Edi Defrancesco[1]
Università di Padova, Italy
M.Bruna Zolin[2]
Università Cà Foscari Venezia, Italy

EU ENLARGEMENT AND AGRICULTURAL TRADE BETWEEN NEW AND OLD MEMBER STATES: ANY CHANGES ONE YEAR AFTER ACCESSION?[3]

Abstract. The paper aims to evaluate whether or not the last EU enlargement to the new 10 member states (EUN-10) has influenced the intra EU trade of agricultural products. In particular, the analysis focuses on the effects on trade between two groups of countries EU-15 and EUN-8 (i.e. the Central-Eastern Europe new members countries) of the EU-accession process. The import-export flows show a noticeable increase in trade between the two areas over the last decade. This increase surely stems from the opening up process, but according to second best theory in international trade which applies to Customs Unions – it not necessarily favours efficiency as far as social welfare is concerned. The analysis shows also that the comparative advantages in certain products, which ten years ago fuelled trade, do not appear to have altered the position of the two groups of countries. Focusing on agricultural products the integration process, which was already underway during the pre-accession period, has maintained and not reduced their specific specialization.

Keywords: EU enlargement, agricultural trade

Introduction

The last EU enlargement to the new 10 member states (EUN-10) has been preceded by a large debate inside the EU-15 on its medium-long run effects on the agriculture of the different member countries and on trade. For example, differing positions reflected the concern of farmers and, more generally, of other actors who, despite being fully aware of the enormous opportunities offered by expansion, were nonetheless concerned by the effects of increased competitiveness within the EU. Many Mediterranean member countries' farmers – among them, Italians - raised further doubts on a possible future reduction of the CAP support (both production related support and structural or rural development funds), taking into account the structural and products-related factors differentiating their agriculture from Central-Northern Europe one.

Just two years after the EUN-10 accession, the paper focuses on certain aspects of the economic integration process of Central and East European countries (EUN-8), exploring the effects of the enlargement on the agricultural products' trade , which was already taking place well before May 2004 under the pre accession process. However, the scope and complexity of a complete, across the board view of the results regarding the extent with which the objective of cohesion has been reached, will need a more specific, detailed analysis. In particular, the work

[1] Associate professor, email: edi.defrancesco@unipd.it
[2] Associate professor, email: zolin@unive.it
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examines Eurostat data on agricultural products' trade between old and new EU member states and compares the years 1995, 1996 and 2005 by presenting a selection of indices on trade between the two groups of countries, namely EU-15 and EUN-8.

The determinants of international trade and international specialization are well known and they can be explained by economic theory based on: the Ricardian Model of Comparative Advantage (Torrens-Ricardo), that defines their determinants as technological differences; the Heckscher-Ohlin theory that emphasises the differences in factor endowments; the neo-classical theory (Mill, Marshall and numerous modern day scholars) which considers differences in technology, factor endowments and also in tastes[4]. The validity of the traditional comparative advantage theory has been recently reconfirmed by several authors [Harrigan 1997][5].

Trade analyses elaborated as a result of EU enlargement, were particularly abundant in the 1990s. They tended mainly to attribute the countries of Central and Eastern Europe with a comparative advantage based on the production of agricultural goods, even if some authors distinguished between the medium and long run [The Economic… 2001, Reform… 2003] effects. Agricultural growth would play a decisive role in the medium run. In the long run, on the other hand, the agricultural sector would lose its important role in favour of the other sectors. Trade relations would necessarily be characterised by a strong increase of the agricultural products' trade. However, according to the "second best" theory, it cannot be denied that the trade liberalization among a limited number of countries ceases to promote a high level of social welfare, whether locally or worldwide, even if certain agents may stand to benefit [Lipsey & Lancaster 1956].

Enlargement and trade between EU member states

In order to evaluate the level of trade-related economic integration reached roughly one year after expansion, and to determine to what extent the law of comparative costs has influenced this process, several indices have been calculated based on trade flows among the EU-15, as a whole and the EUN-8 countries, which have been considered separately. For this reason, the analysed trade flows do not represent the total trade of the EU as a whole. In order to correctly interpret the obtained results, it has also to be taken into account that although all the EU countries are all more

[4] In brief, the assumptions that form the basis of the Ricardian theory, and from which they take their name, also incorporate the theory of "comparative costs" which characterise the current differences in production techniques. Each state will benefit from specializing in the production of a good that provides it with the greatest advantage (or the lesser disadvantage). The theory also aims to demonstrate that trade offers advantages to all the countries involved. Ricardo's model, however, only takes into account one production factor – labour – and bases its comparative advantage on the differences in productivity between countries. Given that these divergences in fact form the bases for international trade, differences in the factor endowment of each country contribute towards favouring trade but, a realistic analysis of international trade must also consider other factors (land, capital etc.) and intra industrial border trade . According to Heckscher and Ohlin each state exports the good that requires relatively more intensive exploitation of the production factors required and which are more abundant [Gandolfo, 1989].

