to the dynamism that the BRIC countries (i.e. Brazil, Russia, India and China) exhibit (see Pinna, 2013). Noteworthy is, also, the fact that the intra-ENP shares are rather small. This indicates that the ENP economic space is still fragmented, with weak demand-supply chain links. In contrast, the spatial allocation of the EU exports and imports flows verifies that the ENP countries are not important trade partners for the vast majority of the EU countries (see Figures 3 and 4). EU trade activity is mostly intra-EU, indicating the slow progress of the ENP undertaking (i.e. the low success of DCFTAs) as well as the incompatibilities with (restrictions arising from) the EU sectoral policies (the CAP, in particular). This means that the magnitude trade effect from DCFTAs remains rather low, in regard to the ENP countries.

Figure 1: Index of Trade Intensity for ENP exports, years 2000 and 2010



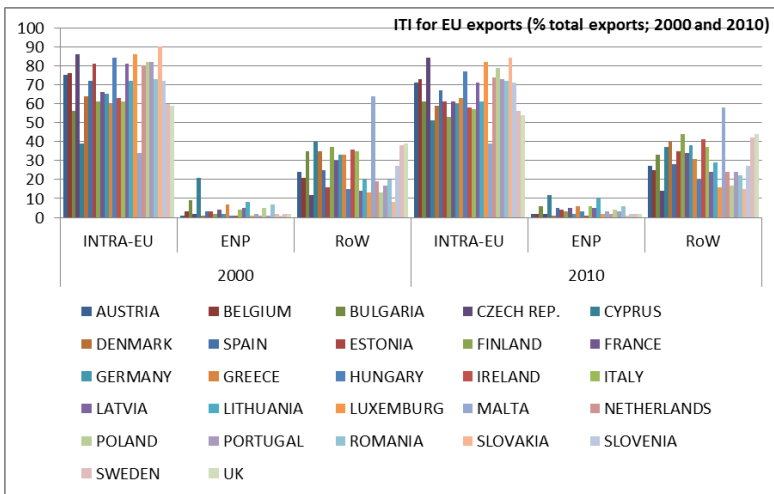
Sources: UN COMTRADE Database / Authors' elaboration

Figure 2: Index of Trade Intensity for ENP imports, years 2000 and 2010



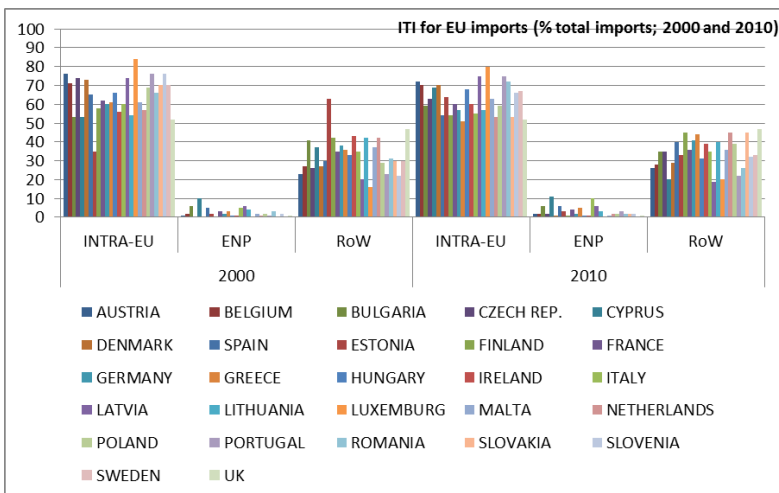
Sources: UN COMTRADE Database / Authors' elaboration

Figure 3: Index of Trade Intensity for EU exports, years 2000 and 2010



Sources: UN COMTRADE Database / Authors' elaboration

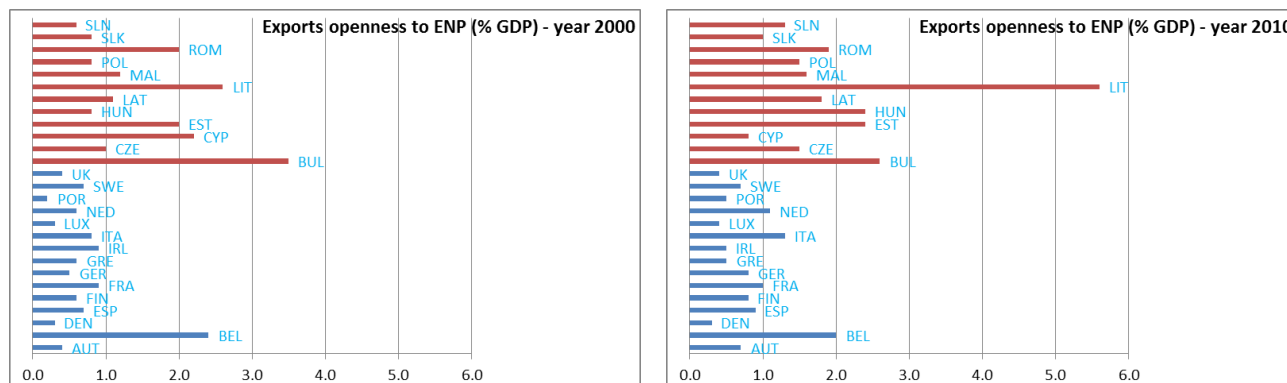
Figure 4: Index of Trade Intensity for EU imports, years 2000 and 2010



Sources: UN COMTRADE Database / Authors' elaboration

The fact that the ENP countries are not important trade partners for the vast majority of the EU countries can, also, be verified from the fact that the latter exhibit extremely low exports and imports shares (to and from the ENP countries, respectively) in relation to their GDPs (see Figures 4 and 5). Possible exceptions to this general rule are Lithuania, in terms of exports, and Cyprus, in terms of imports. In contrast, the corresponding shares for the ENP countries (i.e. exports and imports to and from the EU countries, respectively) are quite high (see Figures 5 and 6). However, in terms of exports, only 4 ENP countries (i.e. Azerbaijan, Egypt, Libya and Tunisia) exhibit increase between the years 2000 and 2010. The picture is diametrically opposite with respect to imports as 10 ENP countries (Armenia, Jordan, Israel, Moldova and Syria are the exceptions) exhibit increase in the above period. Moreover, one significant fact that should be mentioned is that, by and large, for the ENP countries, imports accounts for higher GDP shares comparing to exports.

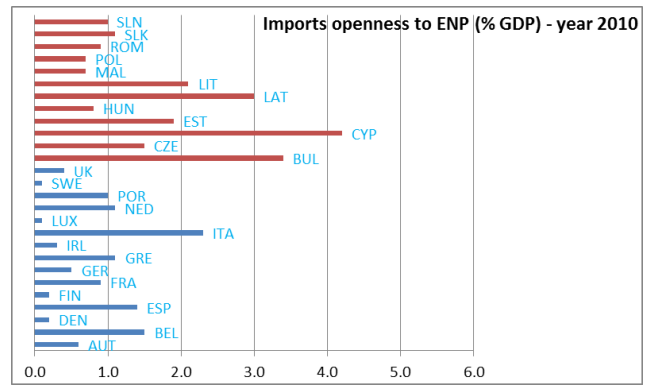
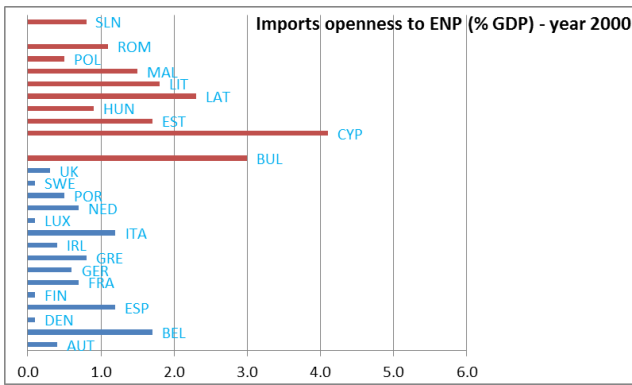
Figure 5: Index of Trade Openness for EU exports, years 2000 and 2010



Sources: UN COMTRADE Database / World Bank / Authors' elaboration

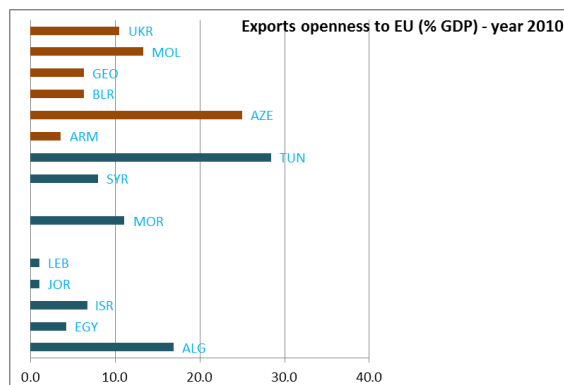
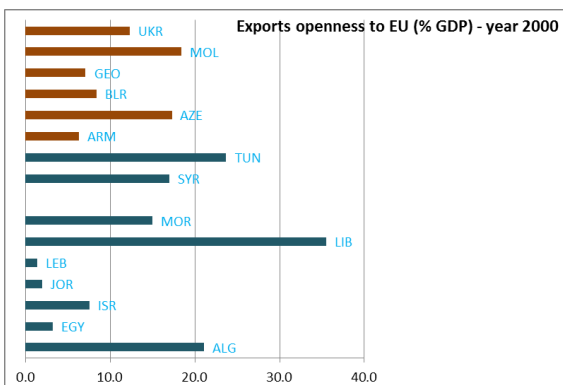
Figure 6: Index of Trade Openness for EU imports, years 2000 and 2010





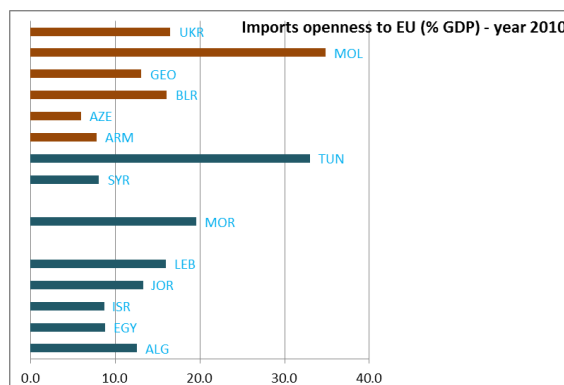
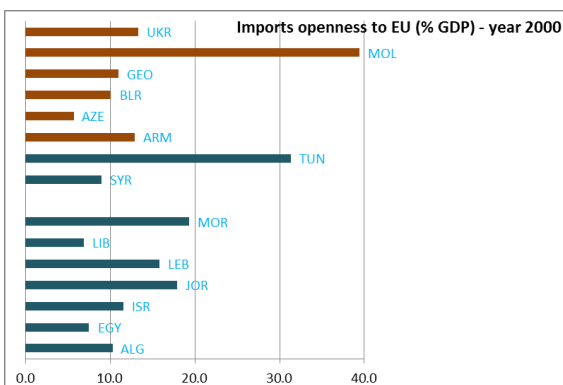
Sources: UN COMTRADE Database / World Bank / Authors' elaboration

