# Jacek Chotkowski, Benon Gaziński

Problem of Fair Competition on the Single EU Market – the Case of Potato Starch

Olsztyn Economic Journal 6/1, 89-98

2011

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

Tekst jest udostępniony do wykorzystania w ramach dozwolonego użytku.



#### OLSZTYN ECONOMIC JOURNAL

Abbrev.: Olszt. Econ. J., 2011, 6(1)

# PROBLEM OF FAIR COMPETITION ON THE SINGLE EU MARKET - THE CASE OF POTATO STARCH

# Jacek Chotkowski<sup>1</sup>, Benon Gaziński<sup>2</sup>

<sup>1</sup> Laboratory of Market Research Plant Breeding and Acclimatization Institute, Bonin, Poland, <sup>2</sup> Institute of Political Sciences University of Warmia and Mazury in Olsztyn

Key words: Market Competitiveness, Starch Quota, Polish Agriculture.

#### Abstract

Integration of Polish agriculture is recognized as a success. Nevertheless some remarkable difficulties have emerged. Some of them are related to low production quotas in the dairy, sugar and starch sectors.

The authors argue that the level of potato starch quota inscribed for Poland is incompatible with the principle of fair competition in the inner EU market. The quota ceiling of a mere 145 thousand tons is a heavy constraint to the processing plants – their total processing capacities are estimated at some 220–260 thousand tons. Therefore, they are utilized at c. 56–66%, leading to the increase of unit costs of starch production by about 9,2% and a decrease in the competitiveness.

Another point is the ratio of the quota to the volume of harvests: 0,1121 for Denmark, 0,057 for Germany and (only) 0,0131 for Poland. Furthermore, the domestic consumption of starch products in Poland is two-fold bigger than the quota with a resultant increase in importation. Paradoxically, such practices are pronounced in spite of the unutilized natural resources of Polish agriculture – a high proportion of light soils. The temporary solution is to increase the quota – the long-run one is to rethink the concept of the quota system – under the new CAP reform.

#### ZASADA UCZCIWEJ KONKURENCJI NA JEDNOLITYM RYNKU UE A KWOTA SKROBI ZIEMNIACZANEJ PRZYDZIELONA POLSCE

#### Jacek Chotkowski<sup>1</sup>, Benon Gaziński<sup>2</sup>

<sup>1</sup> Pracownia Badań Rynkowych Instytut Hodowli i Aklimatyzacji Roślin w Boninie <sup>2</sup> Instytut Nauk Politycznych Uniwersytet Warmińsko-Mazurski w Olsztynie

Słowa kluczowe: konkurencja na rynku, kwota skrobiowa, rolnictwo polskie.

#### Abstrakt

Integracja rolnictwa polskiego jest uznawana za sukces, występują jednak znaczące trudności. Część z nich jest związana z niskimi kwotami produkcyjnymi w sektorach: mleczarskim, cukrowniczym i skrobi.

Autorzy wykazują, że przydzielony Polsce poziom kwoty skrobi ziemniaczanej jest nie do pogodzenia z zasadą uczciwej konkurencji na jednolitym rynku UE. Limit wynoszący zaledwie 145 tys. ton jest uciążliwą barierą dla przetwórstwa – moce przerobowe zakładów to 220–260 tys. ton. Są wykorzystywane zaledwie w ok. 56–66%, co zwiększa koszty jednostkowe o ok. 9,2% oraz przyczynia się do zmniejszenia konkurencyjności.

Innego rodzaju argumentem jest relacja kwoty do poziomu zbiorów ziemniaka: 0,1121 dla Danii, 0,057 dla Niemiec i zaledwie 0,0131 dla Polski. Co więcej, zużycie skrobi na krajowym rynku w Polsce jest dwukrotnie wyższe niż przyznana kwota, co powoduje wzrost importu. Sytuacja taka występuje, paradoksalnie, mimo nie w pełni wykorzystywanego potencjału produkcyjnego polskiego rolnictwa – dużego udziału gleb lekkich. Rozwiązaniem doraźnym jest zwiększenie przyznanej kwoty, perspektywicznym – zmiany w samej koncepcji kwotowania produkcji, w ramach zreformowanej wspólnej polityki rolnej.

### Introduction

The 20-th century had been a very turbulent one for Poland with three major political transformations and two concurrent transformations of the system of national economy. The first, a political one, was introduced in Autumn 1918, when Poland recovered the independence after 123 years of partitions. Two further transformations covered both the political and economic systems. As a result of the 2-nd World War, since 1944, the system of "real socialism" had been overruled upon Poland with a "socialized" national economy and the democracy of the "dictatorship of the proletariat", having nothing in common with real democracy.