[5] These authors take into account the qualitative differences of the products, reflecting the differences in the production skills and technology of the producing countries.

or less medium sized, the EU, as a whole, represents one of the largest economic systems in the world (e.g. the last enlargement has increased the number of consumers from 380 million to 454 million) and - like other trade unions - remains relatively closed to world market.

The total EU-15 exchanges (import + export) of agricultural products with the EUN-8 countries registered an increase in the ten-year period 1995-2005 equal to 176.57% at current values and 133.45% at 2005 constant values, for a total of Euro 16.4 billion in 2005. One of the factors affecting the trade increase is the import of products from the EUN-8 into the EU-15 which has grown more rapidly than exports (+165% and 111.7); in absolute terms, however, the latter are still higher and, as far as the balance of trade is concerned, they are still in the lead. It is clear that such trade increases are to a large extent due to the liberalization of trade and accession to the EU.

Table 1. EU-15 exports towards the EUN-8 (in millions of Euro/ECU), percentage variation (var%) and the EU-15 propensity towards exports in EUN-8 (EU-15 Exp in EUN-8/ EU-15 GDP *100)

States**	1995*	1996*	2005	var % 2005/1995*	var % 2005/1996*	The EU-15 propensity towards export of agro-food products in the nations considered (%)
CZ	903.57	980.86	1,934.35	114.08	97.21	0.02
EE	213.13	259.39	350.24	64.33	35.02	0.00
HU	511.20	431.19	1,432.13	180.15	232.13	0.01
LT	190.74	237.88	401.65	110.58	68.85	0.00
LV	232.32	244.43	311.13	33.92	27.29	0.00
PL	1,469.15	1,733.67	3,262.98	122.10	88.21	0.03
SL	392.26	388.27	638.00	62.65	64.32	0.01
SK	240.97	257.99	462.36	91.87	79.21	0.00
Total	**4,153.33**	**4,533.68**	**8,792.85**	**111.71**	**93.95**	**0.09**

*Updated to 2005 using harmonized indices of consumer prices EU-15 (2005=100)
** Czech Republic (CZ), Estonia (EE), Hungary (HU), Lithuania (LT), Latvia (LV), Poland (PL), Slovenia (SL) and Slovakia (SK).
Source: our elaboration of Eurostat data.

Table 2. Imports into the EU-15 from the EUN-8 (in millions of Euro/ECU), percentage variation (var%) and the propensity of the EUN-8 towards exports in the EU-15 (Imp into the EU-15 from the EUN-8 considered state/GDP of country*100)

States	1995*	1996*	2005	var % 2005/1995*	var % 2005/1996*	Propensity of the EUN-8 towards the export of agro-food products in the EU-15 (%)
CZ	342.62	321.96	1.059.58	209.26	229.10	1.08
EE	32.58	44.44	171.13	425.26	285.07	1.62
HU	1,109.36	1,166.11	1,809.66	63.13	55.19	2.06
LT	61.25	76.25	395.99	546.53	419.33	1.92
LV	17.77	21.52	153.41	763.30	612.93	1.20
PL	1,187.66	1,137.46	3,556.52	199.46	212.67	1.46
SL	74.75	80.11	196.50	162.86	145.28	0.72
SK	71.79	73.44	325.20	352.97	342.78	0.85
Total	**2,897.78**	**2,921.29**	**7,668.00**	**164.62**	**162.49**	**1.42**

* Updated to 2005 using Harmonized Indices of Consumer Prices UE 15 (2005=100)
Source: our elaboration of Eurostat data.

