

**EFFECT OF INTERNATIONAL TRADE RELATIONS ON AGRI-FOOD TRADE****NÓRA GOMBKÖTŐ**

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**ABSTRACT**

Nowadays, production of goods increases hugely all over the world, resulting an enormous increasing in international trade. Trade in industrial goods grows at a large rate due to trade liberalization, while agriculture is one of the most vulnerable sectors all over the world. However, barriers of agri-food trade were reduced or eliminated; there are still many obstacles to the totally free trade of agricultural products (e.g. restrictions, safeguards, bans, limitations, etc), especially in the European Union. Besides the WTO's liberalization pressure and its multilateral negotiations, there are a lot of countries that have signed bilateral agreements. In this study, it was examined, what kind of bilateral agreements were entered into force by the EU and how was international agri-food trade influenced by these bilateral agreements as well as by restrict measures. For this, secondary data were analyzed by different statistical methods and the effect of trade measures was characterized by using this results. From the results it can be concluded that EU has preferred different agreements with the various country groups as well as EU has applied different kind of agreements in different eras. The EU's average growth rate of food trade and average share of food trade is highly variable by partner countries. Bilateral agreements have not always caused trade growth between the two partner regions. The EU's restrict measurements effect the EU's foreign trade, because these restrictions are applied to meat products and these commodities are imported the less in the EU.

**Keywords:** agri-food foreign trade, bilateral agreement, EU, USA, restrict measures, average growth rate

**INTRODUCTION**

As it is known agriculture is one of the most vulnerable economic sectors all over the world. Nevertheless, agricultural exports have several economic benefits. It can help to stimulate a wide array of industries linked to agriculture, including transportation, processing, and farm input suppliers. Furthermore, most of the future growth in food demand is expected to occur in developing countries (MCMINIMY ET AL., 2015). International trade in agricultural and food products has increased sharply during the past decades, mainly due to the increased trade liberalization, population growth, urbanization and changing diets (ANDERSON, 2010). Although currently the European countries have the largest share of world food exports, agri-food exports from other underdeveloped countries are expanding rapidly (especially from low-and middle –income countries in Africa, Asia and South America) (AKSOY, 2005). At the same time, there are many countries that can not overcome the barriers to export their products, so they promote the free movement of products on the global market. Nevertheless, there is no country that freely allows the import of certain products. Protective measures of agricultural protection are present in all countries, but they are of particular significance in the agrarian policy of the countries of Europe and the United States. Agriculture sector has a particular importance to the member states in EU, because it has a significant share in the total EU budget. While the United States primarily implemented protectionist measures that favours the stimulation of exports (offensive protectionism), the EU applied mainly defensive protectionism (limiting imports) (MARKOVIC AND MARKOVIC, 2014). There is a long-standing trade dispute between the US and the EU. They have different opinion on agriculture, particularly with regard to environmental protection, consumer safety, animal welfare and farming support. EU and US farmers still operate under very different conditions and product different

products (DIAMAND AND SCHIMPF, 2016). One of the barriers to negotiations between the US and EU involves the EU's safeguards against genetically modified organisms (GMOs) including genetically modified foods and crops. The EU restricts or outright bans the import of GMO products and requires the labelling of all GMO foods (Lewis, 2014). The US has no such labelling requirements for GMO foods. Furthermore, the EU bans imports of hormone-treated meat from the US and restricts most meat exports to the European Union to a limited quantity of beef imports that are certified as produced without the use of hormones. Even so, the US is the largest importer of EU agricultural products and it trades particularly with the EU15 member states. However, patterns of agricultural trade with the US vary greatly between these EU member states. The largest agri-food exporters to the US are France, Italy, Spain, the Netherlands as well as Germany, and the largest importers of US products are Germany, Spain, the Netherlands and the UK. Although it is often stated that tariffs are not a major barrier to trade between the US and EU, both sides set tariffs on agricultural imports. The EU applies much higher tariffs on all products than the US. The average agricultural tariff of EU is 30%, well above the average US agricultural tariff of 12% ([www.usda.gov](http://www.usda.gov)). In case of tariffs there are many differences in regulation, safety measures, procedures and monitoring between the US and EU (DIAMAND AND SCHIMPF, 2016).

