



## **A SECTOR OF STRATEGIC IMPORTANCE? AGRICULTURE IN HUNGARY DURING THE DECADE AFTER THE EU ACCESSION**

**Judit Beke Lisányi**

*Budapest Business School, Hungary*

The food industry sector is becoming one of the most important sectors and has a critical role in tackling global crises, in the environment, in society, food supply and energy. It is vital that Hungary exploit its outstanding natural assets such as the excellent soil composition, climate and biological resources. The study examines how the sector has managed to cope with the challenges of the period after the EU accession in 2004 and how it was able to take advantage of the possibilities offered by the Common Agricultural Policy.

**Keywords:** Hungary, EU accession, Agricultural trade, Employment, Output.

### **Introduction**

The main objective of this paper is to analyse the impact of the European Union (EU) membership and the Common Agricultural Policy (CAP) on the performance of Hungarian agriculture, with a special focus on product structure, agricultural trade and rural employment in the period between 2004 and 2014. The research presents an overview of the CAP, it looks at the situation of Hungarian agriculture before the EU accession, and it focuses on the impacts of EU accession on Hungarian agriculture during the period over 2004-2014.

### **An Overview of the Common Agricultural Policy – From the beginnings Until the 2000s**

The CAP is one of the most complicated and most sensitive policies of the EU which has a significant economic and political impact. Following the entry into force of the Rome Treaty, the CAP was established in the early 1960s. Article 39 of the Treaty of Rome (1958) sets out the objectives of the CAP (the objectives have been the same ever since):

1. to increase agricultural productivity by promoting technical progress and ensuring the optimum use of the factors of production, in particular labour,
2. to ensure that farmers can earn a fair living,
3. to stabilise markets,
4. to ensure the availability of supplies,
5. to provide food at reasonable prices for consumers (European Parliament).

To achieve these aims the CAP - which is a complex, integrated, centralized system of rules and measures - used three main mechanisms to stabilize agricultural prices at a high level and to enhance production and productivity:

- tariffs were levied on imported agricultural products to protect the domestic markets from cheap imports,
- an intervention price was set - if the prices fell to the intervention price, then the Community artificially removed the surplus from the market, i.e. purchased the products and stopped the further falling of prices,
- market organization and a price support scheme (the system of guaranteed prices) was introduced and a production quota system was set up.

Due to the stabilised markets, the artificially high inner prices and the support system, farmers could significantly increase the output, they could produce sufficient quantities of food and were able to ensure food self-sufficiency. However, in the 1980s, increasing domestic outputs led to a massive over-production. The surplus had to be sold on the world market and the Community had to pay export subsidies which covered the difference between global and EU market prices, therefore the CAP became expensive and wasteful. A production quota system was introduced to prevent over-production. Intensification and the attempt to increase productivity and profitability led to unwanted side-effects: increasing over-production, soaring expenditure, decreasing competitiveness, distorted global markets, environmental and social concerns.

All these factors and international pressures (GATT, WTO) gave a strong impetus for the reform process. The most significant changes were the following:

- institutional prices and export subsidies that distorted trade on the world market had to be lowered,
- the original price support system that generated over-production had to be transformed into a direct income support system that is not tied to production (decoupling).

The 1992 reform stabilized the budget expenditure but the CAP remained to be expensive, it absorbed almost 50% of the total budget. The reform aimed to reduce administered support prices and to remove the link between support and production, and farmers were compensated for the income loss through direct payments. The Agenda 2000 action programme was an interim stage towards a more profound reform. The reform's main objectives were to continue the 1992 reform, to further reduce over-production, to integrate environmental concerns into the CAP, and a new rural policy was introduced. The Agenda 2000 meant a shift towards a growing recognition of the needs of rural communities and the multifunctional nature of agriculture. In the period 2000 - 2006, the CAP was divided into two pillars, and rural development as second pillar of the CAP was created. Rural policy played a key role in financing territorial and social cohesion which are the so called eco-social services for which the community must pay compensation to the farmers (Botos and Schlett, 2010).

The Luxemburg Agreement in 2003 (the Mid-term Review) intended to improve the operation of the direct payment system, payments were decoupled, the Single Payment Scheme (SPS) system was introduced, modulation was made mandatory and cross-compliance tied support to compliance with environmental standards, public health and animal welfare. The main objectives of the 2008 reform proposal were to increase modulation (i.e. shifting funds from direct support for rural development) and to shift to full decoupling (the remaining coupled payments were removed, with only a few exceptions). Prior to the 1992 CAP reform, more than 90% of all EU agricultural expenditure went towards export subsidies and market support (intervention buying), and in 2009, that share decreased to 10% (European Commission, 2011). The 2009 budget for the first pillar subsidies was 41,131 million euro, direct payments amounted to 84% of the total first pillar subsidies (31,295 million euro), and export refunds decreased from 10 billion euro to 649.5 million euro (European Commission, 2011).