Table 3. Trade (Imp+Exp) between the EU-15 and the EUN-8, (millions of Euro/ECU), percentage variation (var%), degree of opening up to trade by the EU-15 compared with EUN-8 countries (Imp+Exp/GDP EU-15*100) and degree of opening by EUN-8 towards trade with the EU-15 (Imp+Exp/GDP of the considered country*100)

States	1995*	1996*	2005	var % 2005/1995*	var % 2005/1996*	Opening up of EU-15 towards EUN-8 (%)	Opening up of EUN-8 towards EU-15 (%)
CZ	1,246.19	1,302.82	2,993.93	140.25	129.80	0.03	3.04
EE	245.71	303.84	521.37	112.19	71.60	0.01	4.95
HU	1,620.56	1,597.30	3,241.80	100.04	102.95	0.03	3.69
LT	251.99	314.13	797.65	216.54	153.92	0.01	3.87
LV	250.09	265.94	464.55	85.75	74.68	0.00	3.63
PL	2,656.81	2,871.12	6,819.51	156.68	137.52	0.07	2.80
SL	467.01	468.38	834.50	78.69	78.17	0.01	3.05
SK	312.76	331.44	787.56	151.81	137.62	0.01	2.07
Total	**7,051.12**	**7,454.97**	**16,460.85**	**133.45**	**120.80**	**0.16**	**3.05**

*Updated to 2005 using Harmonized Indices of Consumer Prices UE 15 (2005=100)
Source: our elaboration of Eurostat data.

Table 4. Balance of Exp-Imp in the EU-15 towards EUN-8 (millions of Euro/ECU) and percentage variation (var%)

States	**1995***	**1996***	**2005**	**var % 2005/1995***	**var % 2005/1996***
CZ	560.96	658.90	874.77	0.56	0.33
EE	180.55	214.95	179.12	-0.01	-0.17
HU	-598.16	-734.91	-377.53	-0.37	-0.49
LT	129.49	161.62	5.66	-0.96	-0.96
LV	214.55	222.91	157.72	-0.26	-0.29
PL	281.49	596.21	-293.54	-2.04	-1.49
SL	317.50	308.16	441.51	0.39	0.43
SK	169.18	184.55	137.16	-0.19	-0.26
Total	**1,255.55**	**1,612.39**	**1,124.85**	**-0.10**	**-0.30**

*Updated to 2005 using Harmonized Indices of Consumer Prices UE 15 (2005=100)
Source: our elaboration of Eurostat data.

In relation to the agro-food sector, the role played by the individual EUN-8 countries is different. This can be seen, for example, looking at their differing UAA (Utilized Agricultural Area): both in absolute and percentage values, it is very high in Poland, Hungary and the Czech Republic, as regard as the other EUN-8 states and most EU-15 countries. As far as the share of the total added value from agriculture is concerned, however, in all the EUN-8 countries it is higher than in the EU-15, with the sole exception of the Czech Republic; Hungary and Poland are at the top of the scale here too.

Poland continues to be in first place as far as exports for the decade being examined are concerned, followed by Hungary and the Czech Republic. The more significant increases, however, are registered by Latvia and Lithuania. Comparing EU-15 imports with the GDP of the exporting states, and by classifying the countries exporting towards the EU-15 based on the importance of each state as far as its economy is concerned, we can see that - among those nations exporting towards the EU-15, - Hungary and Lithuania head the list (roughly 2% of their GDP), followed by Estonia at 1.6%, and Poland at 1.5%. The classification based on exports is still headed by Poland,

followed by the Czech Republic and Hungary. Expressing exports in relative terms to GDP, the ranking of countries do not significantly changes. However, by comparing the relative opening index of the EU-15 towards the EUN-8 countries with the EUN-8 countries ones towards the EU-15 the 'scale effect' (i.e. the different size on the EU-15 as a whole compared to each EUN-8 country) has to be taken into account. A similar caution is needed comparing the above mentioned results with index related to the EU-15, where its agricultural exports towards the EUN-8 represent 0.09% of the total EU-15 GDP.

Table 5. UAA (km^2) and gross agriculture value added at basic prices (millions of Euro)

States	UAA (2003)	% total land	Agricultural gross value added at basic prices (current values 2004)	% total gross value added from agriculture
CZ	36,314	46.0	1,255	1.6
EE	7,703	17.0	199	2.5
HU	58,624	63.0	2,531	3.7
LT	26,043	39.9	516	3.2
LV	16,421	25.4	285	2.9
PL	163,008	52.1	5,974	3.3
SL	4,905	24.2	499	2.2
SK	19,347	39.5	646	2.4
EU-15	1,309,849	41.5	155,396	1.7

Source: our elaboration of Eurostat data.