Figure 7: Index of Trade Openness for ENP exports, years 2000 and 2010



Sources: UN COMTRADE Database / World Bank / Authors' elaboration

Figure 8: Index of Trade Openness for ENP imports, years 2000 and 2010

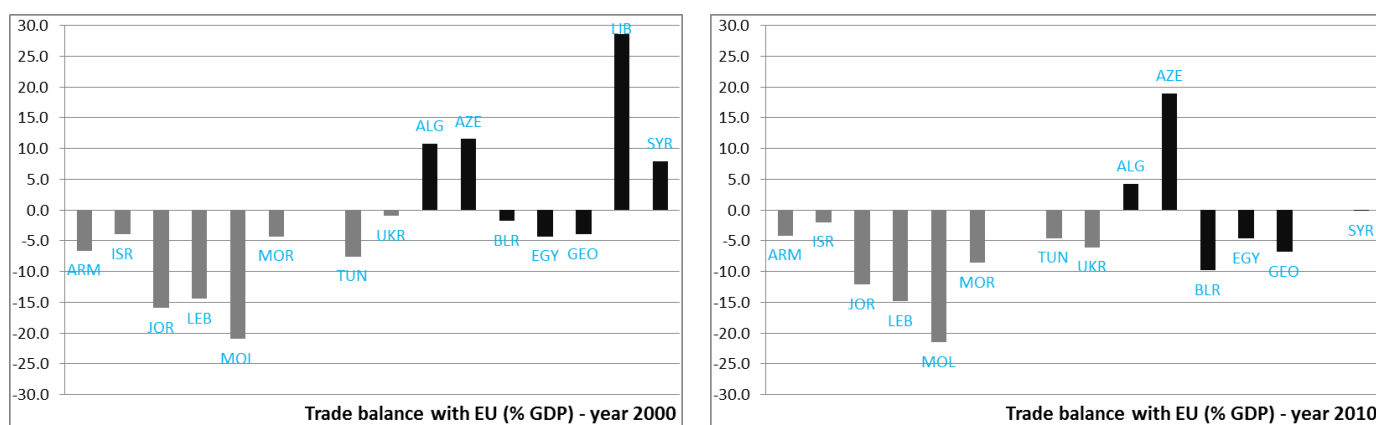


Sources: UN COMTRADE Database / World Bank / Authors' elaboration

Indeed, the vast majority of the ENP countries have a negative trade balance with the EU (see Figure 9). Moreover, the juxtaposition of the figures for the years 2000 and 2010 evinces that the situation deteriorates. However, it is noteworthy the fact that the ENP countries that trade, mainly, products other than fuel primary commodities have all negative trade balance with the EU. In

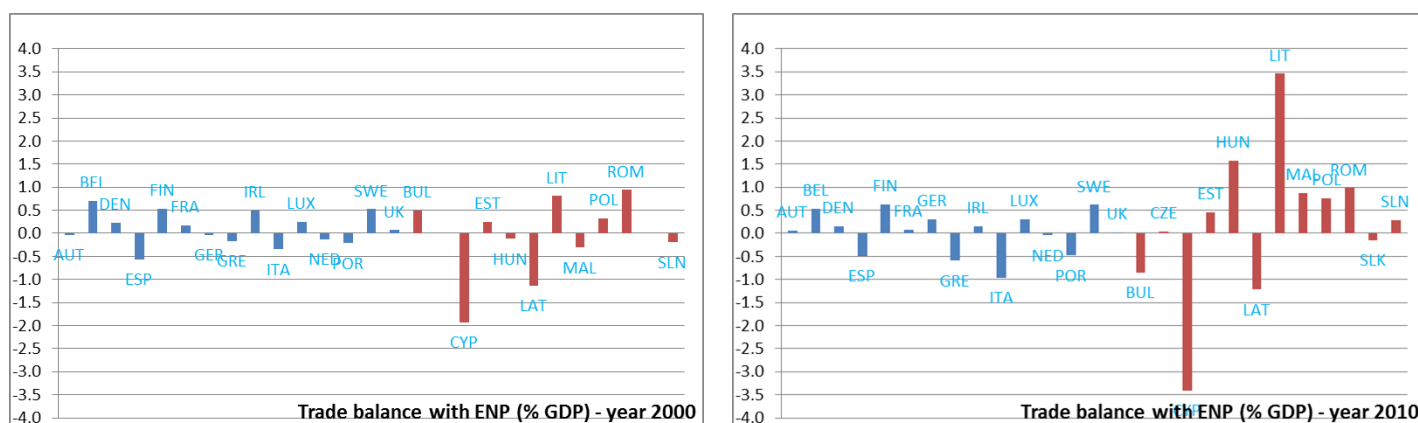
contrast, some of the ENP countries (i.e. Libya, Azerbaijan, and Algeria) that trade, mainly, fuel primary commodities have positive trade balance with the EU. This finding accentuates that the fuel sector is important not only for the EU but also for (some of) the ENP countries. Concerning the corresponding trade balance of the EU countries, the picture is rather different (see Figure 10). In particular, during the years 2000 and 2010, 13 and 18 (out of 27) EU countries have positive trade balance with the ENP countries. Either positive or negative, the trade balance figures for the EU countries are significantly smaller comparing to the corresponding figures for the ENP countries.

Figure 9: Index of Trade Balance (% of GDP) for the ENP countries, Years 2000 and 2010



Sources: UN COMTRADE Database / World Bank / Authors' elaboration

Figure 10: Index of Trade Balance (% of GDP) for the EU countries, Years 2000 and 2010

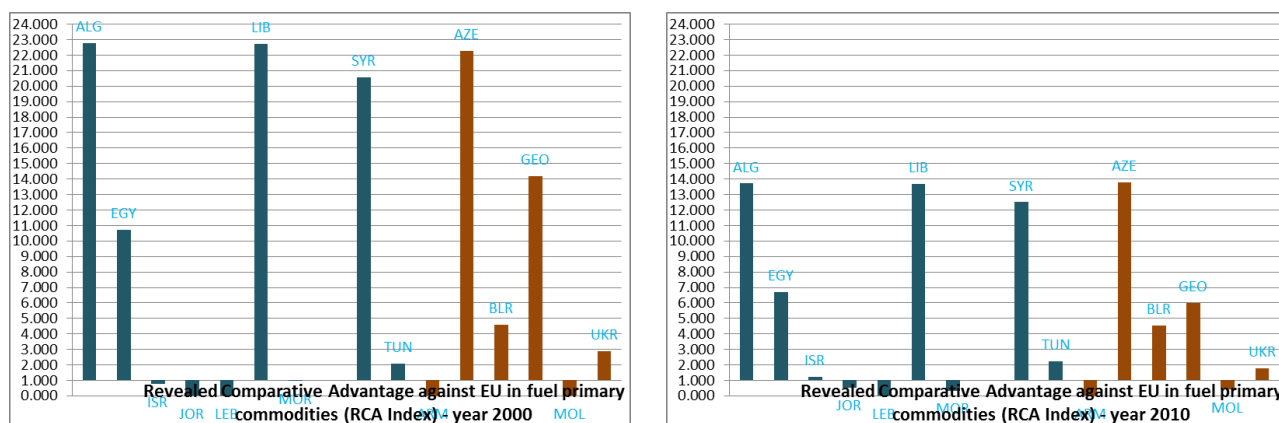


Sources: UN COMTRADE Database / World Bank / Authors' elaboration

The sector of fuel primary commodities is, indeed, a key-sector for the study of the EU-ENP trade relations (see Figures 11 and 12). This is so as in the year 2010, in particular, Algeria, Azerbaijan,

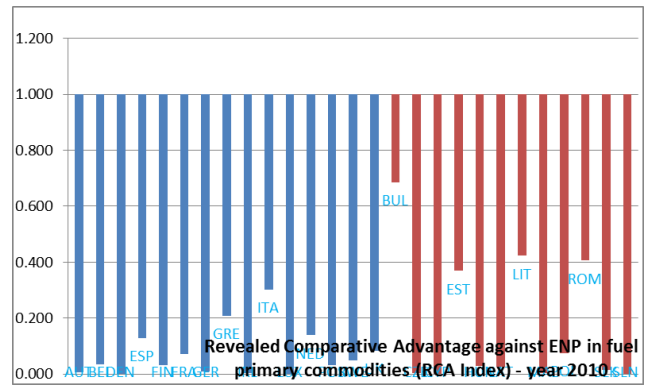
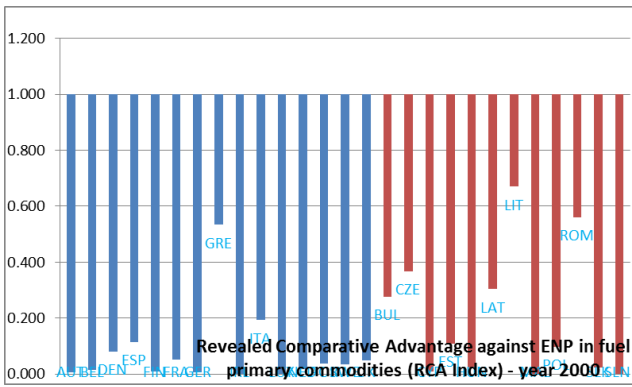
Belarus, Egypt, Georgia, Libya and Syria exhibit their highest revealed comparative advantage against the EU in this particular sector. Moreover, during the same year, Israel, Tunisia and Ukraine exhibit revealed comparative advantage against the EU in the sector of fuel primary commodities. These countries, however, exhibit their highest revealed comparative advantage against the EU in sectors other than the one of fuel primary commodities (mostly in the sector of non-fuel primary commodities). Looking at the EU countries, it is impressive that in the year 2010, in particular, there is no EU country exhibiting a revealed comparative advantage, against the ENP, in the sector of fuel primary commodities. In contrast, all EU countries exhibit a revealed comparative advantage in medium-skill capital-intensive commodities and / or in high-skill capital-intensive commodities. This finding indicates the asymmetric nature of the EU-ENP relations, reminding of the corresponding trade relations that, mostly, occur between the core and the peripheral EU countries (see Kallioras and Petrakos, 2010, Tsiapa, 2011 and Petrakos et al., 2012).

Figure 11: Index of Revealed Comparative Advantage, against the EU countries, for the ENP countries in the sector of fuel primary commodities, Years 2000 and 2010



Sources: UN COMTRADE Database / Authors' elaboration

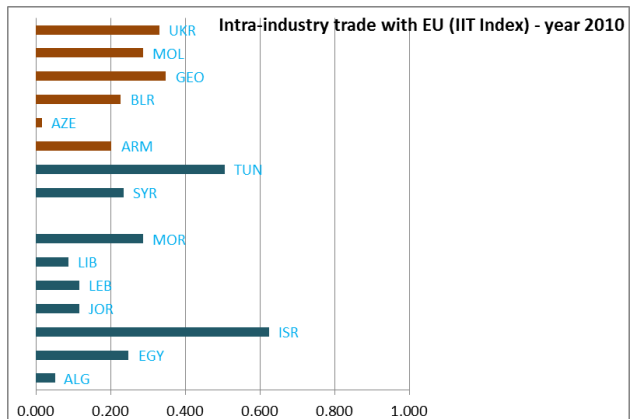
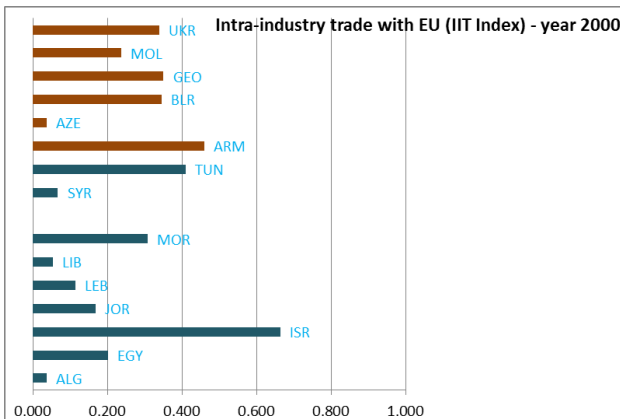
Figure 12: Index of Revealed Comparative Advantage, against the ENP countries, for the EU countries in the sector of fuel primary commodities, Years 2000 and 2010



Sources: UN COMTRADE Database / Authors' elaboration

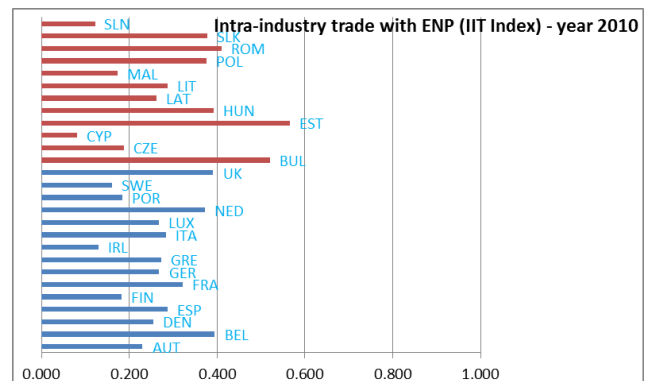
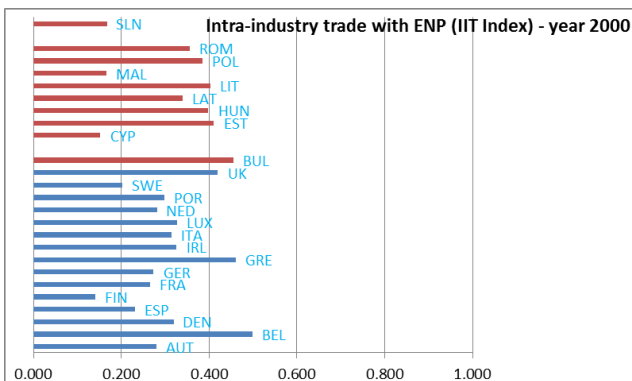
Asymmetry in trade relations means that trade relations are, mostly, of inter-industry type (i.e. more trade occurs between sectors rather than within sectors). Indeed, even though a significant number among the ENP countries tend, over time, to exhibit a trade relation, with the EU, which is more similar to the intra-industry pattern, the EU-ENP trade relation remains, by and large, an inter-industry one (see Figures 13 and 14). Only Israel, the most advanced ENP countries, has, mostly, intra-industry trade relations with the EU, in support of the new trade theory.