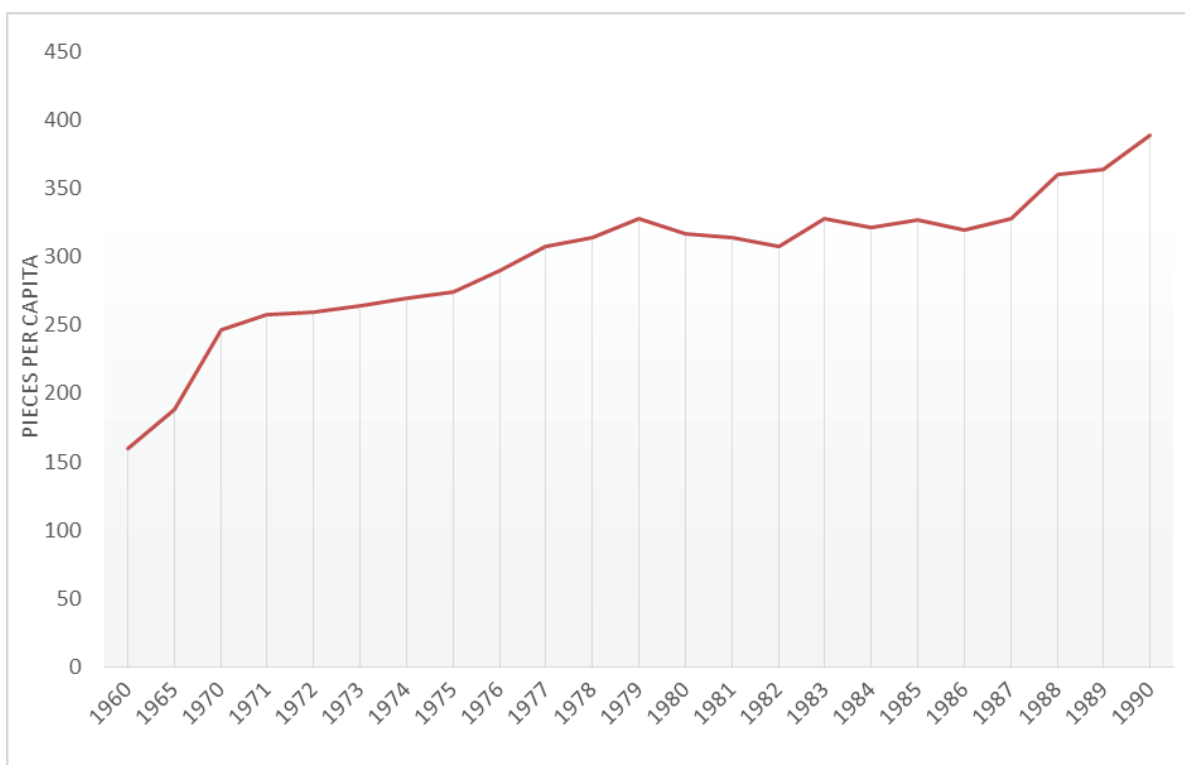
## Hungarian agriculture prior to the EU accession

About 70% of Hungary's territory is arable land. Between 1960 and 1991, the quality of agricultural production was outstanding due to the country's excellent geographical and climatic conditions, fertile lands, large-scale, industrial production, mechanisation, advanced technologies, vertical integration and the highly skilled agricultural labour force (Buday-Sántha, 2011).

The potential of agricultural production was significant. Wheat and corn yields approached the standards of France, Denmark, the USA or Canada, and Hungary was among the major meat producers (KSH 1985). Poultry meat and egg consumption increased significantly (as can be seen in Figures 1 and 2) due to the relatively low prices and a large increase in supply. The per capita egg consumption in Hungary was among the top 5 countries (Schlett, 2012).

Hungary's accession to the General Agreement on Tariffs and Trade (GATT) in 1973 ensured discrimination-free access to the markets of the GATT members, however the EC's discrimination against the so called "state-trading countries", including Hungary, continued until the end of the 1980s<sup>1</sup>. From the 1970s, agricultural exports to the EC countries decreased significantly as a result of the import levy system (Schlett, 2013).

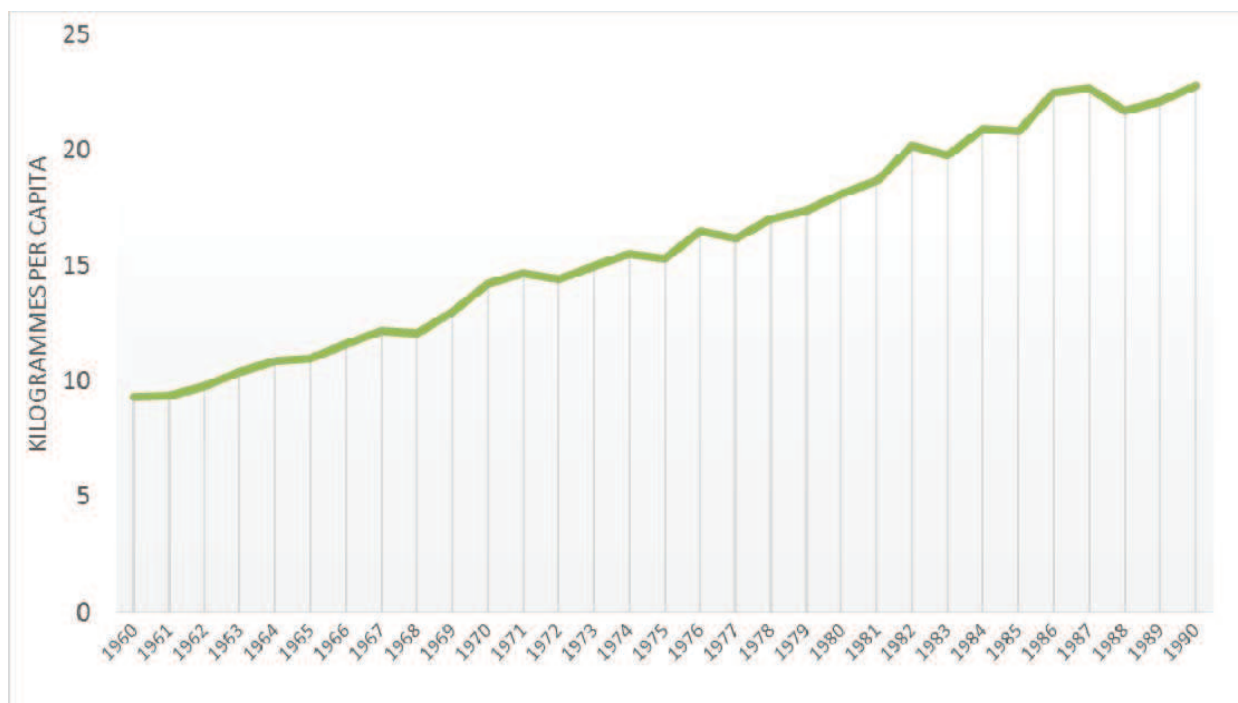
In the first half of the 1980s, in preparation for the GATT multilateral trade negotiations, Hungary became a member of the Cairns Group of Fair Trading Nations. This coalition of agricultural exporting countries played a critical role in lobbying for global agricultural trade liberalization and forced agriculture on the agenda of the GATT Uruguay Round. The Cairns Group aimed to ensure the