By observing the adjusted balance6 we can see that the EU-15 remains the main exporter of agricultural products towards the EUN-8, even if the advantages are decidedly fewer than they were ten years ago. In general, the EUN-8 states are improving their position if compared with EU-15 countries. The case of Hungary, for example, is noteworthy in that it appears to be the only net exporting country towards the EU-15 even if the margins are less accentuated than in 1995. The tendency is reversed if we consider Poland who has completely about-turned its position during the time span being considered and has now become a net exporter towards the "Old Europe".

Table 6. Adjusted balance (Exp-Imp)/(Exp+Imp)*100 of EU-15 with the EUN-8 countries

States	1995 *	1996 *	2005
CZ	45.01	50.57	29.22
EE	73.48	70.75	34.35
HU	-36.91	-46.01	-11.65
LT	51.39	51.45	0.71
LV	85.79	83.82	33.95
PL	10.59	20.77	-4.30
SL	67.99	65.79	52.91
SK	54.09	55.68	17.42
Total	**17.81**	**21.63**	**6.83**

*Updated to 2005 using Harmonized Indices of Consumer Prices UE 15 (2005=100)
Source: our elaboration of Eurostat data.

[6] They range from -100 where the nation only imports, to + 100 where the nation only exports. Where the result is at par the adjusted balance is 0 as the denominator is equal to 0.

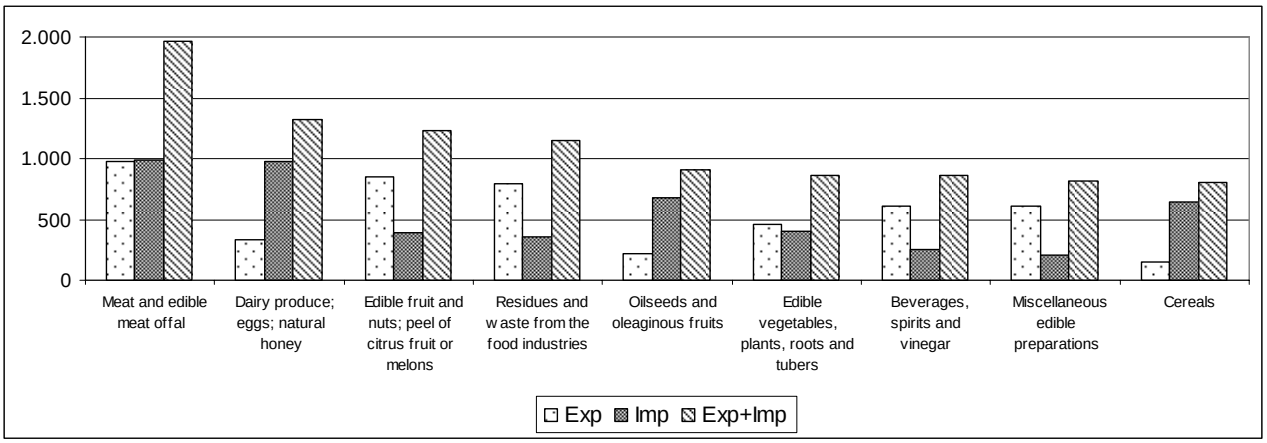
Continuing the analysis in aggregate form, the intensity index of the imbalances confirms the differing positions of the EUN-8 compared with the EU-15. It varies from 0 (trade balance) to 1. The further away from 0 and the closer to 1, the greater the imbalance of trade within the EU-15 when compared with the EUN-8 countries. Obviously, calculated in this specific context, where we are dealing with trade between an aggregate of 15 states and eight individual countries, we cannot expect to have a situation of equilibrium. Nevertheless, the comparison of a single country's index with that of the aggregate allows us to pinpoint the EUN-8 states towards which the EU-15 has the greatest trade imbalance because exports exceed imports. They are as follows: Latvia, Estonia, Lithuania, and Slovenia. Poland is the only state towards which the EU-15 has a lower trade imbalance intensity index than the total average (table 7).

Figures 1-3 summarise the most relevant trade flows between the EU-15 and the EUN-8 by products.