In 1989, Poland rejected the oppression of the Soviet-styled socialist system as the first country in the region – the "bulk" of the national economy had been privatized and the system of democracy was re-introduced.

Peaceful development in Poland cut the outbreak of the war on 1-st September 1939. And the country would come back on the track to normal development only 50 years later, when – in September 1989 – the first non-Communist Prime Minister in the Central and Eastern European Countries announced the departure from rules of the Centrally Planned Economy and a turn to a market-oriented one.

Changes introduced 20 years ago made possible Poland's membership in the NATO and the European Union.

# System transformation and European integration

## System transformation vs. the pre-accession period

In the period preceding Poland's accession to the European Union there were widely spread fears among the farmers (GAZIŃSKI 2006) - they were in no way irrational since in those years the European Union was indeed a bad neighbour for farmers. In the early 1990s the liberalization of Polish foreign trade took place which contrasted with numerous support mechanisms for the Community agriculture and its protection against imports from third countries. It led to a long-term negative balance of trade in agricultural goods with the Union countries which was against the so-called asymmetry principle contained in the Association Treaty, signed in Brussels 16-th December 1991. What is more, the export subsidies, which were not available for Polish manufacturers, eliminated Polish products from other markets, even the Kaliningrad Oblast. It should be added that other exporters including the USA also experienced such difficulties. These matters of argument were the topic of the GATT Uruguay Round negotiations, finished in 1994. Noteworthy is the fact that in the so-called Cairns Group of states opposing the European Union there was also Hungary, the country which stood as a candidate for the Union since 1994.

Systemic transformation, commenced in 1989, obtained the support of the Communities in the form of the PHARE program (*PHARE w Polsce...* 2007). In the first years of the program implementation, the means designed for rural areas and agriculture were quite modest. In the period preceding the accession a special pre-accession program for agriculture, referred to as SAPARD, was introduced which, among other things, was supposed to prepare beneficiaries to make efficient use of structural funds in the period preceding the accession.

The accession negotiations were uneasy and lasted over four and a half years (terminated on 13<sup>th</sup> December 2002); the area of "agriculture" belonged to the toughest ones. What evoked the most controversy was the issue of direct subsidies as well as the access to the purchase of land by foreigners on the other hand. Still in July 1997 the European Commission prepared a multivolume report "Agenda – 2000" (DRAGO, GAZIŃSKI 1998), in which it was agreed that direct subsidies should not be paid to the new member states at all. Such a standpoint was maintained for nearly five years until a compromise was reached on partial and gradually increased levels of these measures of support: from 25% in the first year of membership to 100% by the year 2013.

The government of J. Buzek in turn insisted on the 18-year-long transition period regarding the opportunity to purchase land by foreigners as a trump card. Unfortunately, his followers were not able to make use of it. During his

stay in Brussels, W. Cimoszewicz, the then Minister of Foreign Affairs, made a considerable concession from this initial position and obtained nothing in exchange. Indirect results of this were among others low milk and potato starch quotas which were imposed on Polish negotiators who had no sufficient assets to reach more favorable solutions.

### Experiences of the first years of the EU membership

One of the consequences of Poland's entering the European Union was the introduction of the principles of the Common Agricultural Policy. As an outcome of more than ten years of transformation, Polish economy has undergone a thorough reconstruction. It also refers to agriculture, which at the moment of accession was much closer to the model of the market economy than the "manually" steered Union agriculture. An example of that can be the implementation of the system of dairy quoting which will probably be withdrawn in the next budget period.

In the initial years of membership in the Union, some positive phenomena were disclosed. An increase in prices for a range of agricultural goods took place which unfortunately, as could have been expected, has turned out to be temporary. The negative balance of agricultural trade with the Community states, which lasted for a number of years, turned out to be positive already in the year 2003, preceding our membership. From the very first months of membership in the Union till the end of 2004 Polish agricultural exports were increasing at a very fast pace. In comparison with similar period in the previous year. Exports to the "old" member states increased by about 62.7% and by 52.6% to the "new" member states. Poland soon gained the position of the biggest food exporter in the region of the Central and Eastern European Countries whereas Hungary came in at the second place (KALISZUK 2005).

