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Land Use and Property Changes in Poland and in Hungary After EU Accession

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Abstract

Land property, in the post socialist countries, was rebuilt in the beginning of the 90's. The process went in different way in Poland and in Hungary. The different initial conditions are resulted in different development in the agricultural economy of these two countries. Now the agriculture had different characteristics. Despite of the fact that there are different elements of ownership structures, the importance of farm land leases is increasing in both evaluated countries. Regarding to the competitiveness of agriculture, Poland showed a developing tendency after the accession, but Hungary suffers from serious problems.

The aims and means of agricultural policy have gone through numerous changes throughout the last fifty years in the history of the European Union and its predecessors. Specialties deriving from the characteristics of agricultural production and its structure have come continuously in the foreground when shaping the aims and means of the policy. The sustainable usage of natural resources is of augmented importance, which is basically based on the limitation of land usage and the introduction of various incentives. The (Axis 2) measures serve this objective by enhancing the utilization and protection of arable land. The land use is affected by all the above.

Keywords: land ownership and rental, effects on tendencies

Introduction

Land is a key resource of agriculture: To keep the use of land under social control is/can be one priority of sustainable economy. This is a strategic issue in the EU. Land use can be examined from several aspects. From the two most important aspects one is when we examine the land use from the point of view of production structure, and shows the changes and tendencies of the main directions, and in the yields. These changes must be taken in the context of demand and supply, the price relations generated by them, subsidy system, etc. In the other approach examines the land use by property structure, and here it is getting more emphasis the land as the basic resource, but its role in accumulation of capital. This means that the land use and its changes are in very close connection with land prices and rental fees, that influences the land use, production structure, intensity of crop production by modifying the competitiveness.

The result of the privatization of agricultural land was a fragmented, direct or indirect smallholder ownership structure in most of the new member states of the EU. The land, partly or totally was given back to the owners and inheritors of land reforms following the war. It means that considerable proportion of the land is cultivated by tenants, the fragmented estate structure decreases the efficiency and the increasing rental fees further destroy the profitability and competitiveness of farming. [Csáki – Lerman, 1997] There were major differences. Although the agriculture had different characteristics before the socio-economic transition in Hungary, Slovak Republic, Poland, Estonia, Lithuania, Latvia, after joining the European Union similarities can be found in these countries. The differences are backed to the so called socialism regimes' existence and of course the way of transition in agriculture. For example in the case of Slovak Republic it is necessary to add that as for private ownership relates app. 65% [Csaki et al., 2002] of total agricultural land acreage was in private ownership during the whole period of socialism. During this period the owners of agricultural land could not use their own land because this was associated in cooperatives or in state farms that cultivated it. It was the matter of so-called „naked owners“ because the land was used without any compensation. [Bandlerová – Marisová, 2003; Bandlerová – Laziková, 2005] The

privatization of land took part by restitution process. But as the former state farms and co-operatives were not destroyed, high share of land rental is characteristic. [Laziková et al., 2008]

The property structure and land use are characterized by dichotomy that the large and middle-size farms, generating the major portion of commercial agricultural production, operate simultaneously with small-size farms which produce primarily for self-consumption. [Sadowski – Takács-György, 2005] As in earlier study we stated, the importance of farm land leases is increasing. The rate of tenancy is growing. Agricultural land prices were gradually increasing in the countries under consideration during the past decade, but remain, in general, below the level of farm land prices in the EU-15 countries. Meaningful differences in land prices within regions in countries came into being. [Takács-György et al., 2008] The expectation prior to the EU accession that agricultural land would be farmed mostly by owners have not materialized and a large number of agricultural land owners are interested in land sale or lease withdrawing completely from farming. The increased interest in land sales or lease has influenced the lease conditions including the annual rent. Leasing causes higher production costs. Moreover, changes in lease conditions will change the profitability of agriculture. We compare the main characteristics of land tenure and land use in selected countries accounting for the observed trends in other European countries.

The land estate regulations after privatization usually do not encourage the estate concentration in these countries which – together with the limitation of land ownership - contradicts to the estate policy principles of the European Union. Burgerné Gimes (2003) examined the land use and estate structure before the EU integration and revealed that the dominance of cereals could be observed already before the integration. She also proved that the reduction of fruit and wine-growing areas had already started in many countries. Since the rate of sectors with higher specific production value decreased, the competitiveness of agriculture of new member states further declined in international comparison. [Takács, 2008] He suggests to give priority to the withdrawal of adverse land areas from field crop production, to forestation, grass-growing as well as to the implementation of more extensive grazing livestock production on the grassy areas. By Takács-György et al. (2008) it was highlighted that the yield reduced radically and the production structure got more simple in those countries where before the transition it was dominated the large scale farm structure and it came into being a fragmented property structure. The share of cereals has grown up, area of sugar beet decreased from industrial crops, some of them (for example flax) disappeared, as the role of animal husbandry (typically ruminants) the share of fodder crops also diminished.