Table 7. Trade imbalance intensity index between EU-15 and EUN-8 countries (percentage)

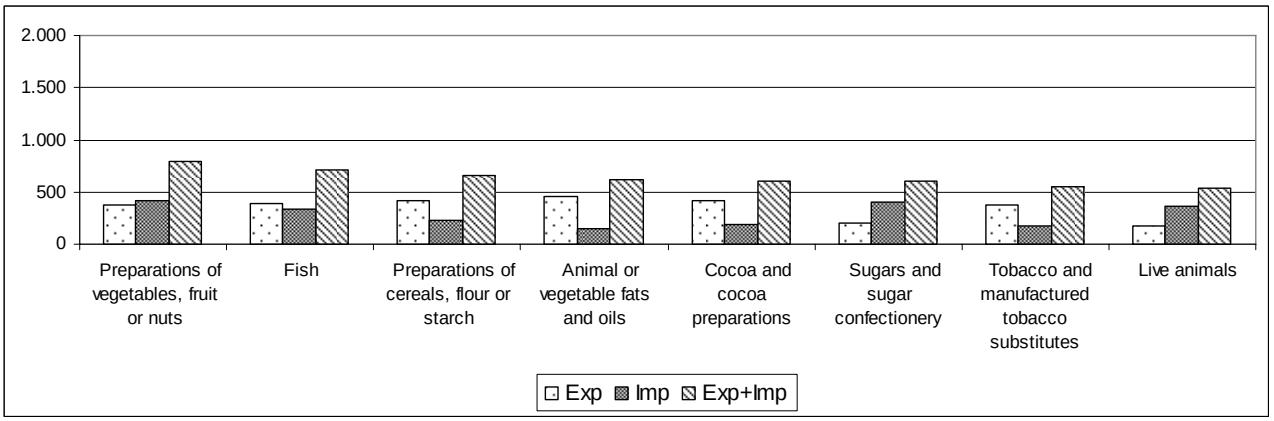
Country	CZ	EE	HU	LT	LV	PL	SL	SK	Total
index	0.55	0.73	0.37	0.59	0.75	0.31	0.58	0.49	0.33

Source: our elaboration of Eurostat data.

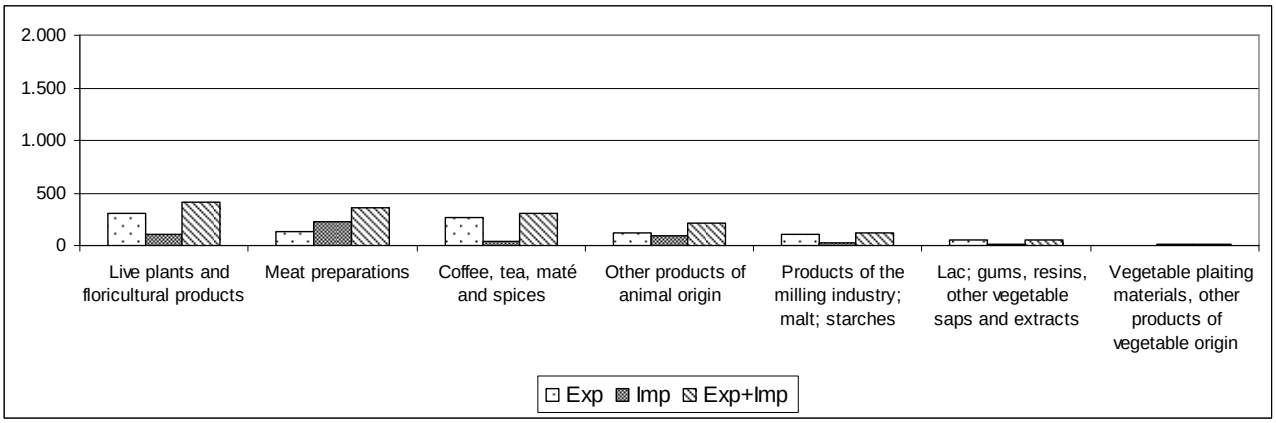


Source: our elaboration of Eurostat data.

Figure 1. Imports and Exports by EU-15 towards the EUN-8 countries by sector (part one) in millions of Euro.



Source: our elaboration of Eurostat data.
Figure 2. Imports and Exports by EU-15 towards the EUN-8 countries by sector (part two) in millions of Euro.



Source: our elaboration of Eurostat data.
Figure 3. Imports and Exports by EU-15 towards the EUN-8 countries by sector (part three) in millions of Euro.