**Figure 1.** Consumption of hen eggs per capita in Hungary (1960-1990)

*Source:* Self compilation based on KSH (Central Statistical Office) data

<sup>1</sup> In the 1980s, Hungary – a “state-trading country”, started bilateral consultations with the EC to settle the differences but without much success. In 1982 November, the contracting parties met at Ministerial level where Hungary urged bilateral agreements with the EC, which at that time was in stark contrast to the adopted position of the COMECON.



**Figure 2.** Average annual consumption of **poultry meat in Hungary (1960- 1990)**

*Source:* Self compilation based on KSH (Central Statistical Office) data

elimination of the trade-distorting agricultural direct and export subsidies of the EU. The formerly used import licencing was abolished and Hungary committed itself to reduce tariffs and customs by 2002. In 1990, at European Summit in Dublin the Visegrád Group, an alliance of three countries (Hungary, Czechoslovakia and Poland) negotiated treaties of association with the EU. On 16 December 1991, the Europe Agreement was signed with Hungary and Poland. The EU-Hungarian Association Agreement ensured a transition period for the elimination of trade barriers, and appropriate market access opportunities were provided for Hungary (Somai, 2004). Prior to Hungary's accession, the Phare Programme of the EU provided pre-accession funds to help the candidate countries acquire the capacity to be able to function more effectively and it supported institution building. The instruments used were twinning and technical assistance. The programme allocated to Hungary 1030 million Euro between 1992 and 1999, 1198 million in 2000, and 1207 million Euro in 2003. The Phare was complemented by the ISPA (Instrument for Structural Policies for Pre-accession) and SAPARD (Special Accession Programme for Agricultural and Rural Development) programmes. In 2000, Hungary received 88.3 million Euro from ISPA and in 2003 94.5 million Euro (European Commission, 2004).

Agricultural accession negotiations with the 10 candidate countries started in 2002. The Issues Paper titled „Enlargement and Agriculture: Successfully Integrating the New Member State into the CAP” aimed to offer the Member States a basis for discussions about the position of the EU. The EU needed to take into consideration that there is a significant difference between the agricultural economies of the EU Member States and the candidate countries. It concluded that the new member states cannot be excluded from the direct payments and the quota system, and it raised the question of how and how quickly the system could be introduced in the new member states.

### **The Impacts of EU Accession on Agriculture - Opportunities and Challenges**

The EU accession was an opportunity for the country but at the same time it had to face the challenges of the changing economic environment. During the accession negotiations, the biggest dispute between the

EU and Hungary was the granting of compensation payments to Hungarian farmers. The member states that joined the EU in 2004 and 2007 were allowed to operate a simplified income support scheme, the Single Area Payment Scheme (SAPS) as a temporary derogation to the SPS. It provided flat-rate decoupled direct payments to farmers that was a compensation for the income loss due to the reduced coupled payments. Originally the SAPS was established for a 5 years long transition (phase-in) period but within the framework of the 2008 CAP reform this period was extended until 2013. The yearly maximum amount of the payments was 25% of the direct subsidies of the old member states in 2005, and through the mechanism of phasing-in the subsidies would reach the level of the EU rate by 2013 (European Commission, 2002), as can be seen in Table 1. To increase the level of support, the new member states could top up the direct payments with complementary national direct payments (CNDPs) (European Commission, 2009). In the accession year Hungary adopted the SAPS and decided to top up the SAPS payments by the National Direct Payments (the amount of payments can be seen in Table 2.).

**Table 1.** Phasing-in direct payments (%) in the EU-15, direct payments and area payments granted for Hungary (EUR/ha) between 2004-2013

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>EU budget (%) SAPS</b>	25	30	35	40	50	60	70	80	90	100
<b>National Budget (%) Top-up</b>	30	30	30	30	30	30	30	20	10	n.a.
<b>Direct payments</b>	n.a.	n.a.	408.7	495.1	618.5	741.9	865.2	988.6	1111.9	1253.3
<b>Area payments</b>	149.5	161	174.3	208.6	238.4	268.2	298	298	298	298

Source: FVM (Hungarian Ministry of Agriculture) and Official Journal of the European Union (2014)

**Table 2.** Total SAPS payments (million EUR) and grants (EUR/ha) in Hungary after the EU accession

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Total SAPS (Million EUR)</b>	316	367	447	543	683	821	954	1000	1200
<b>Grant (EUR/ha)</b>	70.22	86.21	102.29	105.52	132.83	174.48	198	213.99	233

Source: Sidlovits-Kator-Kocsis-Szabó (2014)

Rural development, the second pillar of the CAP, plays a key role in the territorial, economic and social cohesion in the EU. To increase support for rural development, modulation - as a transfer of funds from 1<sup>st</sup> pillar to 2<sup>nd</sup> pillar - was introduced.

In Hungary the general objectives of rural development were to handle structural problems, to pay special attention to remote rural areas, to reduce poverty and social exclusion.