Despite, the EU is one of the most open economies in the world with number of trading partners. It is the largest trading partner almost for 60 countries, while China and the US is a trading partner for 36 and 24 countries. European goods and services account for 35% of the EU's GDP (MAZURE AND TILTINA, 2015). Approximately 90% of world future demand will be generated outside the EU. The EU's aim is to expand the trade relations more widely, because trade in goods and services makes a significant contribution to increasing sustainable growth and creating jobs. The EU trading partners benefit from preferential tariff access to the EU given that the EU has concluded free trade agreements with more than 30 countries. Further aim is to negotiate new form of free trade agreements with certain countries. These agreements could generate 2.2 million new jobs as well as contribute to the EU's GDP with EUR 275 billion. Besides that trade agreements can have many other benefits such as opening new markets for EU goods and services, increasing investment opportunities, making trade cheaper and faster, making the policy environment more predictable and last but not least supporting sustainable development (<http://ec.eurpoa.eu>). Such free trade agreements are for instance the EU-Canada Trade Agreement (CETA), the EU-India Free Trade Agreement as well as the so called DCFTA with Mediterranean region, with special attention with regard to the sensitive products (such as agricultural products). Sensitive products are treated also specially in case of EU's agreement with the MERCOSUR countries. In order to wide its relationships with Central and South-American countries. In additional, EU support more active and (some new and) updated trade relations with Japan, India as well as ASEAN countries. The Transatlantic Trade and Investment Partnership (TTIP) is the most significant recent EU-US project and will reinvigorate the transatlantic partnership as a whole, beyond its trade aspects (not only with the US but also with other trade partners) (EPP GROUP POSITION PAPER, 2015)

Of, course these agreements and partnerships intend to liberalize agricultural trade and eliminate, or substantially reduce tariffs and restrictive quotas around certain commodities, such as rice and pork in Japan, or dismantle supply management programs that protect poultry, eggs, and dairy in Canada. Even so, on the negotiating agenda are still obstacles to agricultural products, mainly non-tariff trade barriers, including certain sanitary and phytosanitary (SPS) measures as well as Geographic Indications (GI) (MAZURE AND TILTINA, 2015). BURNETT (2015) is of the opinion that multilateral agreements require

successful reforms of global agricultural markets, involving trade liberalization and the reduction of domestic subsidy programs.

## MATERIAL AND METHOD

During this investigation were used data related to EU's bilateral trade agreements and its international trade in foods on secondary databases (Eurostat, Faostat, OECD Statistics). The data were calculated using basic statistical methods (average values, ratios, geometric average, standard deviation, coefficient of variation). Data on international food trade of Eurostat and Faostat from 1992 to 2015 were used to calculate the annual growth rate of exports and imports with various partner countries of the EU during these 25 years. From these data were calculated the average growth rate by countries. This indicator is appropriate to separate out the fluctuations that are caused by other factors (such as political, meteorological, economic, etc. factors) in certain years. Furthermore, data on share of food exports and imports were averaged (it is possible, because coefficient of variation were almost in all cases below 15 percent). Using these data it can be established, how was the change of food trade affected by bilateral agreements with partner countries. Data on food trade balance of OECD Statistics were used to calculate imports/consumption ratio and exports/production ratio. These data were compared by countries in order to state whether the trade of the limited foods is influenced by EU's restrictions.

The aim of this study is

- to group the EU's bilateral agreements by type and by partner country groups;
- to review the situation and opportunities outside the EU;
- to compare the change and share of international food trade with partner and non-partner countries of the EU;
- to establish the impact of agreements and restrict measurements on EU's foreign trade;
- to put forward suggestions taking into account the future development opportunities.