Figure 13: Index of Intra-Industry Trade for the ENP countries, Years 2000 and 2010



Sources: UN COMTRADE Database / Authors' elaboration

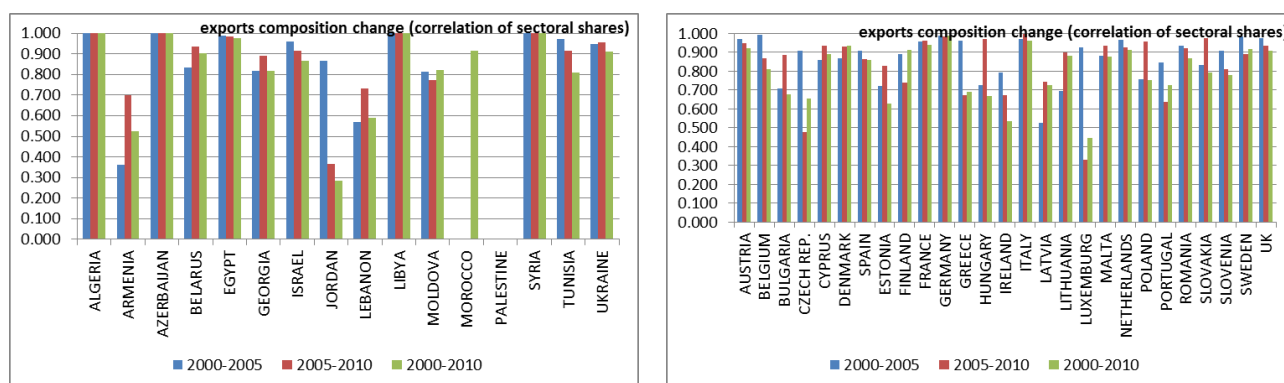
Figure 14: Index of Intra-Industry Trade for the EU countries, Years 2000 and 2010



Sources: UN COMTRADE Database / Authors' elaboration

The persistency of the inter-industry type of trade relations between the EU and the ENP countries has its explanation on the diachronic evolution of the sectoral shares of the corresponding trade activity (see Figure 15). In particular, it is evident that, over time, the sectoral composition of exports flows from the ENP to the EU countries remains, more or less, unchanged. Only the figures for Armenia, Jordan and Lebanon may consider being rather small (indicating rather significant changes). In contrast, Algeria, Azerbaijan and Libya experienced absolute no change. For the majority of the ENP countries changes are experienced mainly during the period 2000–2005 (i.e. mostly prior to implementation of the ENP). However, there are some ENP countries (i.e. Egypt, Israel, Jordan, Moldova and Tunisia) experiencing greater changes during the period 2005–2010. The rather low changes in the sectoral composition of the ENP exports to the EU countries provide strong indication that the ENP countries, in their great majority, have not (successfully) implemented export-led strategies towards the diversification (expansion) of their exports bases (see also Havlik et al., 2012 and Boschma and Capone, 2013). The situation is rather different concerning the EU countries. There are the new EU member-states that, over time, experience significant changes, many of them during the period 2005–2010 (i.e. after their accession to the EU). These changes can be considered a precursor to possible changes with respect to the ENP countries.

Figure 15: Index Trade Composition Change (correlation of exports sectoral shares) for the ENP and EU countries, Periods 2000–2005, 2005–2010, and 2000–2010



Sources: UN COMTRADE Database / Authors' elaboration

Closing the discussion about the EU–ENP trade, it is necessary to focalize on the spatial direction of trade flows in order to detect possible spatial links; otherwise, the picture would not be complete.

Indeed, the examination of the spatial allocation of the ENP trade flows to and from the EU countries reveals some interesting findings (see Figures A1 and A2, in the Appendix). In particular, it can be observed that, over time, the ENP exports are directed mainly to the EU15 countries. This is an extremely important finding, taking, especially, into consideration that for many ENP countries the share of the main exports partner surpasses even the level of 33% (i.e. the one third of the total trade activity). In particular, in the year 2000, the lowest main exports partner share is approximately 19% (Lebanon) and the highest one is approximately 72% (Armenia). The respective shares in the year 2010 are 15% (Israel) and 56% (Azerbaijan). Moreover, it can be observed that the shares of the new EU member–states are extremely low. In the year 2000, the sum of all the aforementioned shares surpasses the level of 20% only in Armenia, Belarus, Moldova and Ukraine. In the year 2010, this holds only for Armenia, Belarus, Georgia, Moldova and Ukraine. All the aforementioned countries belong to the ENP East and it is, rather, natural to conduct trade transactions with the new EU countries located in Eastern Europe. This finding accentuates the positive impact of historical and linguistic ties on the conduct of trade activity. Indeed, taking a closer look, cases such as the exports flows from Libya to Italy and from Morocco and Tunisia to France can be, also, detected. Concerning the ENP imports, there is an analogous situation since the latter come mainly from the EU15 countries. However, there is an exception that concerns Romania, which is the main imports partner for Moldova. Despite the presence of the exception above, the shares of the new EU member–states are, again, extremely low. In particular, in the year 2000, the sum of all the aforementioned shares surpasses the level of 20% only in Belarus, Moldova and Ukraine. In the year 2010, this holds only for Armenia, Belarus, Georgia, Moldova and Ukraine. This finding is similar to the one that counts for the corresponding exports flows. Again, it seems that history and language may have an impact.

Extremely interesting are, also, the findings derived from the spatial allocation of the EU trade flows to and from the ENP countries (see Figures A3 and A4, in the Appendix). Concerning the EU exports, in particular, it can be observed that for the vast majority of the EU countries, the shares of the main ENP exports partner are quite high. In particular, in the year 2000, the lowest main exports partner share is approximately 23% (Austria) and the highest one is approximately 86%

(Bulgaria). In the year 2010, the corresponding figures are approximately 22% (Sweden) and 81% (Hungary). Noteworthy is the fact the main ENP exports partner for the new EU member-states belongs to the ENP East for the vast majority of cases. The only exceptions are Slovenia, in the year 2000, and Estonia and Slovenia, in the year 2010. The picture for the EU imports flows from the ENP countries is quite similar. In particular, in the year 2000, the lowest main imports partner share is approximately 18% (Italy) and the highest one is approximately 80% (Malta). In the year 2010, the corresponding figures are approximately 17% (Italy) and 80% (Malta). Impressive is fact that in the year 2000 Ukraine is the main imports partner for all the new EU countries, with the exceptions of Romania, which imports more intensively from Belarus, Cyprus, which imports more intensively from Syria, and Malta, which imports more intensively from Libya. Again, in the year 2010 Ukraine is the main imports partner for all the new EU countries, with the exceptions of Latvia and Lithuania, which import more intensively from Belarus, Cyprus, which imports more intensively from Lebanon, and Malta, which imports more intensively from Libya. The above cases as well as cases such as the imports of Spain from Morocco indicate that, indeed, historical and linguistic ties are present.

## **6. Conclusions and some policy recommendations**

The analysis of the geography of the EU–ENP trade relations provides the backdrop against which the success of the ENP undertaking can be evaluated. Overall, it seems that the gradual dismantling of the economic borders between the EU and the ENP countries allows for the expansion of the EU–ENP trade activities (i.e. trade flows have almost tripled between the years 2000 and 2010). Indeed, the EU is the most important trade partner for the majority of the ENP countries. However, it loses its shares over time. This indicates the slow progress of the DCFTAs (mainly because the “capabilities–expectations” gap remains) as well as the restrictions arising from the EU sectoral policies (and the CAP, in particular). At the same time, the BRIC countries exhibit a noteworthy dynamism, becoming important ENP trade partners, and this may increase their political influence in the ENP area.

Definitely, there is room for the expansion of the EU–ENP trade relations (especially taking into account that tariff and non-tariff barriers are still high). This is the reason that triggers debate about the (re-)invigoration of the ENP. The political instability in the ENP South and the slow reforms in the ENP East indicate that the “carrot and stick” tactic has not (at least, not so far)

“produced” the anticipated results. Thus, mandatory *acquis communautaire* compliance related to political requirements should not be a precondition for trade negotiations (and agreements), but for further financial and technical support. It is imperative for an ENP review to consider a further (even unilateral) liberalization of trade and a stronger financial support mechanism (similar to PHARE or CARDS) as a reward for reforms. Considering that the ENP area is sensitive in economic (i.e. low welfare level) and in demographic (i.e. high presence of rural population) terms, the current perspective of the ENP runs the danger for the ENP countries to “export” people instead of products to the EU market.

Of course, despite that there is a room for further expansion of the EU–ENP trade, the structure of the EU–ENP trade relations may not be leading to a sustainable type of integration, and, thus, to a reduction of the existing development gap. The clear-cut empirical findings of the paper indicate that the EU–ENP trade relation is, apart from declining, unbalanced and asymmetric. This is so as the ENP countries are not important trade partners for the EU countries, and, most of all, they 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 ENP countries to diversify and expand their export bases, implementing export-led growth strategies. Especially for the ENP countries that do not exhibit comparative advantage in the sector of fuel primary commodities, this type of trade relations provides strong implications (given the recent experience of the Southern EU member-states) that trade deficits may be, quickly, “converted” into fiscal deficits. It seems that the position of the neoclassical school of thought is difficult to verify (given, of course, that its assumptions are not fully satisfied). On the contrary, the well-established “core-periphery” EU spatial pattern of development seems to be “reproduced” in the wider EU area.

The possible discussion about the invigoration of the ENP must not forget the fact that the ENP area is still fragmented, with weak demand–supply chain links. Not only the content but also the scope of the ENP is a salient issue. For the ENP area not to become the “new European South”, it is important for development efforts to assume active and coordinated plans not only at the national but also at the (macro-)regional level. DCFTAs should adopt a new perspective, taking into consideration the specificities of the ENP area, their initial constraints and the ensuing competitive pressures that EU association brings. Despite their current fragmentation, (many of) the ENP countries have many historical, political and cultural communalities, and, most importantly, common future trajectories.



