Заключение. Таким образом, анализ показал, что снижение себестоимости картофеля – актуальная проблема для картофелеводческих предприятий Гродненской области. Основными источниками ее решения являются сокращение затрат на его производство за счет повышения уровня производительности, экономного использования материальных ресурсов, сокращение непроизводственных расходов, потерь при хранении. Решение проблемы снижения себестоимости картофеля является одним из возможных путей повышения экономической эффективности производства картофеля.

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SELECTED ASPECTS OF THE POTENTIAL OF POLISH AND PORTUGUESE AGRICULTURE

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Key words: *agriculture, agricultural land, yield*

Abstract. *Agriculture is an important element of economy in both Poland and Portugal, and it became one of the most troublesome areas in the processes of adjustment to the European Union. In both countries, the prevalent type of farms were multi-functional ones. The aim of this article is to familiarise the reader with the information concerning the productivity potential of Polish agriculture 10 years after the country's accession to the EU and against the background of Portugal, a country which has been an EU member for 30 years. In Poland, same as in Portugal, the total area of farmed land tends to decrease, which seems to suggest that some of the population have been moving from agriculture to other branches of economy. In Portugal and in Poland, the largest cropped area is sown with wheat.*

(Поступила в редакцию 26.05.2017 г.)

Introduction: Whilst the integration of Poland with the European Union creates an opportunity for the country to enter European markets, it also

means that the Polish economy must be adjusted to the competition of these markets. Agriculture is an important part of economy in all countries, but it proved to be the most difficult domain in the ajustment processes. Portugal or Greece did not have well-developed agriculture on accession to the EU. Unquestionably, the level of Polish agriculture was much lower than the highly developed agriculture and economies of the EU states. When Poland joined the EU structures on 1 May 2004, Polish farming showed many similarities to Portuguese agriculture: twelve years after the dissolution of collective state farms, it had a similar area structure – large and small farms, impoverished former state farm workers, high unemployment in the countryside, migration from villages and political marginalisation of problems in rural areas. After years of the dynamic economic growth in Portugal, first stagnation and then regression set in, the dynamics of the domestic product growth has slowed down, the demographic growth declines, interest rates on bank loans increase, etc. (Halamska 2005, Analiza uwarunkowań…2010).

Transformation in the production and organisational structure of agricultural farms in Portugal can serve as an implication for Polish agriculture, all the more so as the farming in Portugal is in many respects (except the natural conditions) similar to Polish agriculture. Both Poland and Portugal are considered to be agricultural countries. Studies have revealed that prior to Poland's access to the EU, the agriculture in this country had been characterised by relatively low efficiency of engaged production factors, which had had an impact on the output and efficiency of production. A comparable situation occurred in Portugal, which at that time had been in the EU for over 10 years (Hunek 1998). Multifunctional farms dominated in both countries.

Aim: Our aim is to familiarise the reader with data describing the production potential of Poland's agriculture 10 years after its accession to the EU, against the background of Portugal, which has been in the EU for 30 years.

Material and methods: Despite differences in the climate, area and land relief, there are notable similarities between Polish and Portuguese agriculture. The following review relies on horizontal and vertical analyses of the agrarian structure, structure of crops as well as harvests of staple crops and yields in Poland and Portugal between 2000 and 2015. The literature and statistical data were analysed. The data were acquired from: the Local Bank of Data, the Central Statistical Office in Poland (GUS) and from the Instituto Nacional de Estatistica in Portugal.

Research results: Poland covers an area of 312 683 km^2 and has a population of 38.7 million people, with the population density being around 124 persons per 1 km^2. Among the employed population broken down by occupation, 23.39% work in agriculture, 31.69% in industry, including 8.88% in the construction business. The land used by agriculture constitutes

60.2% of the country's geographical area. The percentage of Poland's land covered by forests is about 30%. The contribution of agriculture to the gross domestic product (GDP) is about 7%. The unemployment rate is *ca* 9.7% (tab. 1 and 2).

There are around 2 million farms in Poland. The average size of a farm is approximately 8 hectares. The number of farms has been decreasing recently while the average size has been growing. According to the research conducted, most farms in Poland are no larger than 5 ha. Over half of the agricultural land belongs to farms holding over 10 ha[2].

