# The past and future of CAP - Hungarian and Polish similarities and differences

## Gyarmati Gabor

Obuda University Keleti Karoly Faculty of Business and Management gyarmati.gabor@kgk.uni-obuda.hu

### **Mizik Tamas**

Corvinus University Faculty of Business Administration Department of Agricultural Economics and Rural Development

tamas.mizik@uni-corvinus.hu

Abstract: The Common Agricultural Policy needs to be constantly reformed and this is because it is not possible to create a perfect solution for all 28 Member States, which means that continuous experimentation is taking place, improving the CAP by reforming the issues and trying to answer the questions which emerge. The most recent reform measures are the common organization of agricultural product markets, direct payments to farmers and rural development policy. The article looks at how this is happening in our country and Poland, what are the successes and what are the measures for which we can not talk about success.

Keywords: CAP, Hungary, Poland, trade balance

# **1** Introduction

The European Union (EU) accession was a remarkable moment in both Hungary's and Poland's history. That wave was named the Eastern enlargement and those countries are often called EU-12 (or EU-13 with Croatia) or the new member states (NMS). The other "half" of the Union is the EU-15 or the old member states (OMS). The straightforward influence of the integration on the trade connection is often studied and the latter one became tightened even during the integration process (De Santis et al., 2005). The characteristics of Poland and Hungary are very similar. But the territory and inhabitants' number of Poland is more 3-4 times than Hungary, the agricultural structure and characteristics are very similar. Polish

Utilised agricultural area (UAA) (ha) is 3 times more than Hungarian one. We can see small average holdings territory in both countries. This small territory means smaller capital level, lack of machineries, smaller Balance sheet and turnover, market ratio. Totally it is not good characteristics of both countries's agriculture.

	(%)		Burostat	
	Number of agricultural holdings	Utilised agricultural area (UAA)	Number of agricultural holdings	Utilised agricultural area (UAA) (ha)
EU-28	100,0	100,0	10 841 000	174 613 900
France	4,4	15,9	472 210	27 739 430
Spain	8,9	13,3	965 000	23 300 220
United Kingdom	1,7	9,9	185 190	17 326 990
Germany	2,6	9,6	285 030	16 699 580
Poland	13,2	8,3	1 429 010	14 409 870
Romania	33,5	7,5	3 629 660	13 055 850
Italy	9,3	6,9	1 010 330	12 098 890
Ireland	1,3	2,8	139 600	4 959 450
Greece	6,5	2,8	709 500	4 856 780
Hungary	4,5	2,7	491 330	4 656 520

Table 1.: Farm structure Source: Eurostat

We can see Hungarian UAA is 50,1% of all territory while cultivation area is 79,2% ot the total. In Poland UAA is 46,1%, while cultivation area is 52,7%. Arable lands are similar in both countries. Hungary has 81,6% and Poland has 74,7%. Both of countries are typical Agricultural ones with good opportunities for cultivation.

Table 2.: Average utilised agricultural area	a per holding,	2010 and 2013	Source: Eurostat
	2010	2012	

	2010	2013
EU-28	14,4	16,1
Czech Republic	152,4	133,0
United Kingdom	90,4	93,6
Slovakia	77,5	80,7
Denmark	62,9	67,5
Luxembourg	59,6	63,0
France	53,9	58,7
Germany	55,8	58,6
Poland	9,6	10,1
Croatia	5,6	10,0
Hungary	8,1	9,5

The total agricultural output of Poland increased from 2007 to 2013 and it was 6,58% while Hungarian ones were stagnated and its value was 1,7% of total EU. The Polish output strengthten while Hungarian one did not. Labour force has increased in both countries (Polish one was 20%, Hungarian one was 4,56%)which means more work force demand in this sector and work force compensation instead of machineries and capital. Livestock has decreased in both countries which signed lower quotas and problems in animal farming.