## RESULTS

The EU has a strong, rules-based multilateral trading system with a high level of transparency. The EU manages trade relations with third countries in the form of bilateral trade agreements, which have different names depending on their content. Economic Partnership Agreements with partners such as African, Caribbean and Pacific countries aim primarily at supporting development. Free Trade Agreements with developed countries and emerging economies are economically driven and based on reciprocal market opening. Some Association Agreements are part of broader political agreements. Partnership and Cooperation Agreements are non-preferential trade agreements and part of other broader agreements. As it can be seen in the, EU has preferred different agreements with the various country groups (for instance Association Agreement with Mediterranean countries) as well as EU has applied different kind of agreements in different eras. Furthermore EU has successfully signed a number of bilateral trade agreements with various partner countries such as Canada, Colombia, Ecuador, Iraq, Papua New Guinea and some African countries (Cameroon, Cote d'Ivoire, Ghana, Madagascar, Mauritius, Seychelles, and Zimbabwe). In addition, EU has a number of ongoing trade negotiation processes such as Transatlantic Trade and Investment Partnership (TTIP) with the USA, Comprehensive Economic and Trade Agreement (CETA) with Canada, Free Trade Agreement with Japan, and Trade in Services Agreement (TiSA) negotiations by 23 WTO countries, including the EU. The EU's average growth rate of food trade and average share of food trade can be

seen in table 1 by bilateral partner countries. In case of some countries either the value of growth rate (mainly Mediterranean countries) or the value of share of trade (Russia, Serbia, Ukraine, Egypt, Algeria and Chile) have increased after the agreement (these cells of table are shaded with grey colour).

**Table 1. EU's average growth rate and average share of food trade by bilateral partner countries (1992 – 2015)**

Country	Date of entered into force	Average growth rate of exports (%)		Average growth rate of imports (%)		Average share of exports (%)		Average share of imports (%)	
		Before agreement	After agreement	Before agreement	After agreement	Before agreement	After agreement	Before agreement	After agreement
Europe									
Iceland	1973	..	106	..	106	..	0.3	..	1.4
Norway	1973	..	104	..	105	..	3.4	..	4.5
Switzerland	1973	..	105	..	107	..	7.0	..	3.5
Andorra	1991	..	101	..	107	..	0.3	..	0.0
San Marino	1992	..	105	..	125	..	0.0	..	0.0
Turkey	1995	135	115	110	110	..	1.8	..	4.1
Macedonia	2004	118	104	98	109	0.4	0.3	0.2	0.2
Albania	2006	122	106	91	113	0.4	0.4	0.0	0.0
Montenegro	2010	112	106	106	97	0.2	0.2	0.0	0.0
Russia	2013	111	77	115	102	9.7	7.1	1.2	1.4
Serbia	2013	112	111	106	103	0.6	0.7	0.8	0.8
Ukraine	2014	116	78	110	109	1.6	1.2	1.2	2.5
Bosnia and H.	2015	109	..	108	..	0.9	..	0.1	..
Kosovo	2016	114	..	113	..	0.2	..	0.0	..
Georgia	2016	111	..	123	..	0.1	..	0.1	..
Moldova	2016	111	..	95	..	0.2	..	0.2	..
Mediterranean									
Syria	1977	..	103	..	110	..	0.4	..	0.0
Palestine	1997	..	114	..	109	..	0.0	..	0.0
Tunisia	1998	109	106	124	103	..	0.5	..	..
Israel	2000	104	106	109	102	..	1.1	..	1.0
Morocco	2000	106	110	105	106	..	1.2	..	2.3
Jordan	2002	107	112	99	114	..	0.4	..	0.0
Lebanon	2003	104	105	92	110	1.0	0.8	0.0	0.0
Egypt	2004	106	113	87	110	1.1	1.4	0.4	0.7
Algeria	2005	101	109	110	104	2.2	2.7	0.1	0.1
Other countries									
Armenia	1999	149	103	..	109	..	0.1	..	0.0
Azerbaijan	1999	100	101	..	113	..	0.2	..	0.0
Mexico	2000	124	105	120	107	..	0.9	..	0.9
South Africa	2000	106	111	135	109	..	1.0	..	2.6
Chile	2005	97	117	115	105	0.2	0.3	2.6	2.8
South Korea	2015	107	..	106	..	1.7	..	0.2	..
Kazakhstan	2016	112	..	106	..	0.2	..	0.1	..
EFTA	1960	..	106	..	107	10.7	10.7	9.4	9.4
NAFTA	1994	..	104	..	104	20.4	20.4	10.8	10.8