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## Appendix

Table A1: Sectors under consideration (according to Harmonized System (HS) sector activity)

HS	NAME	HS	NAME	HS	NAME
1	Live animals	34	Soaps, lubricants, waxes, candles, modelling pastes	67	Bird skin, feathers, artificial flowers, human hair
2	Meat and edible meat offal	35	Albuminoids, modified starches, glues, enzymes	68	Stone, plaster, cement, asbestos, mica, etc articles
3	Fish, crustaceans, molluscs, aquatic invertebrates nes	36	Explosives, pyrotechnics, matches, pyrophorics, etc	69	Ceramic products
4	Dairy products, eggs, honey, edible animal product nes	37	Photographic or cinematographic goods	70	Glass and glassware
5	Products of animal origin, nes	38	Miscellaneous chemical products	71	Pearls, precious stones, metals, coins, etc
6	Live trees, plants, bulbs, roots, cut flowers etc	39	Plastics and articles thereof	72	Iron and steel
7	Edible vegetables and certain roots and tubers	40	Rubber and articles thereof	73	Articles of iron or steel
8	Edible fruit, nuts, peel of citrus fruit, melons	41	Raw hides and skins (other than furskins) and leather	74	Copper and articles thereof
9	Coffee, tea, mate and spices	42	Articles of leather, animal gut, harness, travel goods	75	Nickel and articles thereof
10	Cereals	43	Furskins and artificial fur, manufactures thereof	76	Aluminium and articles thereof
11	Milling products, malt, starches, inulin, wheat gluten	44	Wood and articles of wood, wood charcoal	77	
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	45	Cork and articles of cork	78	Lead and articles thereof

13	Lac, gums, resins, vegetable saps and extracts nes	46	Manufactures of plaiting material, basketwork, etc.	79	Zinc and articles thereof
14	Vegetable plaiting materials, vegetable products nes	47	Pulp of wood, fibrous cellulosic material, waste etc	80	Tin and articles thereof
15	Animal, vegetable fats and oils, cleavage products, etc	48	Paper & paperboard, articles of pulp, paper and board	81	Other base metals, cermets, articles thereof
16	Meat, fish and seafood food preparations nes	49	Printed books, newspapers, pictures etc	82	Tools, implements, cutlery, etc of base metal
17	Sugars and sugar confectionery	50	Silk	83	Miscellaneous articles of base metal
18	Cocoa and cocoa preparations	51	Wool, animal hair, horsehair yarn and fabric thereof	84	Nuclear reactors, boilers, machinery, etc
19	Cereal, flour, starch, milk preparations and products	52	Cotton	85	Electrical, electronic equipment
20	Vegetable, fruit, nut, etc food preparations	53	Vegetable textile fibres nes, paper yarn, woven fabric	86	Railway, tramway locomotives, rolling stock, equipment
21	Miscellaneous edible preparations	54	Manmade filaments	87	Vehicles other than railway, tramway
22	Beverages, spirits and vinegar	55	Manmade staple fibres	88	Aircraft, spacecraft, and parts thereof
23	Residues, wastes of food industry, animal fodder	56	Wadding, felt, nonwovens, yarns, twine, cordage, etc	89	Ships, boats and other floating structures
24	Tobacco and manufactured tobacco substitutes	57	Carpets and other textile floor coverings	90	Optical, photo, technical, medical, etc apparatus
25	Salt, sulphur, earth, stone, plaster, lime and cement	58	Special woven or tufted fabric, lace, tapestry etc	91	Clocks and watches and parts thereof
26	Ores, slag and ash	59	Impregnated, coated or laminated textile fabric	92	Musical instruments, parts and accessories
27	Mineral fuels, oils, distillation products, etc	60	Knitted or crocheted fabric	93	Arms and ammunition, parts and accessories thereof
28	Inorganic chemicals, precious metal compound, isotopes	61	Articles of apparel, accessories, knit or crochet	94	Furniture, lighting, signs, prefabricated buildings
29	Organic chemicals	62	Articles of apparel, accessories, not knit or crochet	95	Toys, games, sports requisites
30	Pharmaceutical products	63	Other made textile articles, sets, worn clothing etc	96	Miscellaneous manufactured articles
31	Fertilizers	64	Footwear, gaiters and the like, parts thereof	97	Works of art, collectors pieces and antiques
32	Tanning, dyeing extracts, tannins, derivs, pigments etc	65	Headgear and parts thereof	98	
33	Essential oils, perfumes, cosmetics, toileteries	66	Umbrellas, walking-sticks, seat-sticks, whips, etc	99	Commodities not elsewhere specified

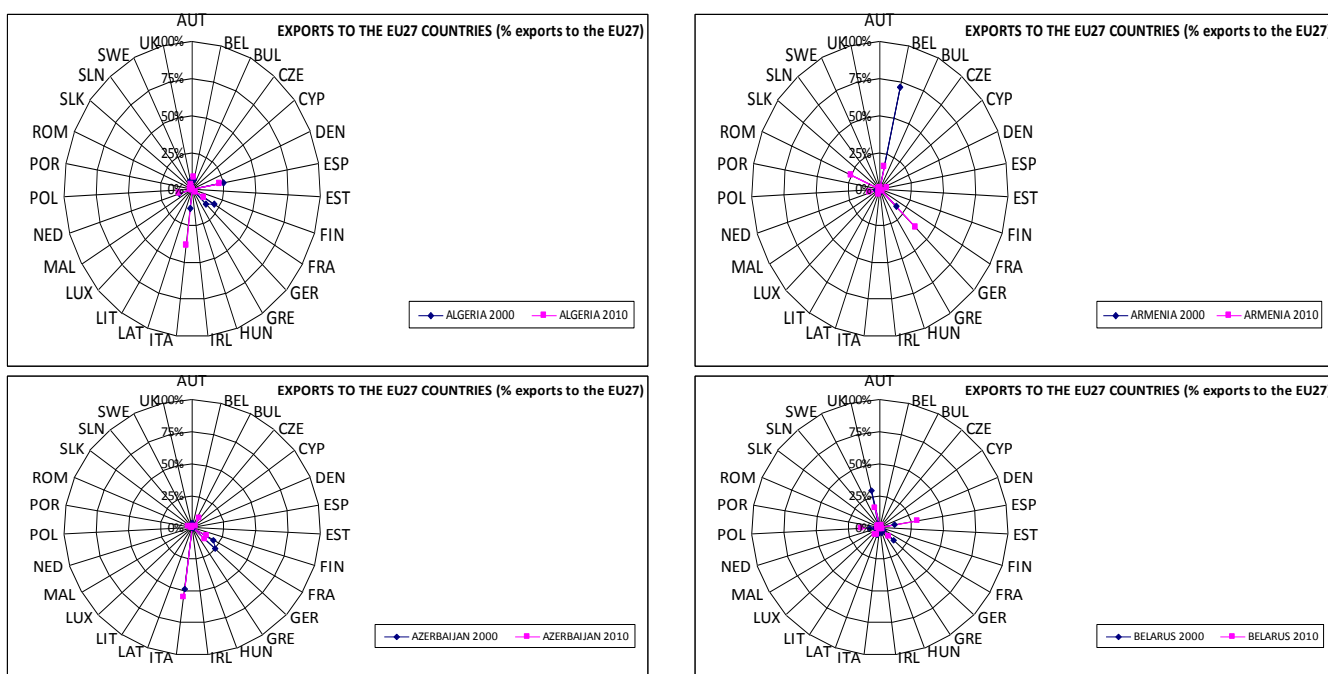
Source: UN COMTRADE Database

Table A2: Groups of sectors under consideration (*according to Harmonized System (HS) sector activity*)

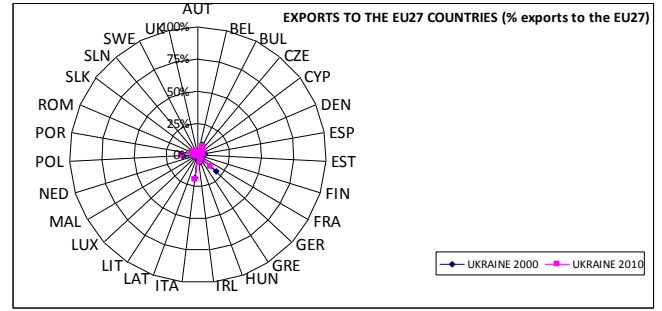
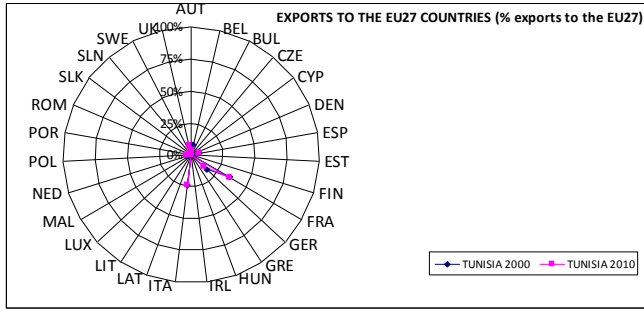
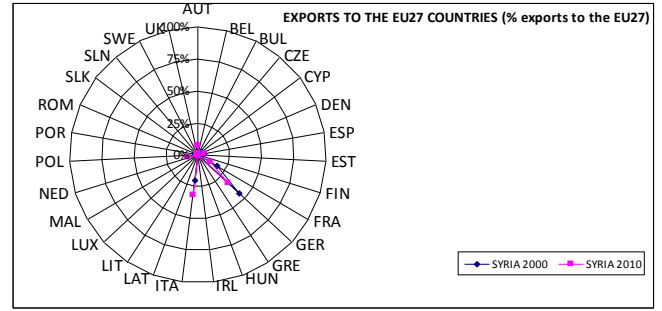
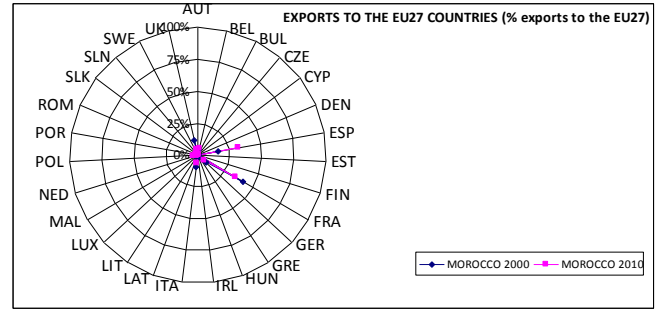
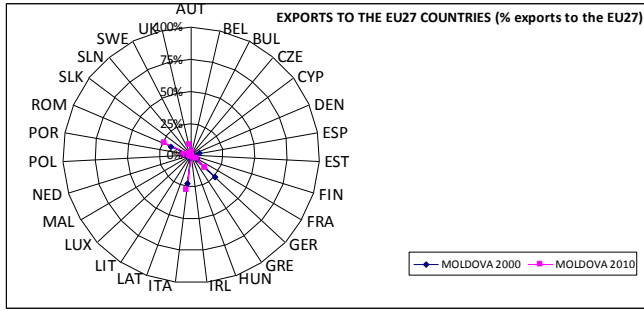
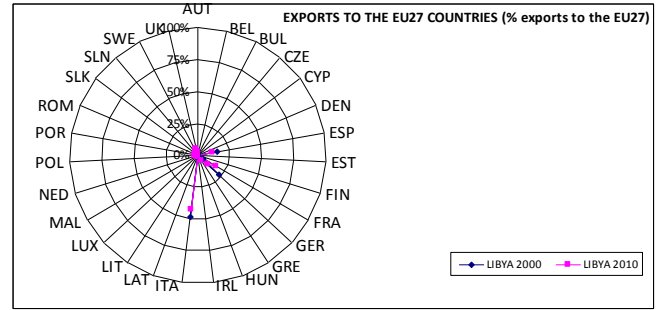
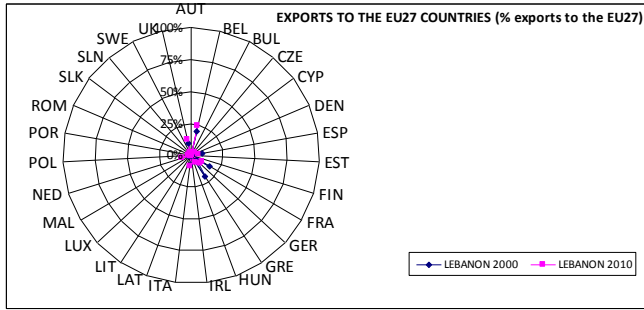
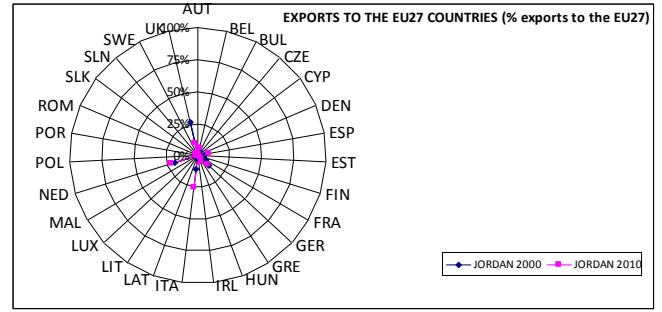
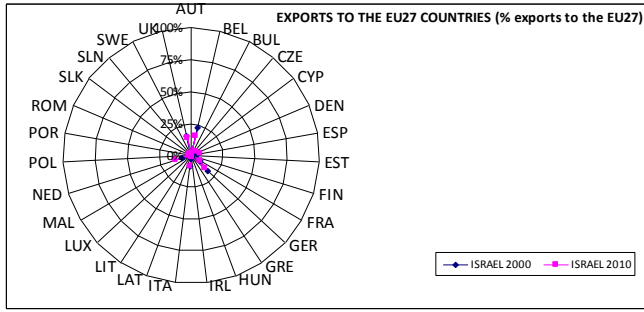
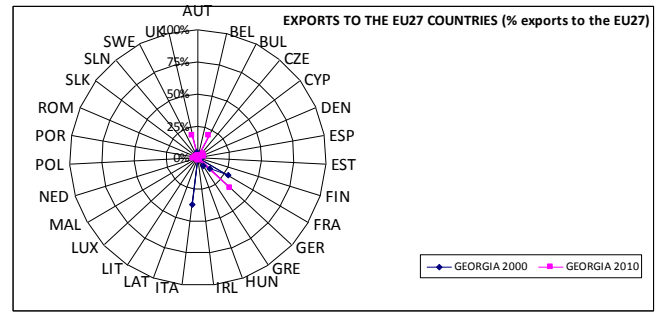
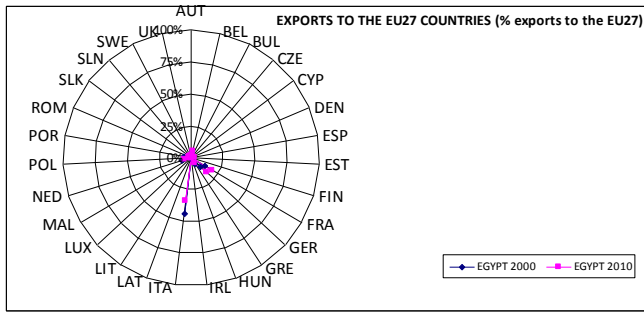
HS GROUP	NAME	HS
1	Non-fuel primary commodities	1-26, 50-52, 74-76, 78-81
2	Fuel primary commodities	27
3	Labor-intensive and resource-based commodities	41-49, 53-65, 68-71, 95
4	Low skill-, technology-, capital- and scale-intensive commodities	72-73, 82-83, 86,89, 92, 94, 96-97, 99
5	Medium skill-, technology-, capital- and scale-intensive commodities	39-40, 66-67, 84-85, 87, 93
6	High skill-, technology-, capital- and scale-intensive commodities	28-38, 88, 90-91