Table 5 Output, labour force and investock, 2007–15									
	Standard output (EUR million)		Labour force (1 000 annual work units)			Livestock (1 000 livestock units)			
	2007	2010	2013	2007	2010	2013	2007	2010	2013
EU-28	285 597	308 062	331 044	11 850	9 946	9 509	136 793	135 212	130 174
Belgium	6 638	7 248	8 407	66	62	57	3 788	3 799	3 584
Bulgaria	2 314	2 537	3 336	494	407	320	1 246	1 149	1 0 2 5
Czech Rep	3 593	3 852	4 447	137	108	105	2 053	1 722	1 728
Denmark	6918	8 431	9 580	56	52	54	4 582	4 919	4 133
Germany	44 202	41 494	46 252	609	546	523	17 985	17 793	18 407
Hungary	4 655	5 241	5 578	403	423	434	2 409	2 484	2 259
Malta	85	96	97	4	5	4	50	42	35
Netherland	18 071	18 930	20 498	165	162	153	6 415	6 712	6 602
Austria	5 199	5 879	5 671	163	114	111	2 473	2 517	2 439
Poland	17 035	18 987	21 797	2 263	1 897	1 919	11 118	10 377	9 165

Table 3.: Output, labour force and livestock, 2007-13

#### Source: Eurostat

Table 4.: Land belonging to agricultural holdings, 2013									
						(hectares)			
	Land belongi	ng to agric	ultural			Land			
	Utilised agricultural area (UAA)	Wooded area	Other (unutilis ed) land		Total land area (km²)	belonging to	UAA	Wooded area	Other (unutilis ed) land
EU-28	40,0	6,7	2,3		4 356 450	213 503 110	174 358 310	29 168 700	9 976 120
Ireland	72,5	2,2	2,5		68 394	5 277 990	4 959 450	147 940	170 590
United Kir	70,5	3,2	2,2		242 509	18 417 700	17 096 170	786 840	534 700
Hungary	50,1	17,0	8,7		93 024	7 048 760	4 656 520	1 583 180	809 060
Austria	33,1	27,5	10,0		82 409	5 815 840	2 726 890	2 264 830	824 130
Denmark	61,0	4,1	3,0		42 916	2 922 230	2 619 340	175 750	127 150
Czech Rep	45,2	19,7	0,8		77 227	5 076 430	3 491 470	1 520 460	64 500
Romania	56,8	5,3	1,7		230 022	14 661 380	13 055 850	1 214 180	391 360
Slovakia	38,8	22,6	1,2		49 036	3 067 090	1 901 610	1 108 700	56 770
Spain	46,4	9,4	4,1		501 757	30 042 210	23 300 220	4 696 770	2 045 210
Netherlan	54,8	0,4	4,4		33 718	2 008 870	1 847 570	12 230	149 070
Luxembou	50,7	2,3	0,3		2 586	137 790	131 040	5 900	850
Italy	40,1	8,9	3,8		302 073	15 933 790	12 098 890	2 680 220	1 154 690
Poland	46,1	3,3	3,3		312 679	16 487 480	14 409 870	1 033 130	1 044 480

Table 4.: Land belonging to agricultural holdings, 2013

Source: Eurostat

%	Arable	Permanent	Permanent	Other	
	land	grassland and	crops	Other	
EU-28	59,8	34,2	5,9	0,2	
Finland	98,5	1,4	0,2	0,0	
Denmark	91,5	7,5	1,0	0,0	
Sweden	85,1	14,8	0,2	0,0	
Hungary	81,6	15,1	3,0	0,3	
Lithuania	79,6	19,6	0,8	0,0	
Malta	78,8	0,0	11,6	9,7	
Poland	74,7	22,3	2,9	0,2	

Table 5.: Land belonging to agricultural holdings, 2013

Source: Eurostat

# 2 Methodology and data

This part of research is based on time series analysis starting from 2000 (before the accession) to the latest available year in the generally used databases, which is 2017. Importance of the agriculture is measured by the share of agricultural employment and the agricultural value added (VA) as a share of gross domestic product (GDP). Main data sources for these indicators is the World Bank's World Development Indicators (WDI) database. It is followed by the share of agricultural export within the total export for these countries and the comparison of the Hungarian-Polish agricultural trade importance. These calculations are based on the World Bank's World Integrated Trade Solution (WITS) database between 2000 and 2017 on agricultural products (chapters 1 to 24).