Covering agriculture with direct subsidies and with a number of support programs from the Community budget have brought in a noticeable growth of income. The parity of agricultural income increased from 65% in 2003 to 83% in 2006 (Wilkin, Nurzyńska 2008). It was accompanied by the improvement of moods and growth of support for Poland's membership in the European Union in comparison with the pre-accession period.

In the Polish rural areas, it is possible to observe several variable trends of change:

i) the share of farms in the group of rural households is decreasing. It is estimated that out of the overall number of 4.4 million, the households connected with farming make up around 49% which is less than half;

- ii) a new phenomenon is the reversal of the negative migration balance, which stands for the fact that at present more people settle in the countryside than leave it;
- iii) even in the farming families the farm has ceased to be the largest source of income. Life requires that a multifunctional development should not only be a theoretical expression but a driving-force to search for additional income beyond agriculture;
- iv) the number of farms is decreasing (within the period of 2002–2007 there was a fall of 11.8%), whereas their average acreage is increasing;
- v) the level of education in rural areas is improving but it is still considerably inferior to the city (in 2007 the percentage of people with higher education was over threefold higher in the city than in the countryside).

The change in the political and economic systems, as well as the accompanying changes European integration, gave Polish agriculture and rural areas new opportunities for growth in comparison with the previous period. Unfortunately, they are neither given once and for all nor smoothly, which is painfully proved by e.g. the present level of milk purchase prices. Although the Common Agricultural Policy turned out to be positive in the first period of membership due to the inflow of means connected with that, it is still an imperfect mechanism which requires new solutions. Initial benefits started to run out, while more and more difficulties have emerged. The source of some of them are low production quotas that were fixed to Poland within the accession negotiations – this refers to dairy products, sugar and starch.

The aim of this study is to analyze the problem of the productive capacities of the potato processing plants in Poland from the point of view of maintaining the conditions of fair competitiveness which constitutes one of the fundamental principles of functioning in the inner EU market (*EU competition policy*... 2004).

# The starch quota as a constraint to the potato economy

# Influence of the low starch quota on starch production costs in Poland

Before the end of Poland's accession negotiations to the European Union, which took place in December 2002 in Copenhagen, the Polish Ministry of Agriculture and Rural Development took the stand to apply for the starch quota of 260 thousand tons, whereas the minimal quota to be accepted by our country was 185 thousand tons. It should also be noted that the domestic starch production quota in Poland set for the year 2004–2005 was

242 thousand tons (*Act of regulation*... 2001). The fact that we were finally granted the quota of 145 thousand tons, which made up only 56% of the one applied for, came as an unpleasant shock. With the support of the Ministry of Agriculture and Rural Development as well as the representatives of the starch sector, Polish deputies to the European Parliament, upon the initiative of J. Wojciechowski, applied to increase the domestic ceiling for the next year (2005/2006) to 180 thousand tons. In spite of the almost unanimous resolution in favor of the motion by the European Parliament, even such tiny changes were not allowed.

The processing potential of the Polish starch potato processing plants is assessed at 220–260 thousand tones. Imposing on the country a limit at the level of 145 thousand tones means that the existing production capacities and the value of invested capital are utilized only within 56–66%. Assuming the net profitability of starch industry plants in 2008 at the level of 2% as well as a 30% share of fixed costs in the total starch production costs, increasing the scale of starch production in the plants from 130 thousand tones (an increase of 38.5%) causes a fall in starch production costs by 8.5% per unit. Changes in starch production cost structure are presented in the example of an X potato industry plant (anonymous due to trade data protection) in Table 1. Increasing the scale of starch production in the production season from 8 to 16 thousand tones caused a decrease of starch potato costs by nearly 10%.

Table 1 Structure of costs of potato starch production [%] in the potato processing plant "X" according to the yearly processing capacities (2003/04 vs. 2005/06)

0.47	Yearly production capacities [tons]			
Cost item	16 000	8 000		
Raw material (potatoes)	48.3	37.1		
Processing	25.5	17.6		
Total costs of production (1 + 2)	73.8	54.7		
Starch marketing (selling)	5.2	8.3		
Administration and office	2.3	1.9		
General	18.8	35.2		
Total costs of starch manufacturing	100.0	100.0		
Total costs per 1 ton of starch (PLN)	1 590.6	1 757.4		

Source: own calculations based on the data from the processing plants.

The high cost of potato starch production in Poland caused by low levels of utilization of the production capacities of processing plants made it in turn impossible to increase the prices for the purchase of potato as a resource to produce starch up to the level ensuring profitability. As the data in Table 2 show, potato starch cultivation in Poland is characterized by negative profitability. In this situation, farmers, especially those growing starch potatoes on a smaller scale, resign from contracts with processing plants. As a consequence, it is difficult to utilize even such a low limit of starch production which has been assigned to our country.