Using the adjusted balance per product as the basic measure of the EUN-8 countries' comparative advantage, we can say that in 2005, the EU-15 principally imported cereals, oilseeds, dairy products; meat products, livestock and sugar are also relevant. These results are confirmed by the related export specialization indices. The EUN-8 states appear to be oriented towards the more traditional products of the continental area. The major disadvantages for the EUN-8 countries compared with the EU-15 can be seen when dealing with milled starch products, animal and vegetable fats, live plants and floricultural products, alcoholic beverages, vinegar and fruit.

The level of trade liberalization per product gauges the importance of trade reported to the economy as a whole. An increase in the index indicator over time points to a greater opening up of the economy. It may go over 100% if the exchanges exceed GDP (this occurs when countries are very small and heavily trade oriented).

Table 8. Adjusted balance per EU-15 products compared with the EUN-8 countries

Products	CZ	EE	HU	LT	LV	PL	SL	SK	Total
Live animals	-68.39	93.09	-10.40	-47.86	81.59	-36.37	-11.93	-64.92	-33.06
Meat and edible meat offal	70.50	75.28	-18.26	37.97	76.61	-27.42	42.88	50.11	-0.49
Dairy produce; eggs; natural honey	-22.92	-81.19	1.74	-83.18	-82.52	-66.62	-1.61	-44.84	-48.94
Living plants and floricultural products	76.43	84.95	80.43	86.59	95.37	35.84	91.39	-26.85	49.33
Edible vegetables, plants, roots and tubers	90.63	83.00	-30.92	-1.91	94.29	-25.54	83.05	44.73	6.44
Edible fruit and nuts; peel of citrus fruit or melons	79.22	70.04	40.40	65.05	73.78	15.87	51.86	24.45	37.43
Cereals	-64.55	-68.48	-78.40	-80.75	-66.50	-25.15	44.77	-48.41	-61.83
Products of the milling industry; malt; starches	27.86	76.07	17.39	90.65	95.44	79.43	97.40	14.36	62.85
Oilseeds and oleaginous fruits	-58.82	-79.26	-73.97	-67.19	-71.49	0.01	7.31	-42.66	-50.54
Animal or vegetable fats and oils	77.49	64.45	0.59	99.57	99.74	46.59	82.89	55.87	50.81
Sugars and sugar confectionery	-43.99	64.15	-37.37	7.80	22.17	-30.25	-36.17	-67.21	-33.99
Cereals, flour or starch preparations	58.34	68.05	60.76	51.37	72.00	-10.90	96.51	82.37	28.79
Beverages, spirits and vinegar	19.77	90.87	15.90	63.10	74.50	46.33	55.39	66.49	41.05
Residues and waste from the food industries	75.40	63.99	7.47	-35.35	79.37	44.35	82.04	73.75	37.14
Tobacco and manufactured tobacco substitutes	13.04	99.98	68.79	97.71	53.10	10.41	99.91	78.70	34.71
Total agricultural products	**29.22**	**34.35**	**-11.65**	**0.71**	**33.95**	**-4.30**	**52.91**	**17.42**	**6.83**

Source: our elaboration of Eurostat data.

The EU-15 opening up index to the EUN-8 for total agricultural products equals 16; this value is particularly remarkable if compared with the opening up of trade towards the rest of the world, which is at around 1.23. The EU-15 versus EUN-8 propensity towards exports equals 0.09 as against 0.54 for the rest of the world.

The propensity towards the export of EU-15 versus EUN-8 places meat and edible meat offal at the top of the list, followed by fruit, animal feed and by-products from the food industry. Alcoholic beverages and miscellaneous food products are in fourth place. Trade openings by product show meat and edible offal, dairy and milk products, fruit and residues and waste from the food industry to be increasingly more important.

Specialisation indices – calculated on the ratio between the exports of each one of the individual EUN-8 countries towards the EU-15 and EU-15 total imports – highlight the inherent specialization of exports from EUN-8 towards the EU-15, compared with the EU-15 imports of products from outside the EU; this evidence can be considered as an indicator which – to some extent – could show the existence of a second best equilibrium[7]).

[7] Before a country enters a Free Trade Area (FTA) it has policy imposed distortions already in place in the form of tariff barriers applied on imports of goods. This means that the initial equilibrium can be characterized as a second-best equilibrium. When the FTA is formed some of these distortions are removed. However, other distortions remain (e.g. tariffs applied for non-member countries). If the partial tariff removal substantially raises the negative effects caused by the remaining tariff barriers with the non-FTA countries, then the efficiency improvements caused by free trade within the FTA could be outweighed by the negative welfare effects caused by the remaining barriers outside the FTA and national welfare could fall.