Portugal covers an area of 92,200 km^2. About 49% of the country's geographical area is used for farming, and 32% is afforested. The most common tree species are oak, eucalyptus and pine. Portugal has a population of about 9.9 million, and the average population density is 107 persons per 1 km^2. The employed population broken down by occupation is composed of 16.5% working in agriculutre and 31.57% in industry, including 14.37% in the construction business.

Table 1 – Selected economic indicators for Poland and Portugal

Specification	Poland	Portugal
Area [km^2]	312 683	92 100
Share of agricultural land [%]	60.2	49.0
Population in total [million]	38.7	9.9
Population per 1 km^2	124.0	107.0
Employment in agriculture [%]	23.4	16.5
Area of agricultural land in an average farm [ha]	7.2	9.3
Area of agricultural land per 1 resident [ha]	0.5	0.4
Unemployment [%]	9.7	12.2
Contribution of agriculture to the GDP [%]	7.0	7.3

Source: the authors, developed on the basis of the Local Bank of Data of the Main Statistical Office (GUS) as of 2015

An average size of a farm in Portugal was 9.3 ha (the INE), slightly more than in Poland. Table 2 shows the number and percentage of people in Poland and in Portugal according to the sectors in which they are employed. The data prove that the highest percentage of the Polish population work in industry (31.69%) and agriculture (23.39%), while in Portugal the highest percentage are employed in industry (31.57%) and in commerce and hospitality (25.29%), which confirms the high development of tourism in this country. Agriculture in Portugal employs 16% of the country's population, which is 6.3% fewer than in Poland.

[2] BDL GUS

Table 2 – Employed population according to sectors

Specification	Poland		Portugal	
	in thousands	%	in thousands	%
Agriculture, forestry and fisheries	2666	23.39	611	16.47
Industry	3611	31.69	1171	31.57
Construction industry	1012	8.88	533	14.37
Commerce and services, hospitality and catering	2318	20.34	938	25.29
Transport, warehouses and communication	895	7.85	162	4.37
Financial services, corporate real estate management	894	7.84	294	7.93
In total	11396	100	3709	100

Source: the authors, based on the Statistical Yearbook and data of the INE

The structure of agricultural land use in Poland and in Portugal is presented in table 3.

Table 3 – Use of agricultural land in Poland and in Portugal

Specification		2000		2005		2010		2015	
		thousand ha	%	thousand ha	%	thousand ha	%	thousand ha	%
Poland	area of the country	31269	100	31269	100	31269	100	31269	100
	area of agricultural land	18844	60.26	18720	59.87	18622	59.55	18413	59.55
	arable land	14511	46.41	14388	46.01	14286	45.69	14063	45.69
	grassland	4069	13.01	4060	12.98	4046	12.94	4083	12.94
	perennial plantations	264	0.84	272	0.87	290	0.93	267	0,93
Portugal	area of the country	9191	100	9191	100	9191	100	9191	100
	area of agricultural land	4007	43.59	4021	43.75	3973	43.23	3868	42.09
	arable land	2346	25.53	2349	25.56	2283	24.84	1692	18.41
	grassland	888	9.66	890	9.68	935	10.17	1411	15.36
	perennial plantations	772	8.40	782	8.50	756	8.22	765	8.32

Source: the authors, based on the Statiscal Yearbook and the INE Portugal

In Poland, there were 18,413 thousand hectares of agricultural land, which corresponded to 60% of the total area of Poland. In 2000-2005 the share of agricultural land in Poland's total area decreased, but this decreasing tendency was unobserved later, in 2005-2015. Similar tendencies were noticed with respect to arable land and grassland, but a lower contribution of perennial plantations in the structure of agricultural land compared to Portuguese agriculture is worth noticing. It could be expected that the smaller the area of a farm, the larger its share of perennial plantations. From 2000 to 2015, the area of agricultural land in Portugal did not change drastically, in

which the situation was similar to the one in Poland, suggesting that urbanisation in these countries does not progress so rapidly.

One of the indicators which can be applied when making an assessment of the adequacy of plant production organisation is the structure of crops and yields (tab. 4 and 5).