The specific objectives were:

- to improve the competitiveness of agriculture, food industry, food processing and forestry, to make technological changes and to set up appropriate production structures,
- to support innovation and human resource development, and to move to a market oriented approach, to improve infrastructure,
- to improve sustainable agricultural production and land use,
- to reduce rural unemployment, to offer income opportunities, to improve living standards and to improve the quality of life,
- to strengthen local communities.

### **The First Decade in the EU - Hungarian Agriculture between 2004 and 2014**

After joining the EU, the situation of agriculture became complex and the high expectations were not completely fulfilled. Harmonisation of the law with European legislation facilitated Hungary's EU accession (Vajda, 2009). One of the biggest challenges was the distribution of direct payments. In the first years of Hungary's EU membership – as was earlier mentioned – the level of direct payments were phased in, i.e. it progressively increased from 25% of the EU level in 2004. The traditionally high level of subsidies in the EU-15 increased the competitiveness of the agricultural products entering Hungary which resulted in unequal conditions for Hungarian farmers.

Agricultural subsidies increased significantly compared to the previous years. In 2003 subsidies from the national budget amounted to 200 billion HUF, while in 2013 total subsidies amounted to 700 billion HUF, of which 128 billion HUF was the national contribution. The high amount of EU subsidies proves that Hungary's EU accession had a significant impact on Hungarian agriculture. Unlike in other countries, agriculture's contribution to GDP was 3.5% in 2010, in 2011 it increased to 3.9% and in 2013 and 2014 to 4% (Kapronczai, 2010).

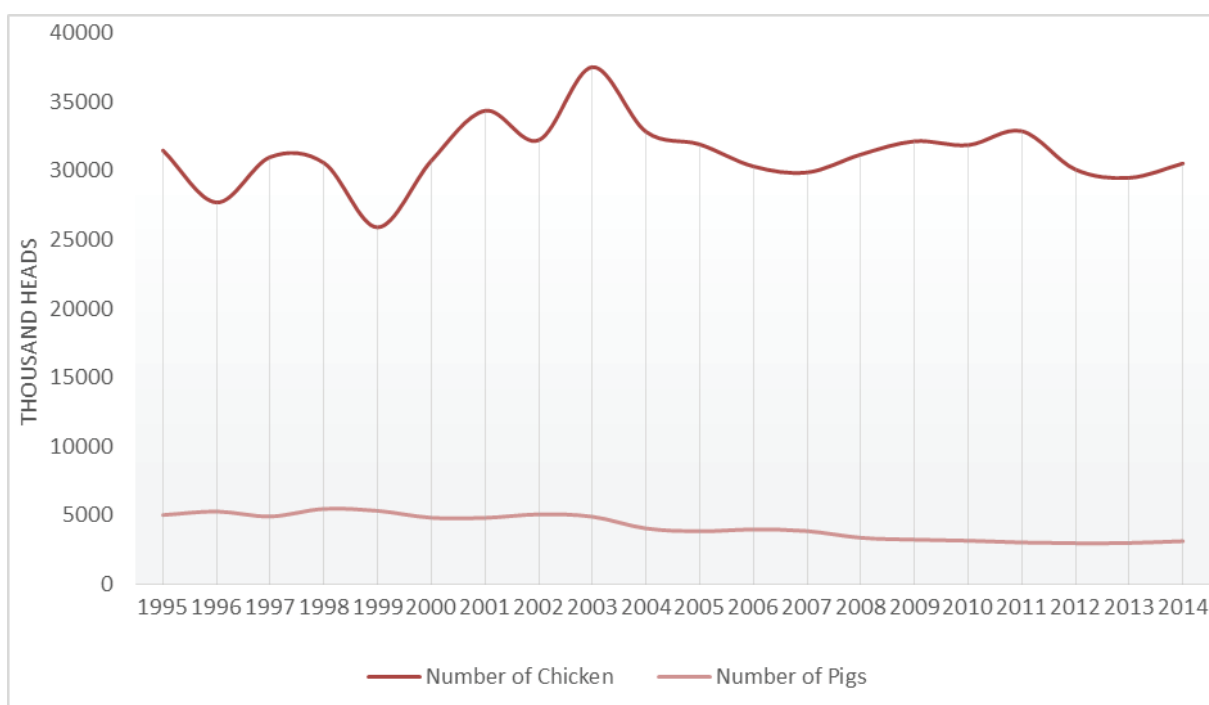
During the past 10 years of Hungary's EU membership, there were significant changes in the production structure, the trade of agricultural products and the role of agriculture in providing rural employment opportunities.

#### **1 Agricultural Output**

The structure of agriculture changed during the first decade of Hungary in the EU. The share of livestock production and crop production in the gross output showed significant changes after the EU accession. The dominance of arable farming (cereal production) was significant, its share was 55% of the total output in 2005. After the accession, livestock production started to decline, its share was approximately 35% (equal to the level of the 1960s (KSH, 1960).

The main reason for the decline in livestock production is that the CAP subsidised arable crop production to a greater extent. The pig and poultry sector was not subsidised since they got support through plant production (KSH 2013). Intervention buying contributed to the decline as well. Earlier, animal feed prices were substantially lower, and due to the guaranteed minimum prices the price of animal feed increased by 30-40%. Livestock holdings faced the most serious threat from the cereal price increase, and only the poultry sector could perform well after the EU accession. However, in 2006 production decreased significantly.

After the accession, except from certain very important crops (cereals, oilseeds and protein crops), the performance of the crop sector was much lower than it was before the accession (Somai, 2014). Wheat and vegetable production stagnated, potato and fruit production declined, while sugar beet production fell dramatically. Table 3. shows the ratio of agriculture's performance between 2004 - 2012 and 1981 – 1989.