Source: Edited and calculated by own based on data of *Eurostat and Faostat*

However, there are some countries where the average growth rate of exports (Turkey, Macedonia, Albania, Ukraine, and Armenia) or the rate of the imports (Montenegro, Israel, South Africa, and Chile) or both exports and imports (Russia, Tunisia, Mexico) were decreased after the agreements (shaded with diagonal lines). In Russia and in Ukraine the growth rate of food exports, while in Montenegro and in Moldova the growth rate of food imports show declining trend year by year. Thus, bilateral agreements have not always caused trade growth between the two partner regions. The average growth of food exports and imports with the partner countries vary between 1-10 percent per year, but this data is almost the same in case of ongoing negotiation countries and in case of other countries. There are only a few exceptions, where the growth rate is higher than this average (Turkey, Macedonia, Tunisia, Russia, and China). A relatively large share of EU's food exports go to Switzerland (7%), and Russia (7.1%) (this latter has decreased after entering the agreement), and in case of other partner countries the share of food exports and imports are larger, than in countries which have not applied the agreement yet.

In EU there are many obstacles to the totally free trade of agricultural products. The EU bans the imports of GMO products, hormone-treated meat and restricts most meat exports to the European Union. While the US has no such restrict measures for foods imported from the EU. In table 2 there are data related to trade of some goods which imports are limited to the EU. These data were examined in three countries (EU, USA, and China).

**Table 2: Trade balance of some foods (Thousands tonnes)**

	Crops	Beef and veal	Pig meat	Poultry meat	Dairy
<b>EU</b>					
Production	339 391	7 857	23 441	13 605	63 467
Imports	34 665	304	15	828	188
Consumption	339 662	7 765	21 371	13 036	60 931
Ending stocks	44 254	483	225	500	550
Exports	40 815	393	2 085	1 397	2 644
Trade balance	6 151	89	2 070	569	2 456
<b>Imports/consumption (%)</b>	<b>10.2</b>	<b>3.9</b>	<b>0.1</b>	<b>6.4</b>	<b>0.3</b>
<b>Exports/production (%)</b>	<b>12.0</b>	<b>5.0</b>	<b>8.9</b>	<b>10.3</b>	<b>4.2</b>
<b>USA</b>					
Production	583 663	10 342	10 956	20 532	31 536
Imports	8 803	2 106	675	77	357
Consumption	442 997	11 376	9 344	17 414	30 715
Ending stocks	97 493	317	283	480	855
Exports	133 756	1 027	2 257	3 111	1 129
Trade balance	124 953	-1 079	1 582	3 034	772
<b>Imports/consumption (%)</b>	<b>2.0</b>	<b>18.5</b>	<b>7.2</b>	<b>0.4</b>	<b>1.2</b>
<b>Exports/production (%)</b>	<b>22.9</b>	<b>9.9</b>	<b>20.6</b>	<b>15.2</b>	<b>3.6</b>
<b>China</b>					
Production	550 184	6 989	54 870	18 180	42 474
Imports	115 422	557	916	408	1 175
Consumption	653 203	7 504	55 691	18 166	43 224
Ending stocks	272 416	0	175	0	
Exports	1 893	41	295	422	13
Trade balance	-113 528	-515	-621	14	-1 162
<b>Imports/consumption (%)</b>	<b>17.7</b>	<b>7.4</b>	<b>1.6</b>	<b>2.2</b>	<b>2.7</b>
<b>Exports/production (%)</b>	<b>0.3</b>	<b>0.6</b>	<b>0.5</b>	<b>2.3</b>	<b>0.03</b>