Table 4 – Structure of crops, harvests and yields in the Polish agriculture

Specification		2000	2005		2010		2015	
				Dynamics		Dynamics		Dynamics
Wheat	area (in thousand ha)	1885.0	2281.0	121.0	2407.0	105.5	2635.0	109.5
	harvest (in thousand tons	8103.0	9026.0	111.4	8668.0	96.0	8503.0	98.1
	yield (q/ha)	37.5	39.6	105.6	36.0	90.9	32.3	89.7
Barley	area (in thousand ha)	1242.0	1174.0	94.5	1048.0	89.3	1096.0	104.6
	harvest (in thousand tons	4135.0	4217.0	102.0	3278.0	77.7	2783.0	84.9
	yield (q/ha)	33.2	35.9	108.1	31.3	87.2	25.4	81.2
Rye	area (in thousand ha)	3083.0	2314.0	75.1	2452.0	106.0	2130.0	86.9
	harvest (in thousand tons	6330.0	6044.0	95.5	6288.0	104.0	4003.0	63.7
	yield (q/ha)	25.7	26.1	101.6	25.6	98.1	18.8	73.4
Oat	area (in thousand ha)	713.4	747.0	104.7	595.0	79.7	566.0	95.1
	harvest (in thousand tons	2288.0	2119.0	92.6	1495.0	70.6	1070.0	71.6
	yield (q/ha)	27.4	28.4	103.6	25.1	88.4	18.9	75.3
Potatoes	area (in thousand ha)	2095.0	1835.0	87.6	1522.0	82.9	1251.0	82.2
	harvest (in thousand tons	36140.0	36313.0	100.5	24891.0	68.5	24232.0	97.4
	yield (q/ha)	190.0	198.0	104.2	164.0	82.8	194.0	118.3
In total	area (in thousand ha)	8305.0	8351.0	100.6	8024.0	96.1	7678.0	95.7
	harvest (in thousand tons	56996.0	57719.0	101.3	44620.0	77.3	40591.0	91.0
	yield (q/ha)	62.8	65.6	104.5	56.4	86.0	57.9	102.6

Source: the authors, based on the Statistical Yearbook in Poland

In total, the cropped area in Portugal ranged from 738 thousand ha in 2000 up to 435.1 thousand ha in 2015. The total yield was 35.6 q/ha as an average for 4 cereals (wheat, oat, rye and barley). The total yield of potatoes reached 1886.8 thousand tons in 2005, 1946.2 in 2010 and 1292.5 in 2015. The total area dedicated to plant production in Poland decreases more slowly than in Portugal, which implicates the lack of a definite direction

towards reforming the agrarian policy in Poland. In total, harvests and yields in Poland are about two-fold higher than in Portugal.

In Poland, same as in Portugal, wheat is the cereal with the highest cropped area among all cereal plants, which proves the usefulness of this plant. In 2015, the total area sown with wheat in Portugal was 226.3 thousand ha, which was 12.8% less than in 2010. In Poland, the total area of wheat fields was 2,635 thousand ha in 2015, which was 9.5% more than in 2010. In 2000, the wheat fields covered the largest area, equal 306.8 ha, decreasing by 32.4% in 2010 and than rising by 25.1% in 2015, when the total area of wheat fields equalled 226.3 thousand ha. Large fluctuations are observed in the total acreage of wheat plantations. The total wheat harvest in Poland between 2000 and 2015 was 8,575 thousand tons on average, and was about 22-fold higher than in Portugal over the same time period.

There is an increasing tendency in Poland regarding the area of fields sown with barley, which rose from 1,048 thousand ha in 2010 to 1,096 thousand ha in 2015. The barley harvest volume in Poland varied from 4,135 thousand tons in 2000 to 2,783 thousand tons in 2015.

In Portugal, the area sown with barley was 53.1 thousand ha on average, decreasing drastically in 2015 (down to 42.8%) compared to the area cropped in 2010 (76.3%). Barley harvest in Portugal was on average 64.3 thousand tons and the yield was half that collected in Poland.

The area of rye fields in Portugal seems to fluctuate over a wide range. It equalled 95.1 thousand ha in 2005, rose to 62.3 thousand ha in 2010, and declined again to 44.7 ha in 2015. The quantity of harvested rye ranged from 96.5 thousand tons in 2005 to 46.5 thousand tons in 2015 (tab. 5)