**Figure 3.** Livestock production: number of pigs and chicken in Hungary, 1995-2014  
*Source:* Self compilation based on KSH (Central Statistical Office) data

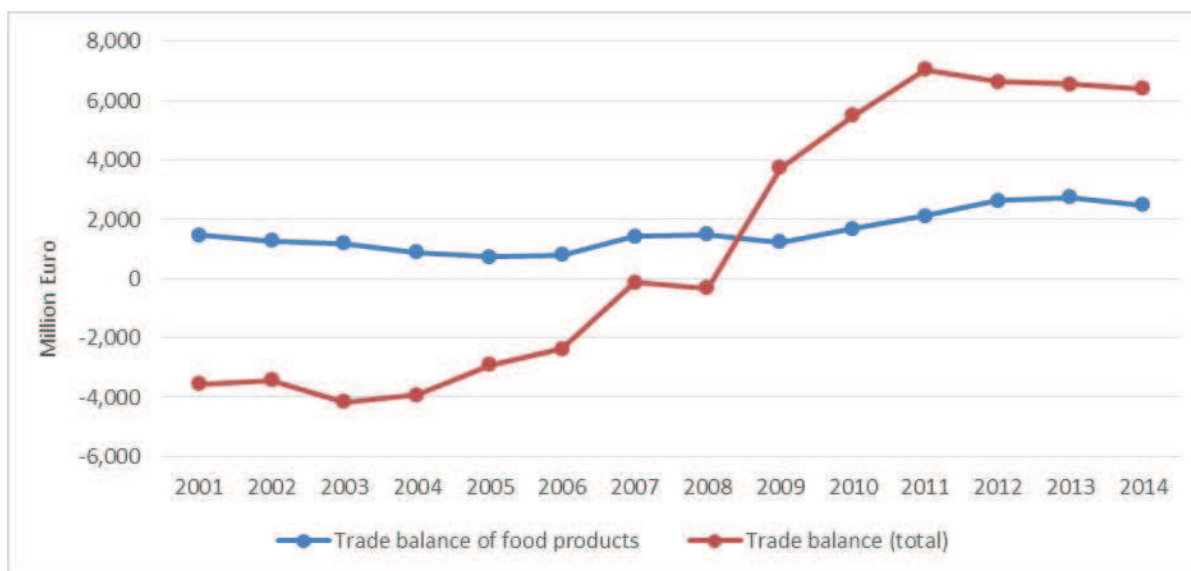
**Table 3.** The ratio of agriculture's performance in Hungary between 2004 - 2012 and 1981 - 1989

Sectors	2004-2012 average (A)	1981-1989 average (B)	A/B (%)
Plant production, gross production ratio (1960 = 100)	151	164	92.1
Livestock, gross production ratio (1960 = 100)	115	207	55.7
Gross agricultural production, ratio (1960 = 100)	141	182	77.2
Grains (thousand tonnes)	13.762	14.551	94.6
Wheat (thousand tonnes)	4.597	6.160	74.6
Corn (thousand tonnes)	7.317	6.959	105.1
Sugar beet (thousand tonnes)	1.673	4.460	37.5
Oil seeds (thousand tonnes)	1.765	880	200.6
Vegetables (thousand tonnes)	1.615	1.949	82.9
Fruit (thousand tonnes)	758	1.706	44.4
Cattle (thousand head)	708	1.791	39.5
Pigs (thousand head)	3.506	8.620	40.7
Sheep (thousand head)	1.244	2.617	47.6
Poultry (thousand head)	40.248	63.833	63.1
Cow's milk (million litres)	1.766	2.701	65.4
Egg production (million pieces)	2.805	4.382	64.0

*Source:* KSH (Central Statistical Office)

## 2 Trade in Agricultural Products

The past 10 years of Hungary's EU membership shows an increasingly high degree of export orientation. Agricultural trade expanded significantly with the EU-27 member states, however export expansion was accompanied by high import penetration. Agricultural exports between 2003 and 2011 tripled, but at the same time the imports of food products increased as well. Export of agricultural products rose to 6-7 billion euro per year, while import amounts to 4-5 billion euro, which means that imports are counterbalanced by exports and the balance of foreign trade in agriculture is positive making agriculture an important source of foreign currency (KSH, 2001). The foreign trade in agricultural products can be seen in Figure 4.)



**Figure 4.** Foreign trade in agricultural products in Hungary between 2001 and 2014

*Source:* Self compilation based on KSH data

The three-fold growth in agricultural export shows that Hungary was export-oriented and the EU accession benefited the country. However, agricultural export commodity structure was dominated by raw materials: the share of raw materials in the exports to the EU-15 countries was 47% in 2003 and increased to 56% by 2010 that was due to the decline of food processing industry (Hegedüs and Kiss, 2014; Schlett, 2014). By 2003, instead of meat, cereals (maize and wheat) became the leading export products.

While the added value of exports is low, in 2006-2009 Hungary became a net importer of processed food therefore a “colonial type” of division of labour emerged. The low added value in exports resulted in low employment as well since processing industry could provide employment opportunities.