Source: Edited and calculated by own based on data of *OECD Statistics*

As for export/production ratio the US exports a higher proportion, while China a lower proportion of their products than the EU in case of all examined commodities. The share of each exported food type is almost the same proportionally in the EU and in the US. As for the imports/consumption ratio it can be concluded that it is very variable by the three countries. Share of imported foods for consumption are different by types of foods in each examined country. In the US a relatively high proportion of meat consumption is provided from import (especially beef, veal, and pig meat); while in China primarily the crop, beef, and veal imports meet a portion of domestic demand. A relatively high proportion of EU's crop consumption is provided from import, while import of meats and dairies contribute to the domestic consumption negligibly. Consequently, the EU's restrict measurements effect the EU's foreign trade, because these restrictions are applied to meat products and these commodities are imported the less in the EU.

## CONCLUSIONS

EU has preferred different agreements with the various country groups, as well as EU has applied different kind of agreements in different eras. This influences the EU's trade with each partner country. The EU transacts a higher volume of trade with the countries with which it signed an agreement with deeper content. The EU's average growth rate of food trade and average share of food trade is highly variable by partner countries and these indicators are not explained by the fact that these are the EU's partner countries or not. Bilateral agreements have not always caused trade growth between the two partner regions. The EU's restrict measurements influence the EU's foreign trade, because these restrictions are applied to meat products and these commodities are imported the less in the EU. For the future, it might be considered to initiate more multilateral negotiations, because these are much more efficient in terms of individual countries. If the EU opens up its markets for meat products, much more meats would be imported from the third countries, especially from the US. However, more meat products of EU might be exported, because a higher amount of surplus would remain. According to estimations the TTIP agreement will increase food and agriculture imports from the US.

## REFERENCES

- AKSOY M. A. (2005): The Evolution of Agricultural Trade Flows. In Aksoy, M. Ataman, – Beghin, C, John (Eds.): Global Agricultural Trade and Developing Countries; The World Bank: Washington, DC, USA, 2005; pp.17–34.
- ANDERSON K. (2010): Globalization's Effects on World Agricultural Trade, 1960–2050. *Philosophical Transactions of The Royal Society B Biological Sciences*; Vol. 365, Issue 1554, September, 2010; pp. 3007–3021.
- BURNETT J. W. (2015): Moving to A Free Market Agriculture Policy. Americans for Limited Government Foundation; April 2015
- DIAMAND E., SCHIMPF M. (2016): Trading Away EU Farmers. The Risks to Europe's Agriculture from the TTIP. TTIP Farming Report; Brussels; April 2016
- EPP Group Position Paper on International Trade. EPP Group in the European Parliament Press and Communications Service Publication Team. Accessed online at [http://www.eppgroup.eu/system/files\\_force/publications/2015/06/Final.EPP\\_Position\\_Paper\\_Trade\\_EN.pdf](http://www.eppgroup.eu/system/files_force/publications/2015/06/Final.EPP_Position_Paper_Trade_EN.pdf) downloaded on 30 May 2016
- LEWIS C. (2014): The TTIP: A Very Scary Proposal. The Huffington Post. Accessed online at <http://www.huffingtonpost.com/courtenay-lewis/the-ttip-avery->

scary-proposal\_b\_6069532.html. downloaded on 9 June 2016

MARKOVIC I., MARKOVIC M. (2014): Agricultural Protectionism of the European Union in the Conditions of International Trade Liberalization. *Economics of Agriculture*; Vol.61, Issue 2; April-June 2014; pp. 423-440

MAZURE G., TILTINA S. (2015): Export-Import Dynamics within the European Union Trade Policy. 2015 International Conference "Economic Science for Rural Development" No37 Jelgava, LLU ESAF, 23-24 April 2015, pp. 268-279

MCMINIMY M. A., COWAN T., GREEN J. L., JOHNSON R., SCHNEPF R. (2015): Major Agricultural Trade Issues in the 114th Congress. Congressional Research Service Report; February 10, 2015; pp.1-3