Source: UNCTAD (1996)

Figure A1: Spatial allocation of the ENP exports to the EU countries (% of total exports to the EU), Years 2000 and 2010

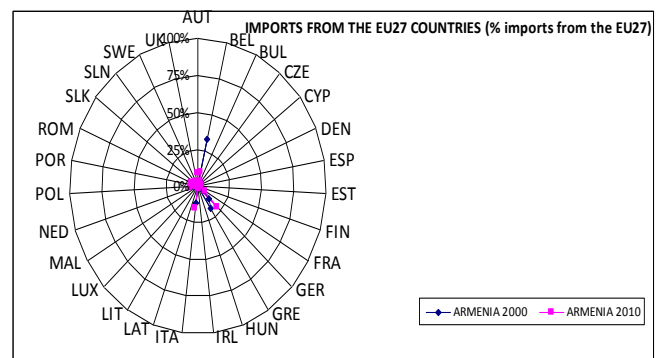
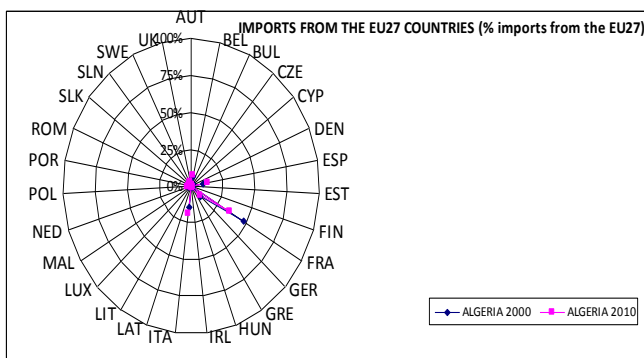


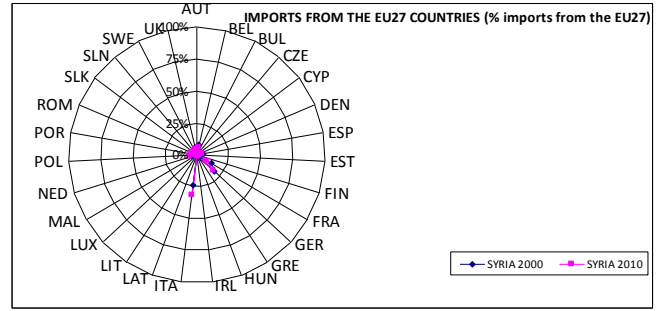
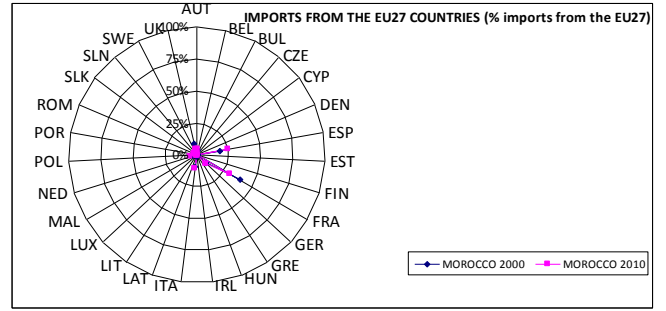
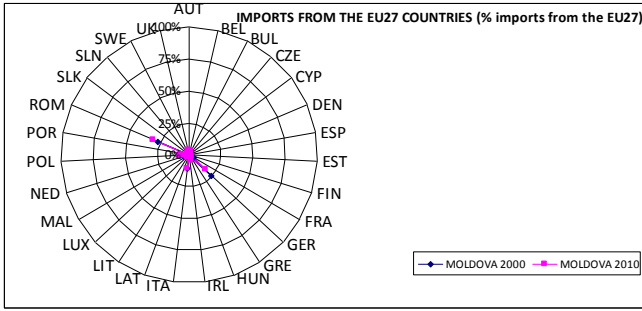
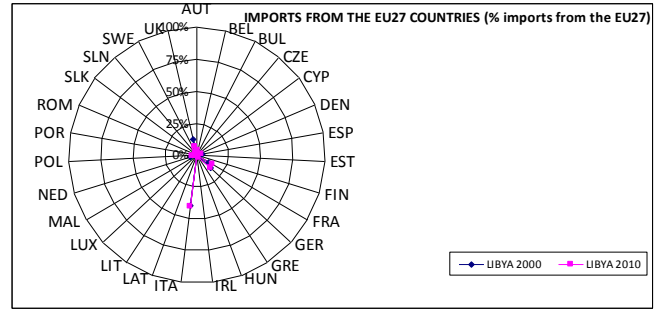
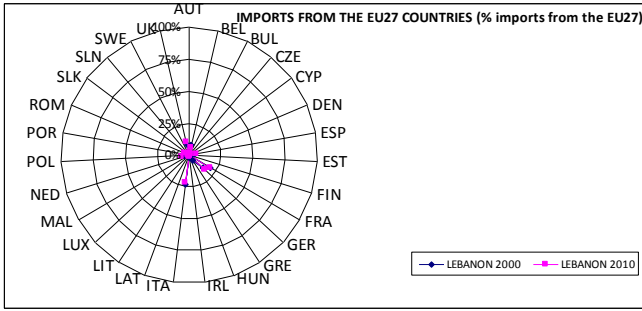
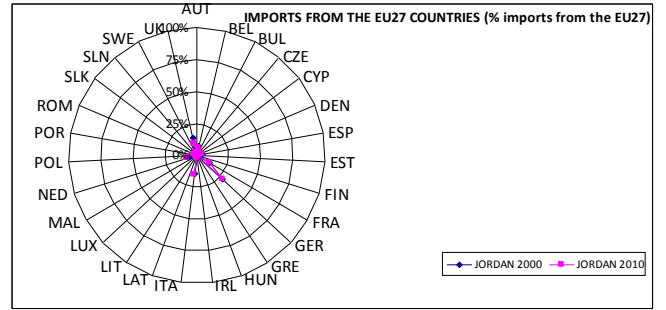
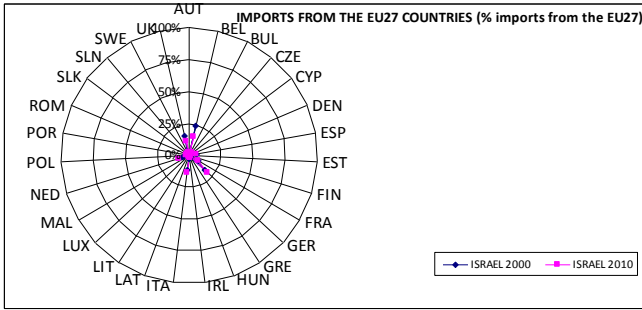
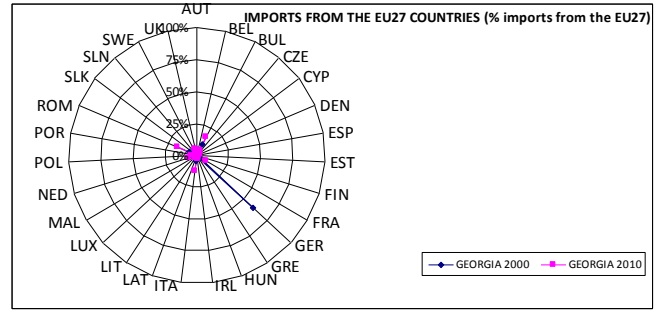
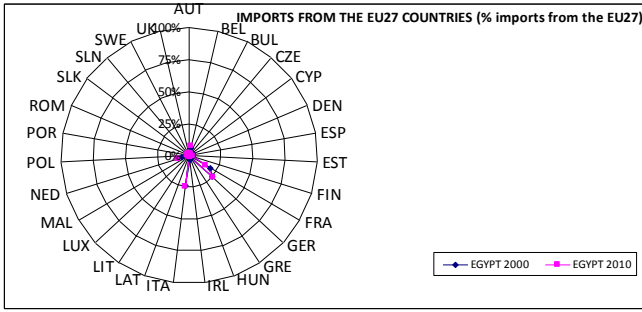
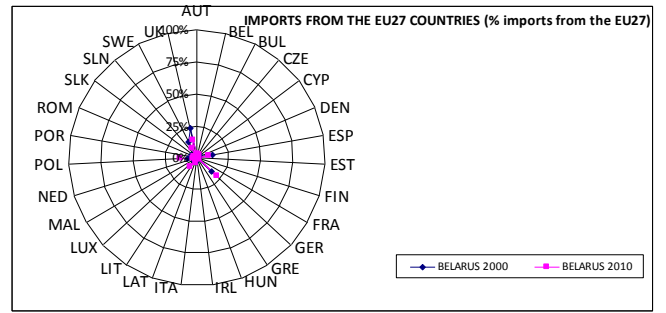
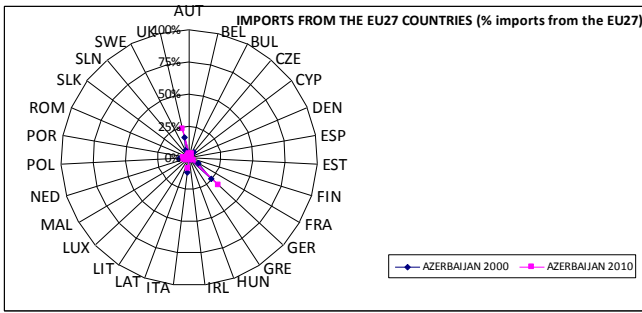