As a result, the production from the Polish starch industry is burdened with exceedingly high fixed costs in comparison with their competitors from other EU-member states, which hampers their competitiveness. In this case the principle of maintaining the conditions of fair competitiveness on the uniform European market should stand for setting equal relations between given member states and the starch production quota fixed to them.

Table 2 Calculation of costs and profitability of starch potato cultivation [PLN/ha], assumed yield of 30 tons/ha

Item of input	Year 2007/08	Year 2008/09	
Potato seeds, purchased	830	625	
Potato seeds, own cultivation	410	431	
Pesticides	720	820	
Fertilizers	785	1540	
Machinery exploitation	1090	1520	
Draught power	1320	2110	
Credit costs of purchased inputs (yearly interest rate – 3%)	100	115	
Labour	600	600	
Total direct costs	5855	6241	
Indirect costs (lump, 10% of the total direct costs)	585	624	
Total costs (9 + 10)	6440	6865	
Total costs per 1 ton of marketed potatoes	215	229	
Total value of production	6300	6750	
Assumed prices of marketed potatoes (PLN per 1 ton)	210	225	
Calculated profit (PLN per 1ha)	-140	-115	

Source: own calculations based on the field survey of the IHAR Bonin.

# The relation of the starch production quota to the volume of potato harvests and domestic demand for starch

The essential element of the comparative analysis the potato starch market is the relation of the quota to the cultivation area and to the volume of harvests. Decisively, Poland has the lowest relative starch production quota out of the biggest potato producers among the European Union members. For instance, the starch production quota per 1000 tons of potatoes accounts for 112 tons for Denmark, 57 tons for Germany, and only 13.1 tons for Poland (Tab. 3). Even more unfavorable for Poland is the relation of the starch quota to the potato cultivation area.

Major EU-15 potato starch producers\*

Table 3

Country	Starch potato quotas (tons) 2004–2008	Acreage of potato cultivation (1000 hectares) in 2007	Average potato harvests	Starch potato quota as calculated per:		
			(mln tons)	1 ha of cultivated potatoes	1000 tons of harvested potatoes	
Germany	656 300	273	11.5	2.4	57.0	
The Netherlands	507 400	161	6.9	3.1	73.5	
France	265 400	158	6.7	1.7	39.6	
Denmark	168 200	38	1.5	4.4	112.1	
Sweden	62 100	29	0.9	2.1	69.0	
Finland	53 200	28	0.7	1.9	76.0	
Austria	47 700	23	0.7	2.1	68.1	
The Czech Republic	33 700	32	0.8	1.1	42.1	
Poland	145 000	570	11.1	0.3	13 .1	

<sup>\*</sup> Quota for remaining 5 EU member countries (Spain, Latvia, Lithuania, Slovakia and Estonia) fixed at the level of 9900 tons.

Source: own calculations based on the data from: Hambloch et al. (2007, p. 127).

The volume of the starch production ceiling granted to Poland is also disproportionate to the requirements of the inner market. As the overall (potato and other) starch balance shows, until the year 2003–2004 the domestic demand for Poland was about 180 thousand tons of starch and starch products. For this reason, the net import was low (Tab. 4). Following accession to the European Union, the volume of domestic starch consumption increased to over 300 thousand tons, which means that the net import of 100–200 thousand tons is necessary. The deepening gap between production and consumption indicates that the quota granted to us is incompatible with the increased demand of the domestic market.

Table 4 Balance of exports, imports and production of starch and starch products in Poland during the period 2001-2008, thousand tons

Item	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009*
Total exports of starch products	68.5	89.8	108.4	120.4	141.4	117.6	107.5	91.4
- in these: potato flour and starch	40.9	57.5	72.9	54.4	64.0	28.5	34.7	436.6
- other starch products	27.6	32.3	35.5	66.0	77.4	89.1	72.8	54.8
Total imports of starch products	85.0	95.0	109.9	205.9	246.2	332.7	275.4	204.7
- in these: potato flour and starch	0.4	0.4	0.2	4.6	9.8	19.5	7.6	10.7
- other starch products	84.6	94.6	109.7	201.3	236.4	313.2	267.8	194.0
Balance: exports/imports	-16.5	-5.2	-1.5	-85.5	-104.8	-215.1	-167.9	-113.3
Production of potato starch	135	165	178	158	130	79	115	130
Domestic consumption (production minus exports plus imports)	151.5	170.2	179.5	243.5	234.8	294.1	282.9	243.3

<sup>\*</sup> forecast.