Starting from 2013, it is estimated that the CAP reform will have effect on land use. The changes in subsidy policy, the introduction of the Single Payment Scheme (SPS) will have significant impact on the distribution of income and, accordingly, on the structural reform of agriculture only if the movement of subsidy entitlements and land markets are free. The SPS will have the strongest impact on those areas where the land prices and land rents are the lowest, the land ownership is clearly separated from land use and the efficiency of production can be increased. [Vásáry, 2008; Swinnen et al., 2009] Szabó (2008) stated that following Hungary's integration into the European Union, the subsidies in the Hungarian agriculture significantly contributed to the objectives of the agricultural policy concerning expansion, competitiveness and efficiency and clearing of land market.

Bíró (2010) says that the introduction of SPS in the short run contributes to the stabilization of the land market in Hungary by integrating it into the value of the farm and increasing the price of the land. In Poland – as the land use mainly based on own estate (only 23.4% of land was leased in 2007) the expected CAP reform's effect on land use is expected less than in

Hungary. [Sadowski, 2009] Van Meijl et al. (2006) proved that no drastic decline can be expected in agricultural land use and product output within the European Union in the next 30 years following the liberalization of trade and subsidy system based on their model calculations. The reason for the impact, which is just the opposite as it was presumed before, is, on the one hand, the economic growth and increasing demand for food in developing countries, and on the other hand, that they underline that the declining competitiveness due to the declining subsidies will move production towards extensification and not towards withdrawal of land from agricultural production. [van Meijl et al., 2006] They concluded that the lower quality land will be withdrawn. It may cause an increase not only in yield but in the rise of prices of agricultural land. It was also underlined by another research team, who revealed that the areas with high marginal costs and unfavorable qualities are partly withdrawn from food production due to the introduction of SPS instead of the former, direct payments. This process contributes to the improvement of environment. [Brady et al., 2009] Sadowski (2009) verified that the less favorable arable land were withdrawn after implementing EU subsidy system in Poland. Central and East European agriculture is characterized by a high incidence of small-scale farmers who are not producing for the market. Their agricultural activity has an effect on land use, but its strength depends on their real share in land use in different countries. [Mathijs – Noev, 2004]

Also several factors have effect on the change of land use and production structure. From these the global climate change, the headway of biomass production, the characteristics of land market, the legal environment, the abover mentioned susidy system respectively its changes, international trade movements have edirect effect on the land price and land lease.

Material and Methods

The paper tries to identify the main differences and similarities in land use and property structure, and their effects on the agricultural competitiveness based on the FADN data base, since 2004-2007. During the research relation analysis were made by descriptive statistics between the changes of land use and land ownership, emphasizing the effect in competitiveness of the land price and a land rent.

Results

Poland

Trying to define the state of agricultural structure it can be concluded that Poland possesses large resources of agricultural land, however the area structure of farms demonstrate a great variety. Before the socio-economic transition in Poland the private sector was dominant by cultivating 78.6% area of arable land. Now after privatization private sector owns 99.8% of agricultural land.

In Poland historical reasons can be traced back that low proportion of rented area compares to the community average, although the average value masks variety inside a country. Before the changes the proportion of state owned holdings were significant in the western and north western part of the country, while the small size family holdings were in the south and east part of Poland. According to this the high proportion of the rented areas in the country's western regions are significant. [Sadowski, 2008]

The process of polarization of the farms' structure is still characteristic. It can be seen the considerable regional variety. The biggest distribution of individual farms appears in the southern provinces (the average area about 2 hectares) particularly the biggest average area

characterized farms in the northern provinces (over 14 hectares). In Poland one farm has about 6.5 ha but in the group of farms having over 1 ESU it was over then 12 ha in 2007.

Poland have specific situation in utilizing land by owners: In population of farms having more than one ESU about 22.7% of agricultural area was leased while in the population of farms having less than one ESU only about 7.3% of land was leased. But we must state that in the biggest farms (over 50 ha) about 47.3% of agricultural area were leased.