Table 5 – Structure of crops, harvest and yields in the Portuguese agriculture

Specification		2000	2005		2010		2015	
				Dynamics		Dynamics		Dynamics
1		2	3	4	5	6	7	8
Wheat	area (in thousand ha)	306.8	207.6	67.6	259.6	125.1	226.3	87.2
	harvest (in thousand tons	500.3	296.6	59.3	360.1	121.4	354.7	98.5
	yield (q/ha)	16.3	14.3	87.7	13.9	97.1	15.7	113.0
Barley	area (in thousand ha)	73.3	66.7	91.0	50.9	76.3	21.8	42.8
	harvest (in thousand tons	89.6	78.5	87.6	53.1	67.6	36.3	68.5
	yield (q/ha)	12.2	11.8	96.3	10.4	88.6	16.7	160.2
Rye	area (in thousand ha)	106.1	95.1	89.6	62.3	65.5	44.7	71.8
	harvest (in thousand tons	112.4	96.5	85.9	36.3	37.6	46.5	128.1
	yield (q/ha)	10.6	10.2	95.8	5.8	57.4	10.4	178.4

1	2	3	4	5	6	7	8	9
Oat	area (in thousand ha)	129.4	87.7	67.8	73.4	83.8	85.0	115.8
	harvest (in thousand tons	152.7	72.1	47.2	57.6	79.9	112.4	195.0
	yield (q/ha)	11.8	8.2	69.7	7.9	95.4	13.2	168.4
Potatoes	area (in thousand ha)	122.4	120.3	98.4	94.3	78.4	57.3	60.8
	harvest (in thousand tons	1576.5	1343.0	85.2	1439.1	107.2	742.6	51.6
	yield (q/ha)	128.9	111.6	86.6	152.6	136.7	129.5	84.9
In total	area (in thousand ha)	738.0	577.3	78.2	540.5	93.6	435.1	80.5
	harvest (in thousand tons	2431.5	1886.8	77.6	1946.2	103.1	1292.5	66.4
	yield (q/ha)	36.0	31.2	86.8	38.1	122.1	37.1	97.3

Source: the authors, based on the Statistical Yearbook and the INE Portugal.

As far as potato harvests are concerned, the average quantity of potatoes harvested was 49,981.5 thousand tons in Poland and 1,275.3 thousand tons in Portugal. The yields of potatoes in Poland were 1.5-fold higher than in Portugal.

Summary. Prior to its accession to the European Union and in its first yeras as an EU member state, Portugal was a country with rather primitive agriculture. Before Portugal joined the EU, 28% of its residents had been employed in agriculture. The EU recommendation was to have about 10% of the total population working in agriculture. Rural tourism is a strategic sector of economy in the countryside. An indicator measuring this aspect reached around 23%. In both Poland and Portugal, the total area of agricultural land tends to decrease, which indicates that there has been a shift from agriculture to other sectors of economy. The harvests of cereals and potatoes in Portugal have decreased steadily since 2000, being lower by 66.4% between 2010 and 2015. In Poland, the analogous decrease went down to 91%.

Recapitulating, it can be claimed that Polish farms achieve better production results (especially expressed with yields per ha) than their Portuguese counterparts. Portugal had taken advantage of pre-accession programmes before it joined the EU, and this contributed to the creation of job places in other sectors of economy, outside agriculture.

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INVESTMENTS REASONS IN REAL PROPERTY MARKET

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Key words: *investments, real property.*

Summary. *The paper aims at presenting a model for evaluation of effectiveness of investments in real properties by foreign entities considering the practical aspects related to financial-economic and strategic conditions. The paper uses the project method that involves defining of the investment model in the format of the strategic investment model and the following reasons: stable economy, competitive costs, location, local incentives supporting business, range of opportunities for property investors, and the largest EU fund beneficiary.*

(Поступила в редакцию 22.05.2017 г.)

Introduction. The crisis that appeared in the American real property market in 2005 caused that the current situation is the worst in 17 years. The negative phenomena of that crisis also reached the Polish market causing a decrease in demand for real properties. The analysts see no indications of revival in demand for real properties in the nearest future. The increase by 79% in the number of implemented collection procedures against real properties is in turn the consequence of the crisis in the mortgage loans market. In total more than 2% of families in the USA were deprived of almost 3,0 million apartments and houses, more than two million from July through December of 2008. During the whole year 5.2 million proceedings were initiated.

Real properties have become, as of the early 1990s, an attractive form of capital investment as a consequence of continually increasing prices, which was influenced by numerous factors. The main factors include natural, spatial-organisational, technical, land improvement and spatial ones.

Poland is still the largest beneficiary of funds from the EU budget, which has determined the country's economic performance. There is also steady progress in the growth of wealth with Polish society. In 2012, Polish