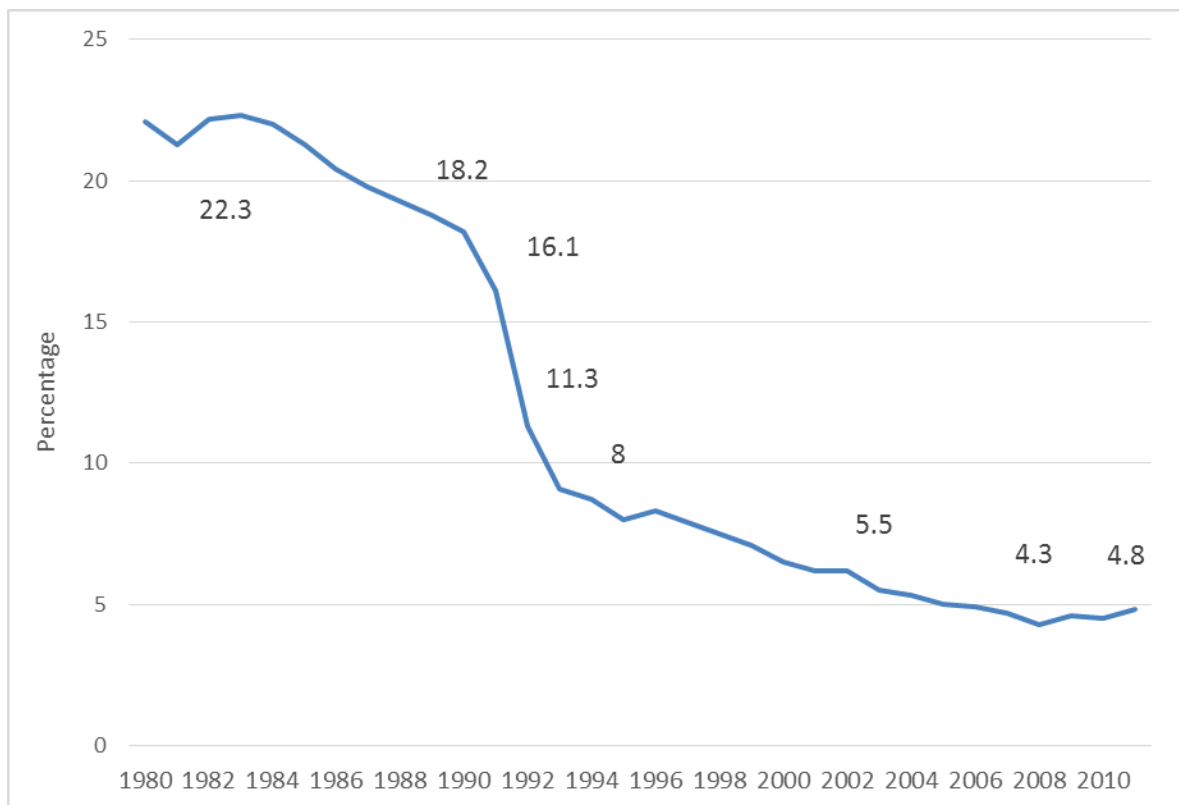
Hungary's main export partners were Germany, Romania, Austria, Italy and Slovakia (having a 60% share of exports to the EU). Imports arrived concentrated. In 2013, 69% of agricultural imports from the EU arrived from 6 EU member states, with a 20% share of Germany. Prior to the EU accession, the share of the EU in agricultural imports to Hungary was more than 83%, and after the accession the EU became the dominant supplier of agricultural products. In 2013 the share of the EU in agricultural imports to Hungary increased to 91.6%. By 2013, agricultural trade increased dynamically and nearly 40% of intra-EU agricultural trade was conducted with the member states that joined the EU in 2004 and 2007, i.e. with the former CEFTA (Central European Free Trade Agreement, signed in 1992) countries (Hegedüs and Kiss, 2014).

### 3 Rural Employment

Throughout the world, and in Hungary as well, agriculture plays a decreasing role in terms of rural employment and the services sector is the most important sector of the economy. The labour force shift from farm to non-farm sectors and the rural-to-urban migration was speeded up by the expected higher incomes, the more favourable working conditions, the adoption of new technologies that reduced labour inputs and the simplification of the production structures (Popp, 2014).

Before the transition, state farms and agricultural cooperatives offered employment to 90% of the people engaged in farming, and other activities like book keeping or maintenance, etc. Invisible unemployment characterising the Socialist large scale agriculture became visible and during the first 10 years following the transition employment rate dropped by over 60%. Instead of migrating to more productive sectors, labour force moved to long-term inactivity since private capital funded the production of the less labour intensive crops while vegetable and fruit production that provides more rural employment opportunities decreased dramatically (Schlett and Beke, 2014).

Hungary's expectations related to the advantages of EU membership and the employment expectations were high, which was enforced by the Rural Development Policy (2<sup>nd</sup> pillar of CAP). The 2<sup>nd</sup> pillar of the CAP was aimed at retaining rural population and at increasing the basic services in rural areas. The share of agriculture (including forestry, hunting and fishing) in the employment was 17.5% in 1990 and it decreased to 6.2% by 2002. After the transition, employment in agriculture decreased dramatically, its share in employment further decreased to 4.8% by 2011 (Trading Economics, 2015). Its highest value over the past 24 years was 18.2 in 1990, while its lowest value was 4.3 in 2008 (Trading Economics, 2011). The declining trend of employment in agriculture (% of total employment) in Hungary between 1990 and 2014 can be seen in Figure 5.



**Figure 5.** Employment in agriculture (% of total employment) in Hungary between 1990 and 2014

*Source:* Trading Economics, 2015

During the first 10 years of Hungary's EU membership, less labour-intensive technologies were still significant, while the labour intensive sectors like vegetable and fruit production or animal farming declined. It proved to be extremely important from an employment perspective for farms to be able to produce labour intensive products (as opposed to intensive cereal production or animal farming).

## Summary

After the EU accession, Hungary's high expectations related to the advantages of EU membership changed. Instead of seeking the rapid expansion of agricultural markets the aim was to protect the country's agricultural sector and to ensure a fair income to the farmers.

The EU membership had a positive impact on Hungary's agriculture. The expanded agricultural markets offered new possibilities, and on the other hand agricultural supports and farm incomes increased considerably. The Common Agricultural Policy was a centralised policy that restricted the possibility of national governments to define their own policy instruments and through its common institutional framework the CAP became more transparent and more predictable. Hungarian producers, consumers and the processing industry had to face new challenges, e.g. stiff competition from the imports or the rapid expansion of multinational food processing companies, supermarkets and hypermarkets. The share of the more competitive imported food products increased significantly.