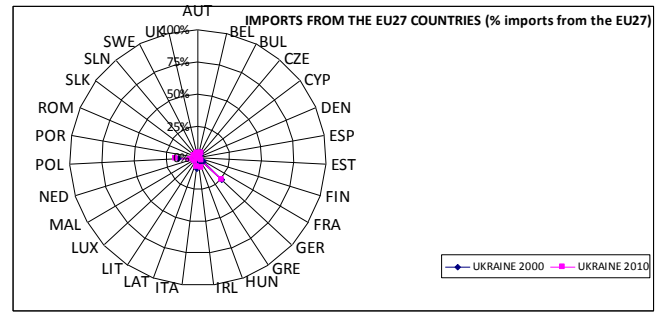
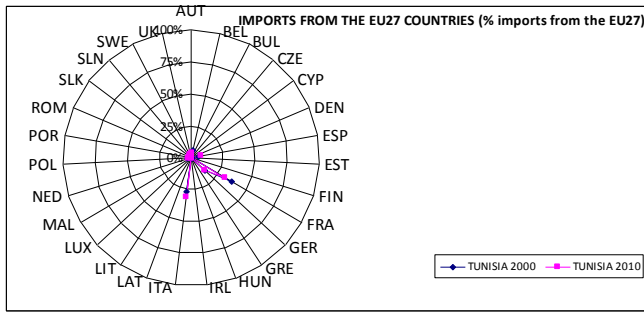


Sources: UN COMTRADE Database / Authors' elaboration

Figure A2: Spatial allocation of the ENP imports from the EU countries (% of total imports from the EU), Years 2000 and 2010

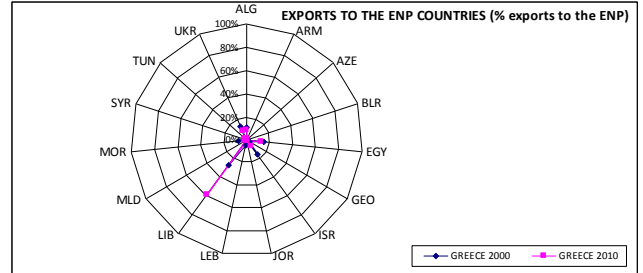
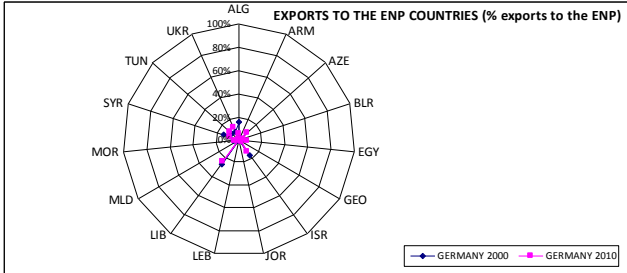
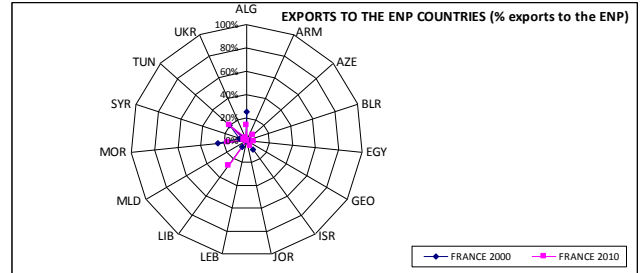
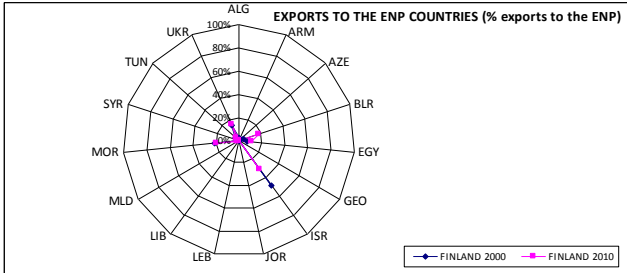
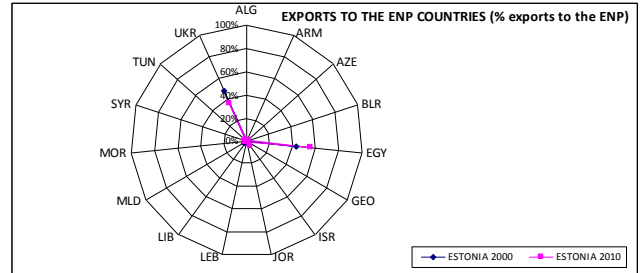
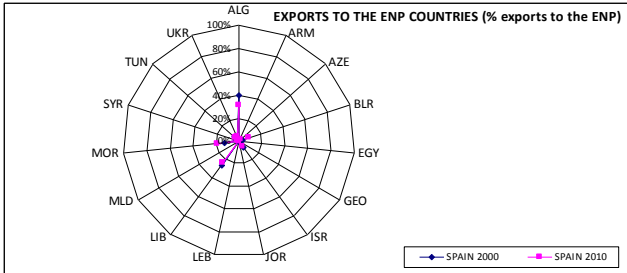
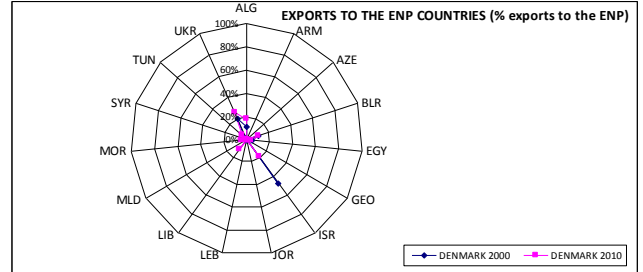
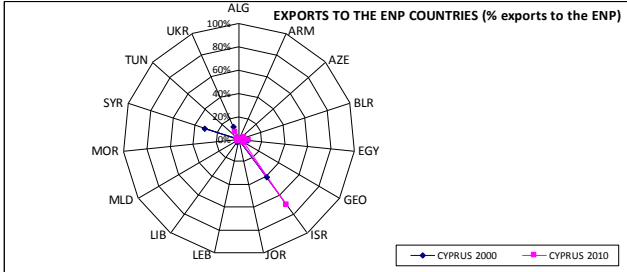
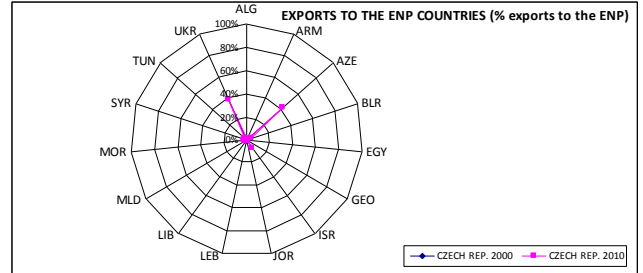
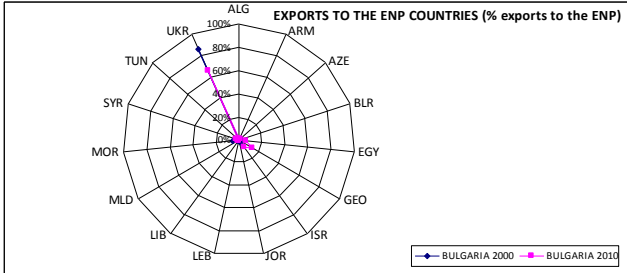
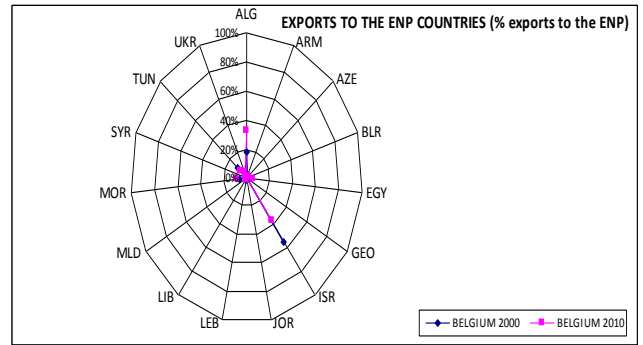
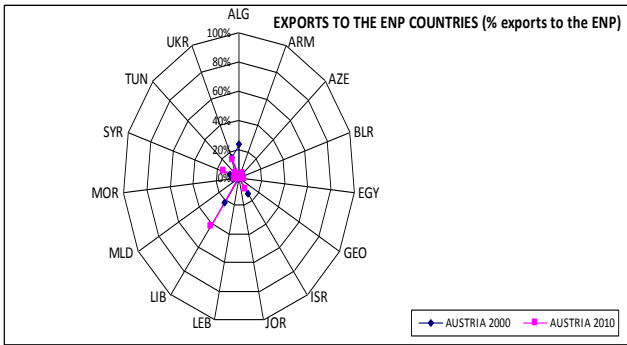