In the structure of farms, small farms of area 1-5 hectares are dominated, which represents over a half (58.6%) of the total number of farms and use about 17.7% arable land. An especially intensive process of losing farms was situated in the group of farms using less than 2 ha. During only three years (2005-2007) their number decreased about 12%. In the group using over 5 hectares were noted a significant rise both the number of farms and especially the total area of agricultural land. To the group of farms of area more than 30 hectares belongs 2.4% farms, and they used 27.3% of total area. (Table 1.)

Table 1. Land use by agricultural holdings (over 1 ESU) in Poland in 2005-2007

| | | Agricultural area in ha | | | | |
|--|------|-------------------------|----------|-----------|--------|-----------|
| | | < 5 | 5 - < 20 | 20 - < 50 | 50=> | All farms |
| Total area of agricultural holdings (1000) | 2005 | 1433.1 | 6582.0 | 3062.8 | 3881.8 | 14959.8 |
| | 2007 | 1522.5 | 6833.7 | 3220.0 | 4186.2 | 15762.4 |
| Agricultural area (1000) | 2005 | 1148.1 | 5732.9 | 2781.9 | 3469.4 | 13132.3 |
| | 2007 | 1225.9 | 5944.9 | 2924.7 | 3760.0 | 13855.6 |
| Arable land (1000) | 2005 | 7959 | 4309.9 | 2174.1 | 3010.6 | 10290.5 |
| | 2007 | 823.4 | 4421.2 | 2261.3 | 3192.1 | 10698.0 |
| Number of holdings (1000) | 2005 | 382.1 | 583.4 | 96.5 | 20.7 | 1082.7 |
| | 2007 | 391.3 | 612.1 | 101.1 | 23.6 | 1128.1 |
| Agricultural area per holding (ha) | 2005 | 3.0 | 9.8 | 28.8 | 167.8 | 12.1 |
| | 2007 | 3.1 | 9.7 | 28.9 | 159.4 | 12.3 |
| Agricultural area own farmed (%) | 2005 | 92.4 | 90.0 | 78.1 | 47.9 | 76.6 |
| | 2007 | 91.6 | 90.1 | 76.9 | 52.7 | 77.3 |

Source: Eurostat http://epp.eurostat.ec.europa.eu/portal/page/portal/publications/collections/sif_dif/sif

The agricultural land is mainly used by owners. But we must notice that in Poland by the end of 2007 there were 122.4 thousand active leasing contracts for 1838.7 thousand hectares of state land (but at the end of 2007 more than 345.6 thousand hectares state land was not developed).

Generally 23.4% of agricultural area is leased and it concerns state and private land. Usually individual farmers are lessees, but in some cases agricultural cooperatives lease land. In Poland the situation is specific because a land lease contract does not have to be written. Most of the lease contracts are not written and only few of the contracts are written and registered with the Local Authority.

Bański (2011) added that land prices peak in the vicinity of large agglomeration and the main transport routes – a phenomenon that links up with the urban expansion and the sprawl and the development of housing. It is anticipated that, by 2010, virtually all of the Poland's agricultural land will have been privatized. However, this fact will not signal an end to the ownership changes. Rather, the changes of this kind can be expected to gather pace in the Central and Eastern parts, in which land is excessively fragmented. Market competition will

favor the large, commercially-orientated farm, which will tend to take land on from the owners of farming operations forced by circumstances to close down.

The main result of the state land location is the differences of land prices. In the region where the traditional family farms were not destroyed in the time of the socialism land prices are very high. They cross the level of the prices in Sweden and France and reach the level of the prices in Finland. This concerns mainly provinces: wielkopolskie, kujawsko-pomorskie, mazowieckie, podlaskie, pomorskie and śląskie. In the provinces where there were a lot of state lands (lubuskie, zachodniopomorskie, warmińsko-mazurskie), private land prices reached the level only 2500-3500 EURO/ha because there was a big supply of cheaper state lands. The interesting situation we can observe in the south and central part of Poland (podkarpackie and świętokrzyskie provinces) where the land prices in comparison to the average prices are very low in spite of a great number of private farms. The reason of that is probably the weakness of very small farms, crumbling of parcels and difficulties concerned with farming in mountain's regions.