The proportion of plant production and livestock in agricultural output (%) shows that there are serious structural problems. As we have seen, livestock production and use declined whereas the volume of crop outputs increased.

As for agricultural trade, exports and imports in nominal terms increased significantly after the EU accession. The greatest problem is that Hungary's export strength lies mainly in basic products (cereals, sunflower and livestock in a decreasing extent), whereas the export of processed foods are less significant.

Currently, a key issue and a key responsibility for Hungarian agriculture is to increase the volume of livestock production and to develop the food processing sector, since they can provide employment opportunity, income opportunity and they have a foreign currency generating capacity, which is a matter of absolute urgency in Hungary.

## References

1. Ángyán, J. (2000): Agrárkonceptiók az Európai Unióban és itthon I. EU-integráció: környezetpolitika és környezetvédelem. MTVSZ, Budapest
2. Balázs, P. (1998): Magyarország és az Európai Unió. In: Kende, T. (Ed.): Európai közjog és politika. Budapest, Osiris
3. Botos, K. and Schlett, A. (2010): Államháztartástan. Budapest: Szent István Társulat, pp. 77-78.
4. Buday-Sántha, A. (2001): Agrárpolitika – vidékpolitika. A magyar agrárgazdaság és az Európai Unió - Dialóg Campus Kiadó Budapest-Pécs 2001
5. Ciaian, P., Kancs, A. and Swinnen, J. F. M. (2010): EU land markets and the Common Agricultural Policy. CEPS, Brussels.
6. Csáki, Cs. and Jambor, A. (2009): The Diversity of Effects of EU Membership on Agriculture in New Member States. FAO Regional Office for Europe and Central Asia, Policy Studies on Rural Transition, No. 2009-4.
7. Csáki, Cs. And Jambor, A. (2012): Az európai integráció hatása a középkelet-európai országok mezőgazdaságára. Közgazdasági Szemle, LI X. évf., 2012. július–augusztus, 906.
8. Csáki, Cs. and Jambor, A. (2013): The impact of EU accession: lessons from the agriculture of the new member states. *Post-Communist Economies*, 25(3), 325-342. pp.

9. DG Agri (2011): The future of CAP direct payments. Agricultural Policy Perspectives Briefs, No. 2. DG Agriculture and Rural Development, Agricultural Policy Analysis and Perspectives Unit [online]. Available at: [http://ec.europa.eu/agriculture/publi/app-briefs/02\\_en.pdf](http://ec.europa.eu/agriculture/publi/app-briefs/02_en.pdf). [Accessed: 20 May, 2015]
10. Dries, L., Gemenji, E., Noev, N. et al. (2009): Farmers, Vertical Coordination, and the Restructuring of Dairy Supply Chains in Central and Eastern Europe. *World Development*. Vol. 37. No. 11. pp. 1742–1758.
11. European Commission (2011): Agriculture in the EU, Statistical and Economic Information, Report 2010. European Commission Agriculture and Rural Development [online]. Available at: [http://ec.europa.eu/agriculture/agrista/2010/table\\_en/2010enfinal.pdf](http://ec.europa.eu/agriculture/agrista/2010/table_en/2010enfinal.pdf) [Accessed: 14 May, 2015]
12. European Parliament (2004): European Parliament Fact Sheets [online]. Available at: [http://www.europarl.europa.eu/facts\\_2004/4\\_1\\_1\\_en.htm](http://www.europarl.europa.eu/facts_2004/4_1_1_en.htm) [Accessed: 14 May, 2015]
13. Eurostat (2014): Available at: <http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes>. [Accessed: 20 May, 2015]
14. Giurc, D. Hurduzeu, G. Rusu, M. et al. (2015): The Agricultural Sector in the Perspective of Romania's Accession to the European Union: Implications upon the System of Payments. European Institute of Romania [online]. Available at: [http://www.ier.ro/sites/default/files/documente/Studiideimpact\\_PaisIII/Pais3\\_studiu\\_6\\_en.pdf](http://www.ier.ro/sites/default/files/documente/Studiideimpact_PaisIII/Pais3_studiu_6_en.pdf) [Accessed: 14 May, 2015]
15. Hegedüs, Zs. and Kiss, J. (2014): The impact of EU membership on Hungarian agricultural trade. *Studies in Agricultural Economics* 116, pp. 87-94
16. Hegedüs, Zs. and Kiss, J. (2014): The impact of ten years of European Union membership on Hungarian agricultural trade. In: *Studies in Agricultural Economics* Vol. 116, 2014. pp. 87-94.
17. Juhász, P. (2001): Mezőgazdaságunk és az uniós kihívás. *Beszélő*, 2001. 6. évf. 4. sz. 64-69.
18. Kapronczai, I. (2010): A magyar agrárgazdaság az adatok tükrében az EU csatlakozás után. *Agrárgazdasági Tanulmányok*, Agrárgazdasági Kutató Intézet
19. Kapronczai, I. (2011): A magyar agrárgazdaság napjainkban. *Gazdálkodás* 2011/7.
20. Kiss, J. (2011): Some impacts of the EU accession on the new member states' agriculture. *Eastern Journal of European Studies*. 2(2): 49–60. pp.
21. Kovács, T. (2012): Vidékfejlesztési politika. Budapest-Pécs, Dialóg Campus, pp. 170-171.
22. KSH (2001): A külkereskedelmi termékforgalom euróban, árufőcsoportok szerint. KSH [online]. Available at: [http://www.ksh.hu/docs/hun/xstadat/xstadat\\_eves/i\\_qkt007.html](http://www.ksh.hu/docs/hun/xstadat/xstadat_eves/i_qkt007.html) [Accessed: 14 May, 2015]
23. KSH (2013): Average annual consumption of poultry meat. KSH [online]-. Available at: [https://www.ksh.hu/docs/eng/agrar/html/tab11\\_5\\_5\\_1.html](https://www.ksh.hu/docs/eng/agrar/html/tab11_5_5_1.html) [Accessed: 20 May, 2015]
24. KSH (2013): Consumption of hen eggs per capita. KSH [online]. Available at: [https://www.ksh.hu/docs/eng/agrar/html/tab11\\_5\\_5\\_3.html](https://www.ksh.hu/docs/eng/agrar/html/tab11_5_5_3.html) [Accessed: 14 May, 2015]
25. KSH (2013): Mezőgazdaság szerepe a nemzetgazdaságban. KSH [online]. Available at: <http://www.ksh.hu/docs/hun/xftp/idoszaki/pdf/mezoszerepe13.pdf> [Accessed: 15 May, 2015]
26. KSH (2014): Economic accounts for agriculture, volume indices. KSH [online]. Available at: [http://www.ksh.hu/docs/eng/xstadat/xstadat\\_annual/i\\_omr003b.html?down=960](http://www.ksh.hu/docs/eng/xstadat/xstadat_annual/i_omr003b.html?down=960) [Accessed: 15 May, 2015]
27. KSH (Hungarian Central Statistical Office) Yearbook 1985
28. OECD (2012): OECD Stat Extracts. OECD [online]. Available at: <http://stats.oecd.org/Index.aspx?QueryId=50477#> [Accessed: 14 May, 2015]
29. Popp, J. and Udovecz, G. (2007): Hungarian Agriculture and EU Accession. Available at: <http://ageconsearch.umn.edu/bitstream/8515/1/sp07po01.pdf> [Accessed: 19, May, 2015]
30. Popp, J.(2014): Hatékonyság és foglalkoztatás a magyar mezőgazdaságban. *Gazdálkodás*. 2014/3. sz. 173.
31. Schlett, A. (2012): Success and Failure of the Hungarian Agrarian Model. *Arhivele Totalitarismului* (2012) 74-75: (1-2) pp. 96-97
32. Schlett, A. (2013): Zátoryra futott mezőgazdaság. A magyar agrárium külpiazi helyzetének alakulása az olajárrobbanás után. In: Veres Lajos (Ed.) *Regionális földrajzi tanulmányok: Abonyiné Dr. Palotás Jolán 70. születésnapja tiszteletére*. Szeged, Közép-Európai Monográfiák, 7. pp. 124-125.