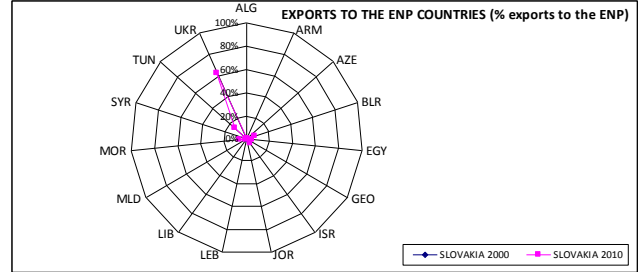
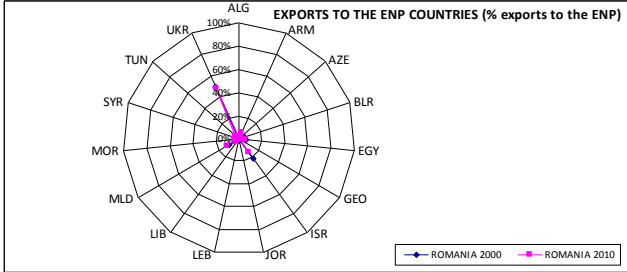
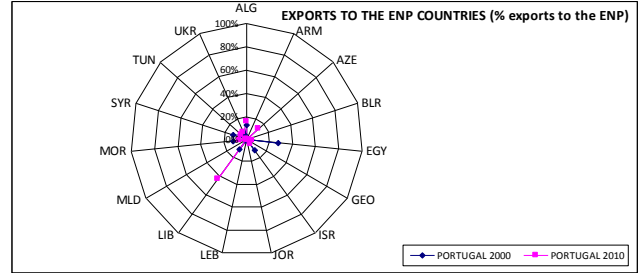
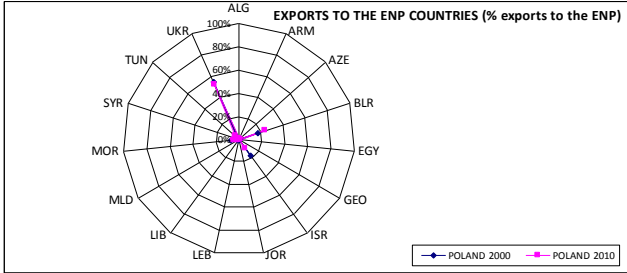
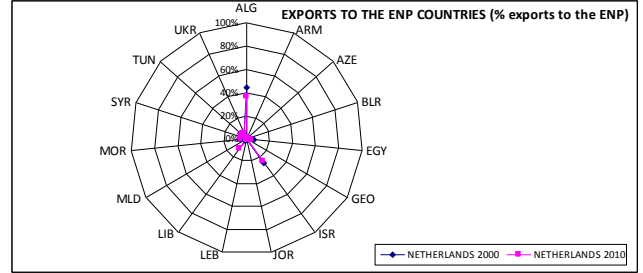
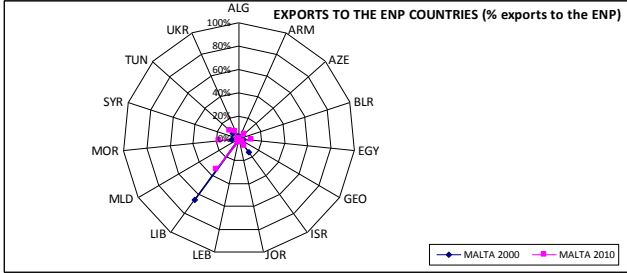
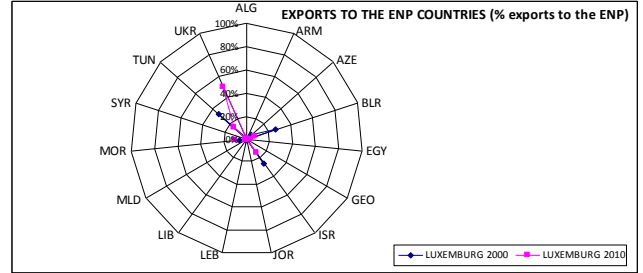
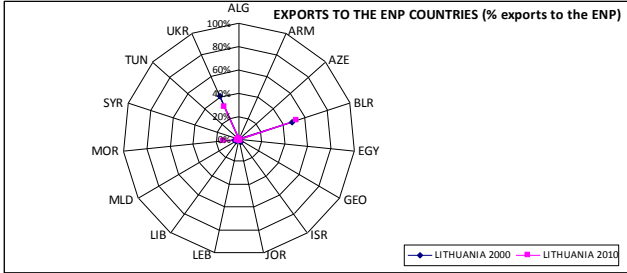
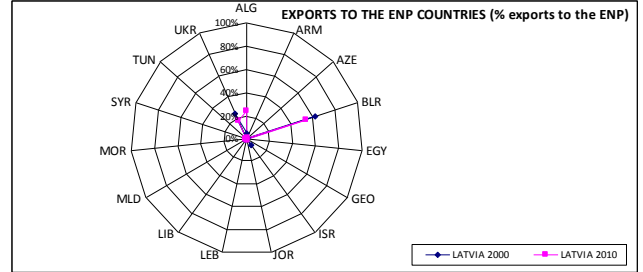
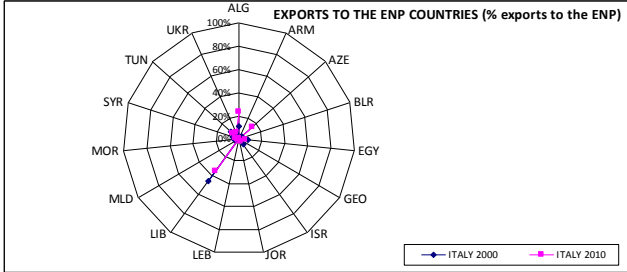
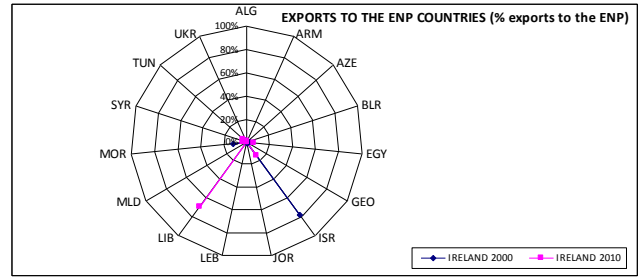
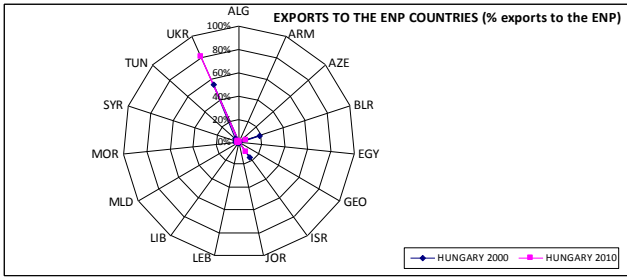


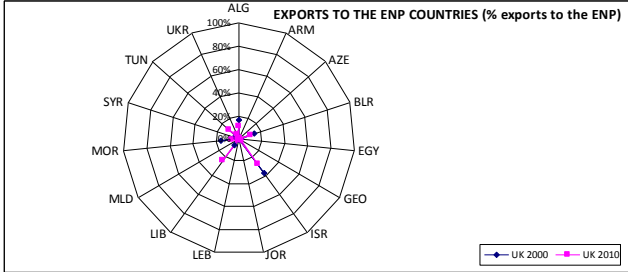
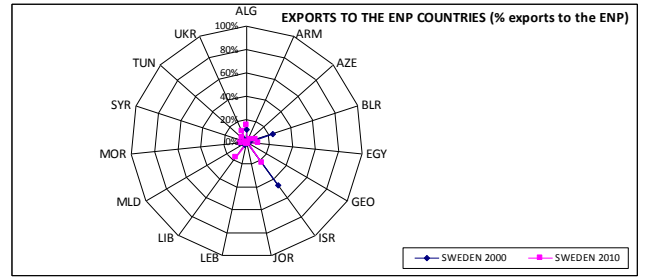
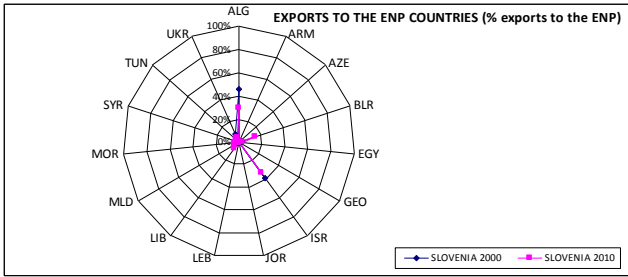


Sources: UN COMTRADE Database / Authors' elaboration

Figure A3: Spatial allocation of the EU exports to the ENP countries (% of total exports to the ENP), Years 2000 and 2010