Source: Own calculations based on: Dzwonkowski (2009).

# Significance of starch potatoes in the structure of harvests

The next argument for increasing the potato starch production ceiling fixed to Poland results from differences in the structure of potato utilization as well as their role in the regions with less fertile soils that are threatened with marginalization (Rembeza 2005). In the majority of EU states consumption and processing into foodstuffs, and in some of them also processing into starch, dominate in the structure of potato utilization (ZIMOCH-GUZOWSKA, CHOT-KOWSKI 2006). In Poland the overall utilization of the potato for feed is decisively higher. This entails numerous and unfavorable consequences since the potato production for feed is located mainly in the regions with less fertile soils which have a much bigger share in Polish agriculture (about one third) than in other EU member states. In recent years the level of feed consumption is decreasing fast which leads to the decrease of the potato share in the structure of harvests. It leads to the extensive plant production which puts the balanced agriculture in the regions with less fertile soils at risk.

The increase of starch production quota would enable the enlargement of potato production in the regions with less fertile soils and partially counterbalance the consequences resulting from the decrease of potato production for feed. Correspondingly, an increase in the starch quota should be treated not only as a way of more in-depth utilization of the processing capacities of plants and better adaptation to the market demand, but also as a factor which prevents degradation of agricultural production in less favored areas.

#### Conclusion

The above analysis explicitly shows that the specific economic market factors in the country, such as the processing capacities of plants, volume of internal demand as well as the significance of potato in the structure of harvests were not taken into consideration in the process of setting the potato starch production quota for Poland. Since fair competitiveness constitutes the overriding principle of functioning in the European Union, the urgent amendment of the starch quota set for our country seems to be grounded. Moreover, with respect to this regulation, the exceptional mode of procedure should be applied due to the fact that previous attempts to change this state of affairs were not successful. The paradoxes of the situation caused by low starch quota in Poland bring into question the point, if – in the long run – the whole concept of quotas, as such, is to be rethought and needs more decisive reforms.

Translated by Sylwia Tyszka

Accepted for print 8.02.2011

### References

Act of regulation of potato starch market. 2001. Journal of Laws, 11(83).

Drago F., Gaziński B. 1998. Agenda 2000. W kręgu opinii Komisji Europejskiej o przysztym rozszerzeniu Wspólnoty. Humanistyka i Przyrodoznawstwo, 4: 159–164.

Dzwonkowski W., Szczepaniak I., Zalewski A., Chotkowski J., Rembeza J., Lewandowski R. 2009. Rynek ziemniaka. Stan i perspektywy. Analizy Rynkowe, 35: 27.

GAZIŃSKI B. 2006. Polskie rolnictwo w Unii Europejskiej i niektóre doświadczenia pierwszego roku członkostwa. Biuletyn Instytutu Hodowli i Aklimatyzacji Roślin, 242: 3–14.

EU competition policy and the consumer. 2004. Office for the Official Publications of the European Communities, Luxembourg.

Hambloch Ch., Menth H., Stelzer M., Schaack D., Wilckens A., Graf G. 2007. ZMP – Marktbilanz. Kartoffeln 2007. Zentrale Markt und Preisberichtstelle GmbH, Bonn, p. 127.

Kaliszuk E. 2005. Analiza konsekwencji członkostwa dla wymiany handlowej. In: Polska w Unii Europejskiej. Doświadczenia pierwszego roku członkostwa. UKIE, Warszawa.

PHARE w Polsce 1990–2007. 2007. Ed. T. Kołodziej, B. Mrówka. UKiE, Warszawa.

Rembeza J. 2005. Uwarunkowania produkcji skrobi na tle produkcji ziemniaka w Polsce i innych krajach UE – uzasadnienie zwiększenia przyznanej Polsce kwoty produkcji skrobi. Ekspertyza na zlecenie MRiRW. IHAR, Bonin.

WILKIN J., NURZYŃSKA I. 2008. Polska wieś 2008. Raport o stanie wsi. FDPA, Warszawa.

ZIMNOCH-GUZOWSKA E., CHOTKOWSKI J. 2006. Potato sector in Poland: From breeding to production. In: Potato developments in a changing Europe. Ed. N.U. Haase, A.J. Haverkort. Wageningen Academic Publishers, Wageningen, pp. 215–225.