# **3**Agriculture matters

The significance of the agriculture can be measured by the share of agricultural employment within the total workforce and the agricultural value added as a share of GDP. Figure 1 shows them for Hungary and Poland.

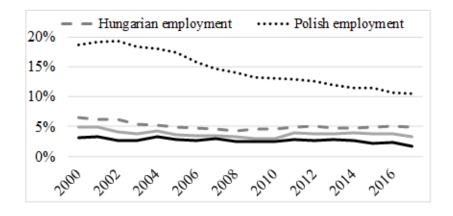


Figure 1. Agricultural employment and value added in the analyzed countries Source: Author's composition based on the World Bank's WDI (2018) database

It can be seen on the figure above, agricultural employments show a generally decreasing trend during the analyzed period, however the Polish one was still above 10% in 2017. As a matter of the agricultural value added, both the Hungarian and the Polish values are lower comparing the employment ones, 3.3 and 1.7% respectively.

Besides these basic indicators, agricultural export volume and especially its agricultural share gives further insight into the importance of the sector. Figure 2 shows it for Hungary.

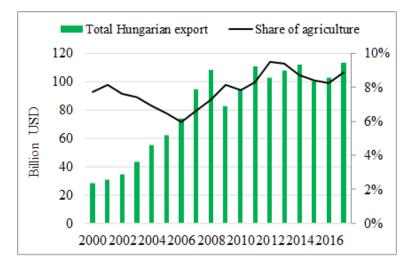


Figure 2. Evolution of the Hungarian export and the share of agriculture Source: Author's composition based on the World Bank's WITS (2018) database

A remarkable growth can be seen even before the accession; however, it has been accelerated after 2004. Only the global financial crisis caused a noticeable drop, otherwise it has been stabilized around 110 billion USD. The share of agriculture fluctuated during these years and ended at 9%. The same has happened with in Poland with high and accelerated growth and the decrease in 2009. According to the data, agriculture plays a more important role Poland in terms of export revenues because it exceeded 13% in the last couple of years (Figure 3).

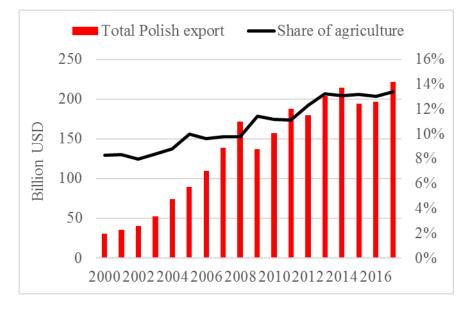


Figure 3. Evolution of the Polish export and the share of agriculture

Source: Author's composition based on the World Bank's WITS (2018) database The following important indicator of the agricultural performance is the trade balance. Hungary had historically a remarkable trade surplus which was adversely affected by the EU accession on the short run (2005-2006). After that it started to grow and peaked at 4.7 billion USD in 2013. From this aspect Polish agriculture was a clear winner of the EU enlargement: the previous trade deficit turned into surplus even one year before the accession and increased rapidly, especially from 2012 to 2013. It value was 9.5 billion USD in 2017 (Figure 4).



Figure 4. The Hungarian and the Polish agricultural trade balance

Source: Author's composition based on the World Bank's WITS (2018) database Hungary and Poland are geographically close to each other; therefore, it could be anticipated higher level of trade between them. The accession has positive impact on the Hungarian agricultural export, it became 5 times higher, however the share of Poland have not changed a lot, it fluctuated between 4 and 5% (Figure 5). In contrast, the Polish agricultural export became 11 times higher by the end of the analyzed period. The share of the Hungarian markets increased after the accession, but its final value the same as its initial one (Figure 6).