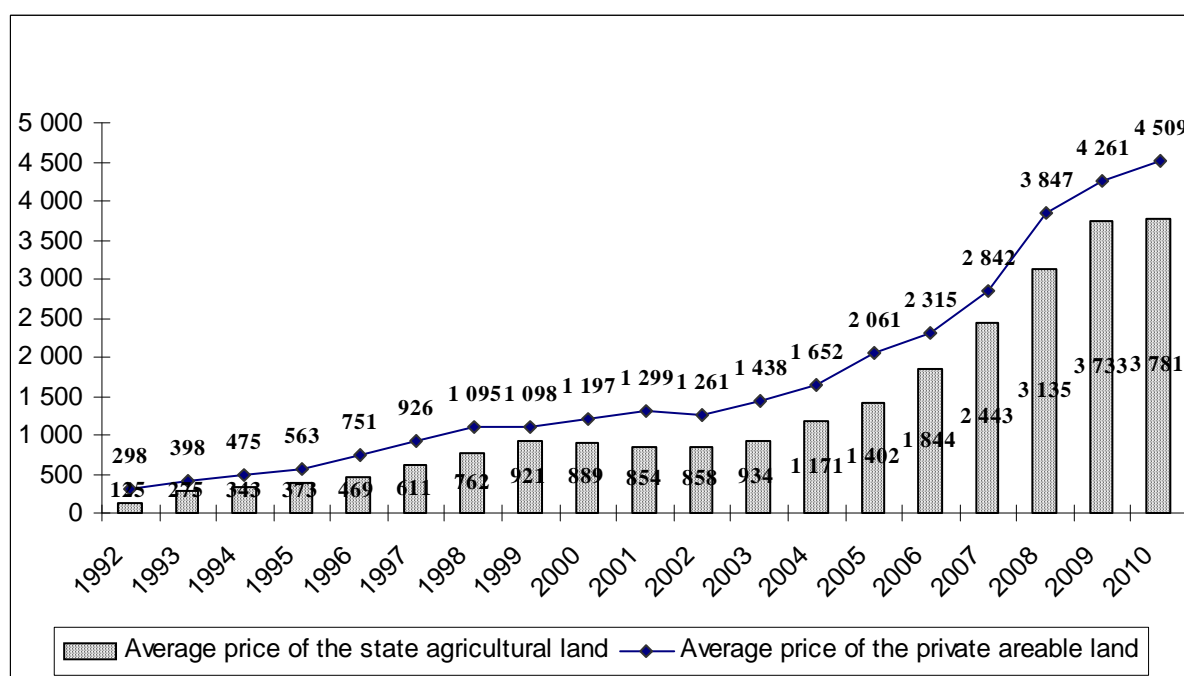


Figure 1. Dynamic of land prices changes in Poland (EURO/ha).

Source: Own calculation based on data from APA and statistic data.

The land prices in Poland to the moment of integration have been increasing but it can be stated that it was not rapid rise. From the moment of integration the prices of the land suddenly started to increase. But till now we can observe differentiation between private land prices and state land prices. We must state that in the last years we can observe land price stabilization and it concerns mainly states land.

Hungary

In Hungary the consequences were most visible in the change of ownership rights, before the transition the private land ownership was not characteristic. The result of privatisation was the move of 95% of land into private ownership. Legal persons and foreigners cannot acquire

ownership rights to land. The ownership of natural persons is limited to maximum 300 ha. The result of the privatization of agricultural land was a fragmented, considerable proportion of the land is cultivated by tenants, more than 60% of agricultural area. (Figure 2.) This results larger average farming sizes showing a slow concentrating process, due to the increase of the average area in the groups cultivated over 50 hectares. At the same time the fragmented estate structure decreases the efficiency and the increasing rental fees further destroy the profitability and competitiveness of farming. The bipolar firm structure is important in the future too.

It is related to the questions of Hungarian land ownership, land-market and land price that the land market is not a real market and there are only a few contracts. Mainly the farms operating below the 2 ESU are offering land for purchase, and the highest activity can be observed among the middle sized farms. The rate of contracts for land lease in Hungary is higher than in the EU-15 average and their frequency is increasing. [Kapronczai, 2006] At the same time it is missing a low, helping the property concentration.