Table 9. Indices showing propensity to export and product demand

Description of agricultural products	Propensity of EU-15 to export to EUN-8	Propensity of EU-15 to export to rest of world	Opening up of EU-15 to EUN-8	Opening up of EU-15 to rest of world	Propensity of EUN-8 to export to EU-15	Opening up of EUN-8 to EU-15
Live animals	0.002	0.009	0.005	0.015	0.066	0.100
Meat and edible meat offal	0.010	0.033	0.019	0.064	0.183	0.364
Dairy produce; eggs; natural honey	0.003	0.045	0.013	0.053	0.182	0.244
Live plants and floricultural products	0.003	0.014	0.004	0.026	0.019	0.076
Edible vegetables, plants, roots and tubers	0.004	0.012	0.008	0.039	0.075	0.160
Edible fruit and nuts; peel of citrus fruit or melons	0.008	0.015	0.012	0.119	0.071	0.228
Cereals	0.001	0.017	0.008	0.036	0.120	0.148
Products of the milling industry; malt; starches	0.001	0.014	0.001	0.014	0.004	0.023
Oilseeds and oleaginous fruits	0.002	0.008	0.009	0.056	0.126	0.168
Animal or vegetable fats and oils	0.005	0.024	0.006	0.061	0.028	0.114
Sugars and sugar confectionery	0.002	0.019	0.006	0.035	0.074	0.114
Preparations of cereals, flour or starch	0.004	0.033	0.006	0.040	0.043	0.122
Beverages, spirits and vinegar	0.006	0.133	0.008	0.171	0.047	0.159
Total agricultural products	**0.086**	**0.542**	**0.160**	**1.235**	**1.422**	**3.053**

Source: our elaboration of Eurostat data.

Table 10. Related specialization per export sector of the EUN-8 countries towards EU-15 compared with total EU-15 imports

Products	CZ	EE	HU	LT	LV	PL	SL	SK	**Total EUN-8**
Live animals	5.11	0.03	4.34	2.72	0.24	4.31	2.56	6.57	**5.54**
Meat and edible meat offal	0.66	0.65	3.40	0.78	0.48	3.43	2.79	0.95	**2.93**
Dairy produce; eggs; natural honey	6.16	16.63	1.89	10.95	10.42	7.85	8.18	6.95	**11.14**
Live plants and floricultural products	0.42	0.39	0.17	0.12	0.10	0.95	0.31	5.46	**0.78**
Edible vegetables, plants, roots and tubers	0.16	0.16	1.47	1.37	0.07	1.87	0.53	0.62	**1.36**
Edible fruit and nuts; peel of citrus fruit or melons	0.16	0.16	0.17	0.15	0.16	0.50	0.65	0.66	**0.33**
Cereals	3.17	1.37	5.93	3.86	6.07	0.87	0.47	1.85	**3.02**
Products of the milling industry; malt; starches	4.74	3.81	1.74	0.60	0.62	1.17	0.93	20.34	**3.01**
Oilseeds and oleaginous fruits	2.01	2.50	1.98	2.47	4.15	0.38	0.81	1.45	**1.29**
Animal or vegetable fats and oils	0.19	0.23	0.55	0.00	0.00	0.43	0.17	0.37	**0.36**
Sugars and sugar confectionery	5.27	0.81	1.20	0.66	0.52	1.39	6.42	3.99	**2.24**
Preparations of cereals, flour or starch	2.43	1.30	0.85	0.74	0.90	5.11	0.33	0.57	**3.22**
Beverages, spirits and vinegar	1.74	0.39	0.71	0.26	0.95	0.27	1.14	0.34	**0.60**

Source: our elaboration of Eurostat data.

The product-specific indexes highlight some important elements. Briefly, the EUN-8 countries have a strong specialization in specific sectors. Milk and dairy products and animal products indexes have the highest values. The Baltic states make the biggest contribution towards this result. The second place belongs to the livestock sector index which is Czech Republic, Slovakia, Hungary and Poland's strong point. Milled products, starch and glutens are in third position thanks, mainly, to exports from Poland. Cereals also rank high due to exports from Latvia and Hungary.