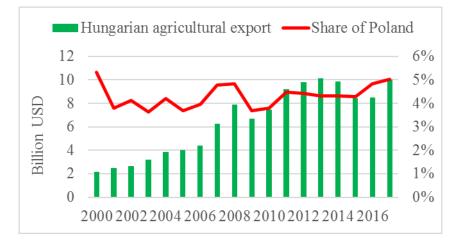
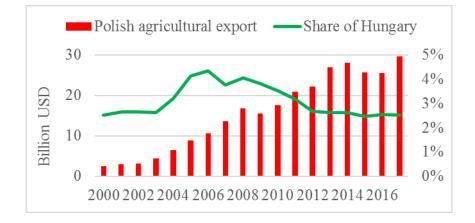
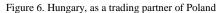
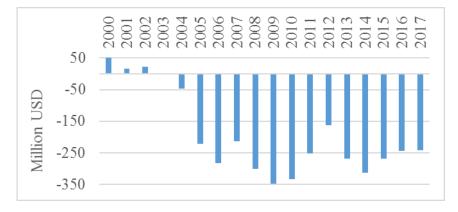


Figure 5. Poland, as a trading partner of Hungary Source: Author's composition based on the World Bank's WITS (2018) database





Source: Author's composition based on the World Bank's WITS (2018) database Comparing the country level agricultural export values, the Hungarian-Polish agricultural trade balance can be calculated. Figure 7 summarizes these values.



### Figure 7. Change of the Hungarian-Polish agricultural trade balance

Source: Author's composition based on the World Bank's WITS (2018) database The figure above confirms the previous results. The accession had positive impact on both countries' agricultural performance, but Poland benefited more from it. Although Poland imported more agricultural products from Hungary then the opposite, it turned into trade surplus even in 2004 and multiplied in the rest of the analyzed period. One of its reason is the sectoral difference between the two countries: Hungary is dominated by the crop sector, while animal husbandry plays a more important role in Poland. It is advantageous because the animal sector can be characterized by higher value added. Another remarkable difference the three times higher Polish factor income (Table 1).

Table 6. Agricultural income composition of Hungary and Poland, 2017 (basic price, million eur					
Agricultural income items	Hungary	Poland			
Agricultural output	7 509	23 898			
- crop output	4 475	10 701			
- animal output	2 445	12 587			
- other output	589	610			
Intermediate consumption	4 594	14 104			
Gross Value Added	3 240	10 116			
Subsidies	1 317	2 171			
Factor income*	3 611	10 222			

Table 6 Agricultural income composition of Uumcomy and Paland 2017 (basic mice million ours)

\* Factor income = Gross Value Added - Consumption of fixed capital - Taxes + Subsidies

Source: Author's composition based on EC (2018a) for Poland and EC (2018b) for Hungary

#### Conclusion

Hungarian agricultre's opportunities have destroyed strongly in the last decade vs Polish ones. Since 2004, accession of the EU, Polish agriculture was ablet to reach benefit from this accession while Hungarian one was not.

- Polish producers exports main higher produced production to Hungary like tobacco, Meat, Milk production while Hungarian ones exports basic produced like cereals. The margin is much more lower in the case of Hungarian produces.
- · Polish subsidies increased very much after EU connection more than Hungarian ones.
- But Polish subsidies in nominal lower than Hungarian one but Polish farmers use them more efficient.
- Polish sharing of production more based on Horticultural production like fruits and vegetables which margin is higher because it claims more well educated working hours.

### References

- [1.] EC (2018a): Statistical factsheet Poland. European Commission, Brussels, Belgium
- [2.] EC (2018b): Statistical factsheet Hungary. European Commission, Brussels, Belgium

- [3.] De Santis, R. De Benedictis, L. Vicarelli, C. (2005): Hub-and-Spoke or else? Free trade agreements in the 'enlarged' European Union. The European Journal of Comparative Economics, 2(2), pp. 245-260.
- [4.] Eurostat. Available at <u>https://ec.europa.eu/eurostat/statistics-explained/index.php/Farm\_structure\_statistics</u> (last download 16th December, 2018)
- [5.] Potori, Norbert ed (2014): Structural changes in Polish and Hungarian Agriculture since EU accession: lessons learned and implications for the design of future agricultural policies, Research Institute of Agricultural Economics, Budapest.
- [6.] World Bank's WDI (2018): World Development Indicators database. Available at: http://databank.worldbank.org/data/reports.aspx?source=world-

development-indicators (Last downloaded: 12nd December, 2018) [7.] World Bank's WITS (2018): World Integrated Trade Solution database.

Available at: http://wits.worldbank.org/ (Last downloaded: 12nd December, 2018)