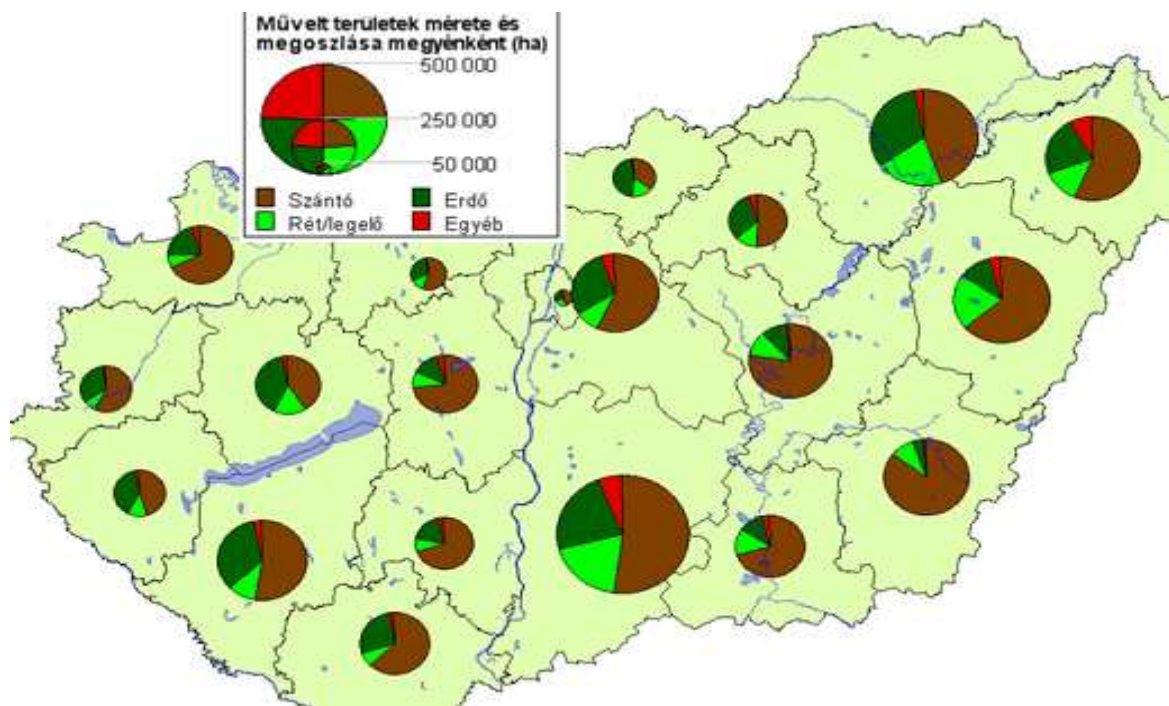


Figure 2. Cultivated area and share by counties in Hungary (ha)

Forrás: OTP Jelzálogbank

For the sake of comparability take referring to Hungary we used number of holdings that can be found in FADN database. 54.4% of farms (individual holdings) have less than 5 hectares and they cultivate about 8.4% of total agricultural area. The 94% of agricultural holdings (under 10 hectares), use the 11% of the agricultural areas. The 0.1% of agricultural holdings cultivate more than 1,000 hectares, covered the 1/3 of the area. (Table 2.)

Table 2. Land use by agricultural holdings (over 1 ESU) in Hungary in 2005-2007

| | | Agricultural area in ha | | | | |
|--|------|-------------------------|----------|-----------|--------|-----------|
| | | < 5 | 5 - < 20 | 20 - < 50 | 50=> | All farms |
| Total area of agricultural holdings (1000) | 2005 | 205.8 | 493.1 | 461.3 | 4318.2 | 5478.4 |
| | 2007 | 602.7 | | 416.4 | 4432.8 | 5452.1 |
| Agricultural area (1000) | 2005 | 160.3 | 443.7 | 415.9 | 3025.4 | 4045.3 |
| | 2007 | 523.6 | | 378.3 | 3152.3 | 4054.2 |
| Arable land (1000) | 2005 | 117.1 | 367.0 | 344.2 | 2617.2 | 3445.5 |
| | 2007 | 414.9 | | 306.8 | 2702.5 | 3424.3 |
| Number of holdings (1000) | 2005 | 83.8 | 46.1 | 13.8 | 11.6 | 155.4 |
| | 2007 | 116.4 | | 12.3 | 12.2 | 140.8 |
| Agricultural area per holding (ha) | 2005 | 1.9 | 9.6 | 30.1 | 260.1 | 26.0 |
| | 2007 | 4.5 | | 30.8 | 240.1 | 28.8 |
| Agricultural area own farmed (%) | 2005 | 92.8 | 85.0 | 74.3 | 23.6 | 38.3 |
| | 2007 | 86.8 | | 71.6 | 24.4 | 36.8 |

Source: Eurostat http://epp.eurostat.ec.europa.eu/portal/page/portal/publications/collections/sif_dif/sif