A country by country analysis of the index reveals that: i) the Czech Republic is slightly in advantage regarding the production of milk and dairy produce and its derivatives together with animal products, live animals, sugar, starch and meat products; ii) as far as exports are concerned, Estonia is strongly oriented towards milk and dairy produce and its derivatives, but much less so with regard to milled products, starches and malt; iii) cereals dominate in Hungary, followed by livestock and meat products; iv) Latvia and Lithuania specialize in milk and dairy produce and its derivatives, while cereals occupy a much more modest position; v) Poland does not stand out for any product in particular even though some product categories appear to be more dynamic than others. The latter refers to milk and dairy produce and its derivatives, animal products, milled products, flours and starches, livestock and meat and edible offal vi) Slovenia has more prominent results in the milk and dairy products sector and their derivatives, animal products and sugars; vii) Slovakia on the other hand specializes more in milled products, flours and starches, followed by milk and dairy products and their derivatives, animal products and livestock.

The EU-15 exports towards the EUN-8 countries appear to be less specialized with results that do not exceed 3.6% in any one sector. Their strongest export sectors seem to be fruit, vegetable by-products from the food industry and animal feedstuffs.

Concluding remarks

The trade analysis carried out between the EU-15 and the EU 8 was based on the assumption that the European Union is still not fully open towards foreign trade with regard to numerous agricultural product and despite its recently revision of market policies. The gradual shift from price to income support has not, in fact, yet completely dismantled the price guarantee structure or eliminated the clause concerning Community preferences. The trade direction of many products is thus partially conditioned.

The trade flows of agricultural products between the EU-15 and the EUN-8 countries has, nonetheless, highlighted a noticeable increase in trade between the two areas over the last decade. This increase surely stems from the opening up process which culminated in May 2004 with the accession of the 10 new member states. As a result, and taking into account also that the EU has not

yet fully completed the liberalisation process toward the world market, we can assume that the EU-25 trade acts under the "second best" theory. As well known, it applies to customs unions and – favouring the exchanges among the member countries with respect to external trade – it does not necessarily favour efficiency as far as social welfare is concerned.

The EU has more recently been more concerned with its desire for cohesion and, as a result, economic integration. But which integration concept has this analysis brought to light? Although limited to agricultural goods, the comparison of the 2005 import-export flows with similar reports from previous years [Agricoltura… 1997] demonstrates that the opening up of trade does not seem to have influenced the specialization areas of either group of countries. The comparative advantages of certain product categories, which ten years ago fuelled trade, do not appear to have altered their position. Within agricultural products sectors the integration process, which was already underway during the pre-accession period, has maintained and not reduced specific specializations, contrary to what had been suggested by certain authors [Bugarelli 2001]. The fears of the Mediterranean EU countries with regard to enlargement seem to be partially unfounded, at least in the short run, concerning both the volume of exchanges in absolute terms and particularly "Mediterranean products" such as fruits and vegetables. The situation of cereals and livestock chain seems to be more controversial, although it is currently being supported, in part, by the rise in consumption within the EUN-8 countries and by the milk quota regimes.

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Appendix: indices applied

Adjusted balance: $\frac{E_i - M_i}{E_i + M_i} \times 100$ with E_i and Mi indicating exports and imports of the i-th product. Where the subscript is not present, it means the total agro-food exports and imports.

Intensity of imbalance: $\frac{\sum_{i=1}^{n} |E_i - M_i|}{E + M}$ with E_i and Mi with E_i and Mi indicating exports and imports of the i-th product, E and M represent total exports and imports respectively.

Opening up of trade per product: $\frac{E_i + M_i}{GDP} \times 100$, with E_i and M_i representing the export and import of the i-th product respectively, GDP gross domestic product. Where the subscript is not present, it means the total agro-food exports and imports.

Propensity to export: $\frac{E_i}{GDP} \times 100$, with E_i representing the export of the i-th product, GDP gross domestic product. Where the subscript is not present, it means the total agro-food exports and imports.

Related specialization per sector: $\frac{(E_{Pj} / E_P)}{(M_{EUj} / M_{EU})}$, where E_{Pj} are the exports of the p-th nation related to the j-th sector towards the EU-15, E_P the total agro-food exports of the p-th nation towards the EU-15, M_{EUj} the EU-15 imports related to the j-th sector but from countries outside the EU-15 and net of imports from the p-th nation.