33. Schlett, A. (2014): Foreign Direct Investments in Food Industry in Hungary. *International Journal of Business and Management Studies*. 2014 Volume 03, Number 03. pp 292-293.
34. Schlett, A. (2014): Foreign Direct Investments in Food Industry in Hungary. *International Journal of Business and Management Studies*. 2014 Volume 03, Number 03. pp 292-293
35. Schlett, A. and Beke, J. (2014): Agriculture and Employment: The Results of the Transition in Hungarian Agriculture. *Visnyk Kyivskoho Natsionalnoho Universytetu Tekhnolohii Ta Dyzainu / Bulletin of the KYIV National University of Technology and Design* 1: (75) pp. 225-234.
36. Schlett, A.: Success and Failure of the Hungarian Agrarian Model. *Arhivele Totalitarismului* (2012) 74-75: (1-2) pp. 96-97
37. Sidlovits, D., Kator, Z., Kocsis, M., Szabó, Zs. (2014): Growing Success? Agriculture and rural development in an enlarged EU. Available at:  
[http://ageconsearch.umn.edu/bitstream/169089/2/paper\\_Sidlovits\\_Kator\\_Kocsis\\_Szabo.pdf](http://ageconsearch.umn.edu/bitstream/169089/2/paper_Sidlovits_Kator_Kocsis_Szabo.pdf) [Accessed: 16 May, 2015]
38. Somai, M. (2004): Nemzeti agrártámogatás az Európai Unióban és a magyar agrárcsatlakozás. MTA Világgazdasági Kutatóintézet – Kihívások, 175. sz., 2004. szeptember
39. Somai, M. (2004): Nemzeti agrártámogatás az Európai Unióban és a magyar agrárcsatlakozás. MTA Világgazdasági Kutatóintézet – Kihívások, 175. sz., 2004. szeptember
40. Somai, M. (2014): Agrártámogatások az Európai Unióban. In: *Fejlesztési stratégiák – finanszírozási alternatívák. Heller Farkas Könyvek 1. (A Pázmány Péter Katolikus Egyetem Jog- és Államtudományi Karának könyvei)* Katona, K. – Schlett, A. (Ed.) Pázmány Press, Budapest.
41. Trading Economics (2014): Employment in agriculture (% of total employment) in Hungary. *Trading Economics* [online]. Available at: <http://www.tradingeconomics.com/hungary/employment-in-agriculture-percent-of-total-employment-wb-data.html> [Accessed: 21 May, 2015]
42. Vajda, L. (2009): Beteljesülő remények. A magyar agrárgazdaság az unióban. In: *Európai Tükör*. 2009/márc. pp. 147-148.
43. Varga, Gy. (2004): A magyar mezőgazdaság az idők sodrásában – Helyzetkép az EU-hoz való csatlakozás időszakában. *Miniszterelnöki Hivatal Stratégiai Elemző Központ, Stratégiai Füzetek* 17. [2004. május]
44. Varga, Gy. (2007): Új szerepben a magyar mezőgazdaság - adottságok, kényszerek és esélyek. *Acta Oeconomica Kaposváriensis*. (2007) Vol 1. No 1-2, pp. 23-24.