The property structure and land use structure are characterized by dichotomy of the large and small-size farms. Small farms are utilized mainly by owners but in the large farms the role of land rent is very strong. Significant differences can be shown in the land price within the size of area. The land price of areas that lower than 10 hectares do not attain 1 million HUF/ha, while the prices in case of the 50-100 hectares' areas can be 2-3 million HUF/ha, however this difference does not appear in the rent. Arable land is most expensive in the Southern Transdanubia region, nearly 2,000 euro/ha (Table 4.), but in the Central Hungary region it is possible to buy land on average 1,600 euro/ha. The price of one hectare of grassland is the highest in the Central Hungarian region probably because of the high urbanization rate. In the Northern Hungary region it is possible to buy grassland for less than one third of that price on average. There is a measurable difference in vine plantation prices as well. In those regions where quality wine production is traditional, vine plantation prices are two times higher than the average. Same relation holds for traditionally fruit producing regions, too.

Table 3. Private arable land prices in regions of Poland in 1999-2010 (EURO/ha)

| Region/year | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| dolnośląskie | 934 | 985 | 1 080 | 1 016 | 1 217 | 1 219 | 1 735 | 1 994 | 2 897 | 3 667 | 4 306 | 4 637 |
| kujawsko-pomorskie | 1 263 | 1 346 | 1 436 | 1 397 | 1 630 | 1 930 | 3 052 | 3 590 | 4 772 | 6 295 | 6 318 | 6 586 |
| lubelskie | 992 | 1 047 | 1 120 | 1 039 | 1 241 | 1 347 | 1 590 | 1 788 | 2 220 | 2 626 | 2 997 | 3 152 |
| lubuskie | 652 | 740 | 790 | 738 | 773 | 890 | 1 091 | 1 193 | 1 580 | 1 981 | 2 373 | 2 513 |
| łódzkie | 960 | 1 055 | 1 171 | 1 178 | 1 335 | 1 705 | 2 246 | 2 444 | 2 997 | 3 790 | 4 038 | 4 283 |
| małopolskie | 1 663 | 1 767 | 1 930 | 1 791 | 1 817 | 2 113 | 2 161 | 2 318 | 3 177 | 3 538 | 4 062 | 4 134 |
| mazowieckie | 1 086 | 1 229 | 1 381 | 1 379 | 1 679 | 1 951 | 2 389 | 2 638 | 3 325 | 4 414 | 4 570 | 4 860 |
| opolskie | 1 453 | 1 552 | 1 593 | 1 401 | 1 364 | 1 566 | 1 775 | 1 945 | 2 656 | 3 516 | 4 290 | 4 587 |
| podkarpackie | 780 | 858 | 971 | 955 | 1 062 | 1 131 | 1 080 | 1 145 | 1 614 | 2 074 | 2 700 | 2 937 |
| podlaskie | 1 008 | 1 124 | 1 199 | 1 270 | 1 394 | 1 674 | 2 353 | 2 737 | 3 492 | 4 276 | 4 509 | 5 158 |
| pomorskie | 789 | 883 | 1 030 | 1 214 | 1 372 | 1 727 | 2 284 | 2 405 | 3 653 | 4 521 | 5 515 | 5 278 |
| śląskie | 957 | 1 086 | 1 252 | 1 316 | 1 818 | 2 104 | 2 056 | 2 258 | 3 149 | 3 767 | 4 667 | 5 236 |
| świętokrzyskie | 1 198 | 1 298 | 1 419 | 1 220 | 1 352 | 1 488 | 1 516 | 1 576 | 1 859 | 2 197 | 2 412 | 2 346 |
| warmińsko-mazurskie | 745 | 810 | 871 | 823 | 875 | 1 173 | 1 434 | 1 718 | 2 256 | 3 307 | 3 397 | 3 655 |
| wielkopolskie | 1 309 | 1 444 | 1 572 | 1 569 | 1 864 | 2 142 | 3 277 | 3 946 | 5 003 | 6 134 | 6 856 | 7 144 |
| zachodniopomorskie | 708 | 809 | 945 | 915 | 1 018 | 1 225 | 1 264 | 1 578 | 2 118 | 2 521 | 2 998 | 3 324 |
| Poland | 1 098 | 1 197 | 1 299 | 1 261 | 1 438 | 1 659 | 2 061 | 2 323 | 3 034 | 3 847 | 4 261 | 4 509 |

Source: GUS http://www.stat.gov.pl/bdl/app/wybrane_cechy.display?p_id=59202&p_token=0.3736731277134844#