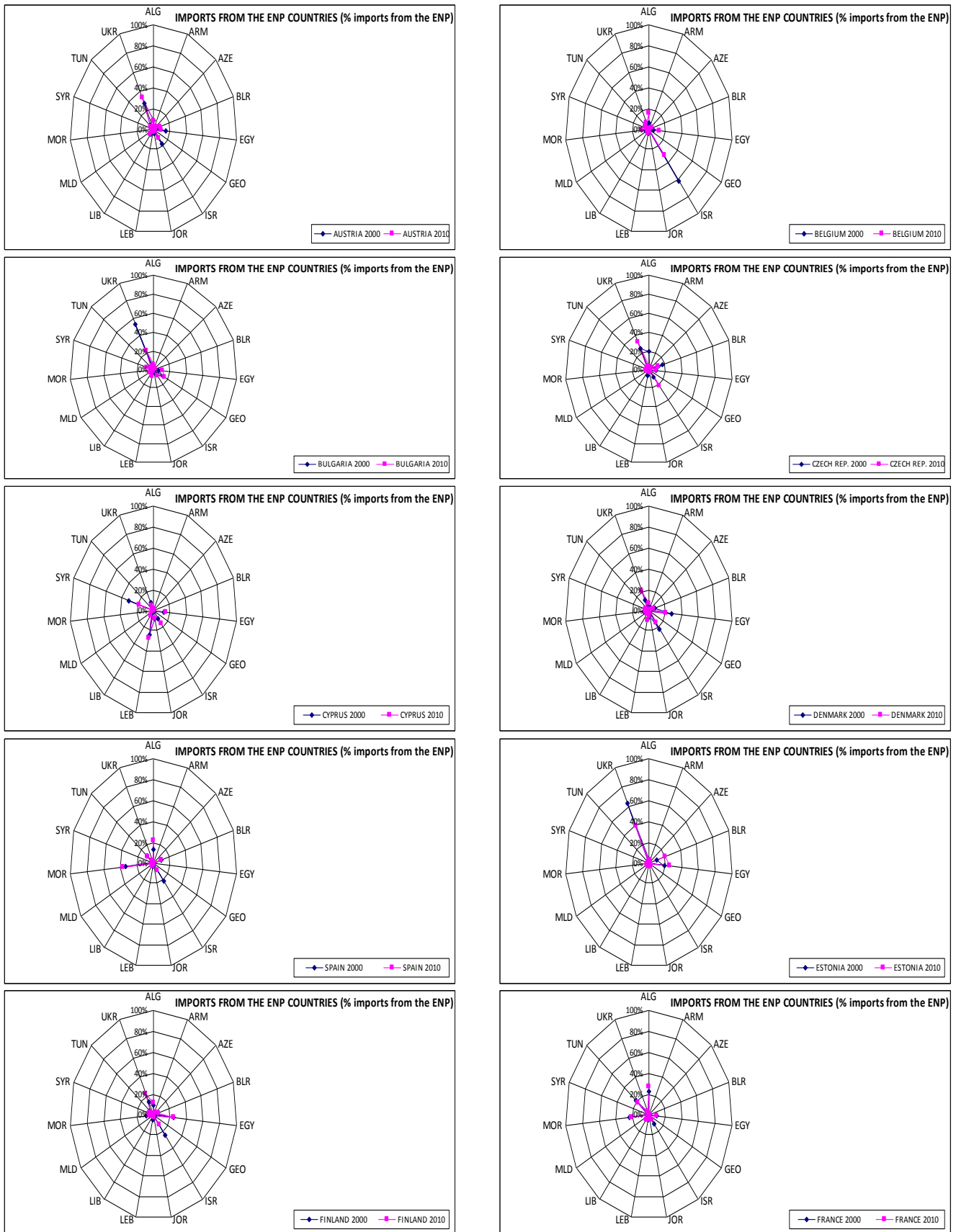




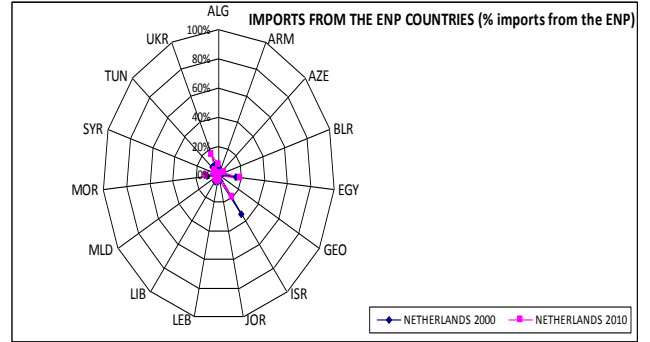
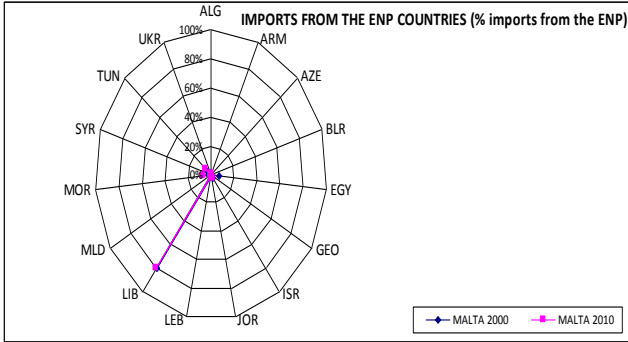
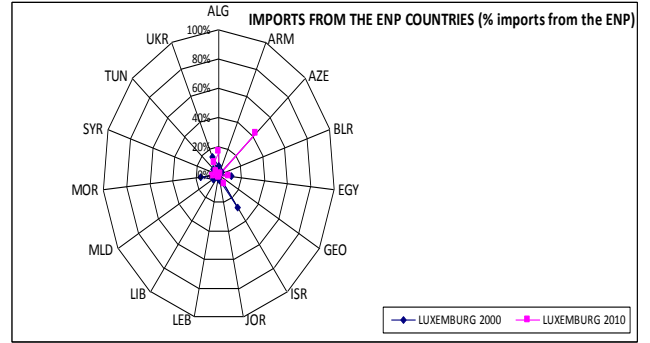
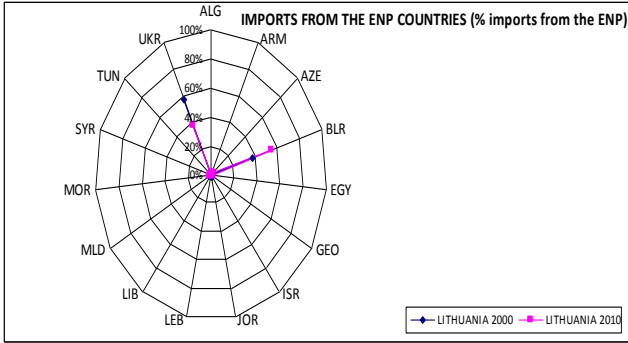
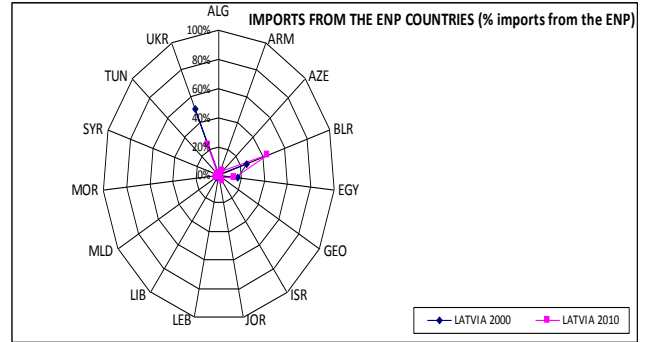
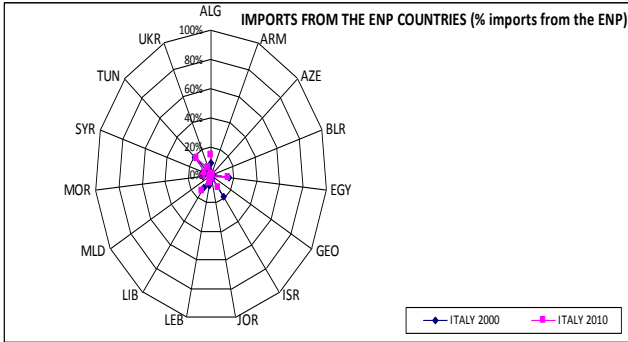
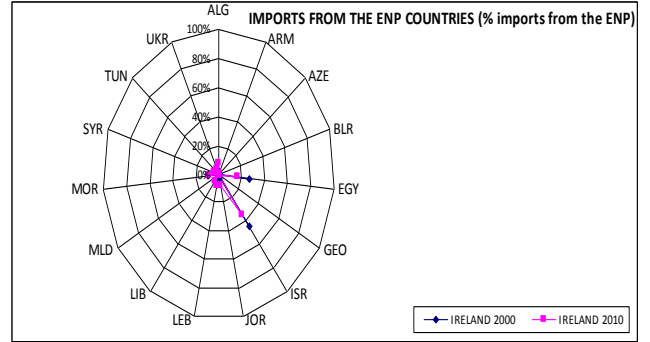
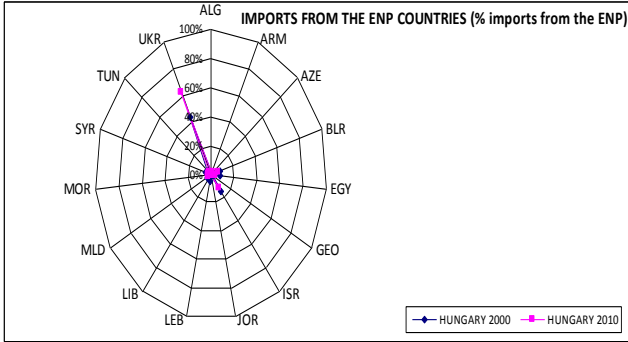
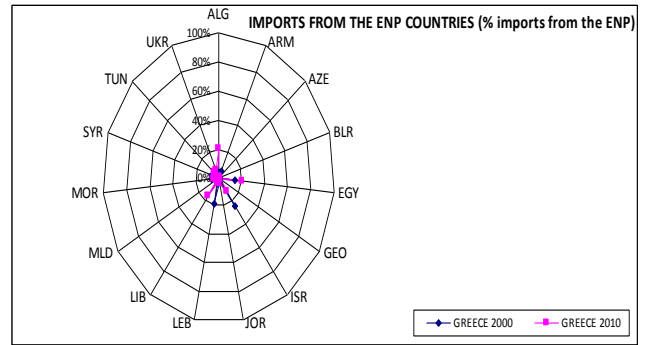
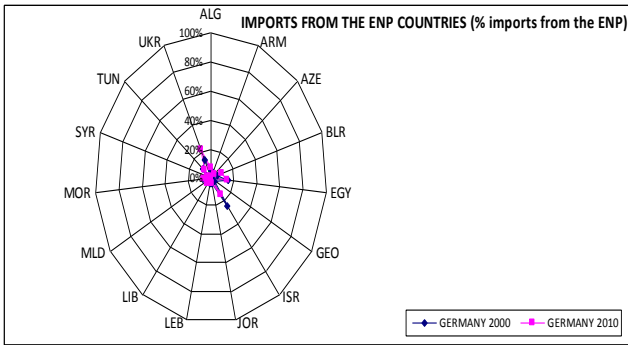


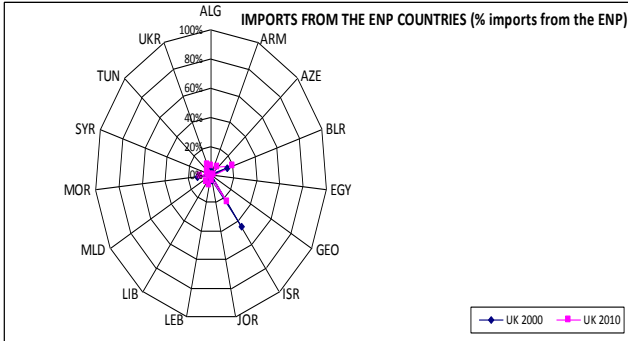
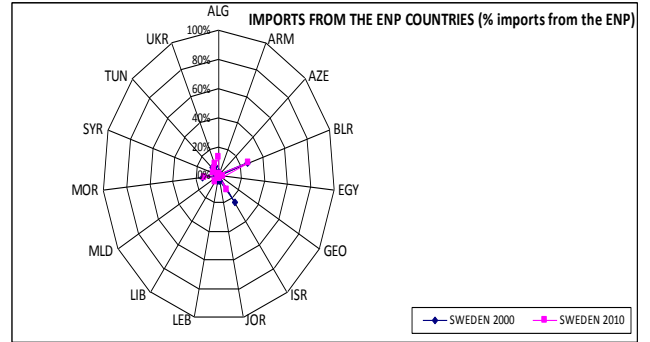
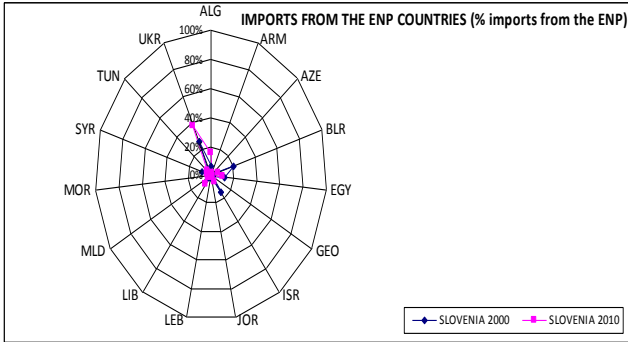
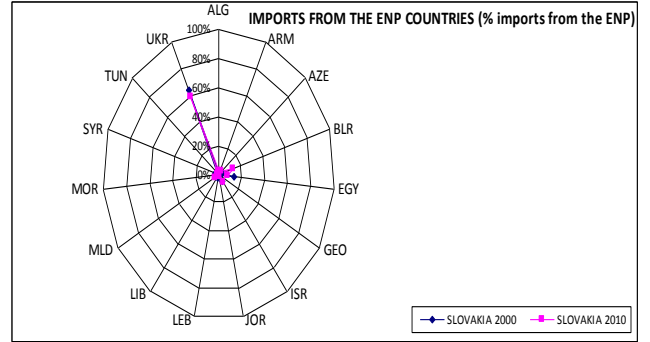
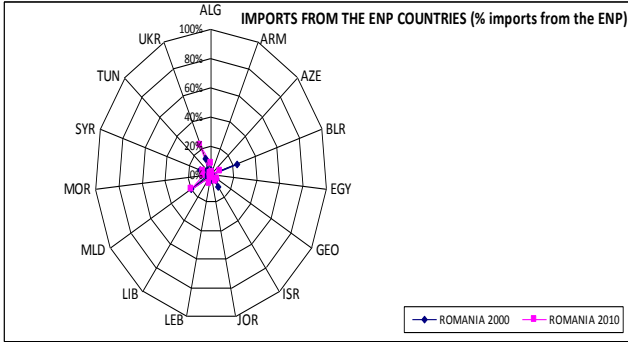
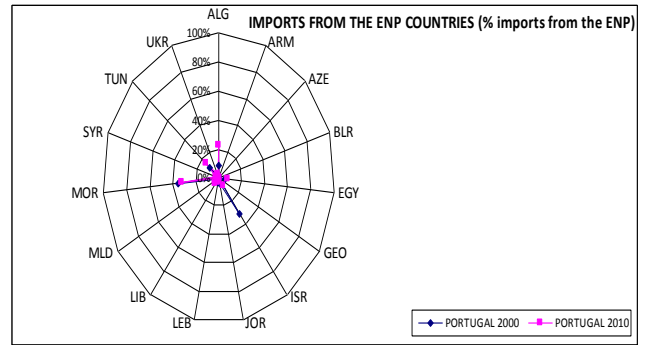
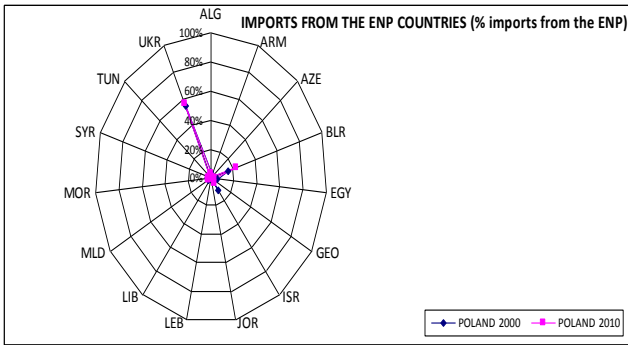
Sources: UN COMTRADE Database / Authors' elaboration

Figure A4: Spatial allocation of the EU imports from the ENP countries (% of total imports from the ENP), Years 2000 and 2010









Sources: UN COMTRADE Database / Authors' elaboration