Table 4. Average land prices by NUTS II. region

| Region | 2009 | | | | 2008 | | | | 2007 | | | | 2006 | | | |
|-----------------------|-------------|-----------|--------|--------|-------------|-----------|--------|--------|-------------|-----------|--------|--------|-------------|-----------|--------|--------|
| | Arable land | Grassland | Grapes | Fruits | Arable land | Grassland | Grapes | Fruits | Arable land | Grassland | Grapes | Fruits | Arable land | Grassland | Grapes | Fruits |
| Central Hungarian | 1,643 | 1,204 | 1,707 | 2,343 | 1,796 | 1,332 | 1,884 | 2,720 | 1,793 | 1,335 | 1,757 | 2,960 | 1,644 | 1,239 | 1,689 | 2,549 |
| Central Transdanubia | 1,539 | 918 | 3,918 | 2,936 | 1,592 | 720 | 4,120 | 3,344 | 1,629 | 976 | 4,167 | 2,916 | 1,466 | 1,057 | 3,159 | 2,864 |
| Western Transdanubia | 1,532 | 982 | 2,182 | 3,736 | 1,660 | 1,160 | 2,316 | 3,640 | 1,610 | 1,108 | 2,566 | 3,936 | 1,402 | 973 | 2,784 | 5,443 |
| Southern Transdanubia | 2,129 | 1,025 | 4,243 | 3,546 | 2,384 | 956 | 6,784 | 3,528 | 2,219 | 936 | 7,020 | 3,514 | 2,045 | 814 | 5,144 | 4,239 |
| Northern Hungarian | 1,596 | 418 | 6,546 | 4,239 | 1,516 | 460 | 7,780 | 4,076 | 1,442 | 422 | 7,510 | 4,283 | 1,246 | 405 | 5,504 | 3,652 |
| Northern Great Plain | 1,607 | 532 | 1,429 | 3,021 | 1,764 | 508 | 1,596 | 3,328 | 1,494 | 546 | 1,498 | 3,159 | 1,337 | 405 | 1,496 | 3,117 |
| Southern Great Plain | 1,382 | 754 | 1,611 | 1,721 | 1,460 | 884 | 1,700 | 1,904 | 1,382 | 777 | 1,781 | 1,924 | 1,235 | 727 | 1,576 | 1,773 |
| HUNGARY | 1,632 | 736 | 3,189 | 2,961 | 1,756 | 768 | 3,792 | 3,164 | 1,637 | 733 | 3,586 | 3,112 | 1,470 | 697 | 3,087 | 3,254 |

Source: Farm Accountancy Data Network

Exchange rates: yr.
2006, 264 HUF/Euro
2007, 251 HUF/Euro
2008, 250 HUF/Euro
2009, 280 HUF/Euro

Land prices are influenced – besides location – by quality as well. (Table 5.)

Table 5. Average Golden Crowns¹ value by land use categories (GC/ha)

| Region | Arable land | Housegarden | Orchards | Viniyard | Pasture | Agricultural landi |
|-----------------------|----------------------------|-------------|----------|----------|---------|--------------------|
| | average Golden Crown value | | | | | |
| Central Hungarian | 19,7 | 18,9 | 30,3 | 36,0 | 11,3 | 18,9 |
| Central Transdanubia | 21,5 | 23,3 | 33,4 | 48,9 | 12,9 | 20,6 |
| Western Transdanubia | 20,6 | 27,3 | 34,7 | 45,7 | 12,9 | 20,1 |
| Southern Transdanubia | 21,4 | 25,4 | 29,1 | 42,8 | 13,8 | 20,9 |
| Northern Hungarian | 17,7 | 18,8 | 22,8 | 45,2 | 9,2 | 16,3 |
| Northern Great Plain | 18,7 | 29,2 | 40,1 | 25,5 | 9,0 | 17,8 |
| Southern Great Plain | 24,4 | 31,0 | 30,5 | 32,3 | 8,5 | 21,9 |
| HUNGARY | 20,9 | 24,9 | 33,8 | 40,0 | 10,3 | 19,6 |

Source: KSH, 2008

Table 4 presents land prices according to Golden Crowns (GC) that is a special Hungarian land quality indicator, based on more than 150 old system. There were several trials to develop new evaluating models, but the most common used is Golden Crown. (Dömsödi, 2007; Vinogradov et al., 2008; Tóth et al., 2009; Szűcs et al., 2011) (Table 6.)

Table 6. The price of arable land according to Golden Crowns and regions 2009. (euro/ha)

| Region | Below 17 GC | 17-25 GC | 25-30 GC | Above 30 GC |
|-----------------------|-------------|-------------|-------------|--------------|
| Central Hungary | 890-1,600 | 1,600-2,860 | 2,860-3,570 | 3,570-4,100 |
| Central Transdanubia | 1,070-1,700 | 1,430-2,500 | 1,790-3,200 | 2,860-4,290 |
| Western Transdanubia | 1,070-2,150 | 1,430-2,860 | 1,970-3,570 | 2,680-5,360 |
| Southern Transdanubia | 1,070-1,790 | 1,430-2,500 | 1,790-3,570 | 2,860-5,700 |
| Northern Hungary | 625-1,960 | 890-2,500 | 1,340-3,030 | 2,150-3,571 |
| Northern Great Plain | 700-2,150 | 890-3,570 | 1,600-7,100 | 2,150-10,710 |
| Southern Great Plain | 700-1,100 | 890-1,790 | 1,250-2,320 | 2,150-3,200 |
| HUNGARY | 700-2,150 | 890-2,860 | 1,600-3,570 | 2,150-5,700 |

Source: http://gazdakor.szie.hu/hirek/mersekelt_sikerek_a_csatlakozas_utan/2

The price of arable land is 17 times higher according the best quality lands of the Southern Great Plains and the poor quality areas in Northern Hungary, while within the regions the price differences between the poor and the best land quality groups are quadruplicate. The

¹ To date, a land-use value classification number, income namely the productivity, location and the ratio of cultivable of a unit of land.

base of medium land quality that is typical of arable land, the regions can be grouped into two groups. The Central Hungary and Transdanubia regions the prices are between 1,400-2,500 euro/hectares, east of the Danube the prices start at 900 euro/hectars, but depends on the demand it can reach the 3600 euro/hectares, especially the Northern Great Plain.

While the land trade is not significant currently, the market is not static. The supply dominate in case of land with poor quality, wrong capability and location, while the demand dominate in case of forests and high quality of land.

In Hungary the proportion of the rented area are growing in the size of the land use. The production is based on the rent in 26.5% of individual holdings, while 92.1% of joint. The proportion of rent is the highest from among the individual holdings that cultivating more than 300 hectares (42.2%). The proportion (7.0%) is the lowest within the holdings cultivating less than 10 hectares. In the period after the accession slight increase can be observable within the proportion of the rent between the 50-300 hectares, which shows the growth of the average size of utilized agriculture area. In the course of required land consolidation that were lagged behind in Hungary and slow, the aim would be the strengthening of the viable holdings. The average price of rent of arable land was 84 euro/ha in 2009. Usually the price of rent increasing year by year because the price is determined in connection of price of crop, and the contracts are renewed on a higher prices than before.

In 2005 in the average of EU-15 countries the 67% of the statistically recorded holdings were bigger than 50 hectares, in Poland 19.1%, in Hungary 75%. It shows that serious viability problems can be found in the case of these two countries.

European Union's comparison

The land prices level (Table 7) in EU is diversified and we must notice that their level increase a lot of during last years. The highest land prices we can observe in the countries having strong agriculture. In the states like Netherlands, Belgium, Denmark, Ireland, land prices cross the level of 20 thousand EURO. But in the same time in other EU countries the land prices level was two-three times lower. Specific situation is in France and Sweden were land prices are similar like in Poland. In other new EU members land prices are very low and they reach the level about 1000-1500 EURO per hectare.

Střeleček et al. (2010) emphasised that the years 2005-2007 were characterized by different prices of land and different dynamics thereof in the EU countries. The annual growth rate was oscillating from 100.5% (Malta) to 131% (Latvia). The Czech Republic adheres to the mean trend in the pace of growth of the prices of land (105.4%). In that situation we must notice that Malta have specific situation and land prices reached there the level about 130 thousand EURO. In postsocialist countries the land prices increase depends from farmers demand. In the countries where private farm are stronger (Poland, Lithuania, Latvia) the demand was higher and land prices increase was higher too. In the other countries where private farm are not so strong the land prices increase was not so high.

We can observe large differentiation in rental level (table 8) between old and new UE members. The highest level of the rent we observe in Denmark and Greece. In Poland in 2009 it was only about 23 EURO per hectare. But we must notice that the level of the rent is different in the regions with strong and poor farms.

Table 7. Agricultural land prices (EUR/ha) in some European countries

| Country/year | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-----------------------|--------|--------|--------|--------|---------|--------|--------|---------|---------|---------|---------|---------|
| Belgium | 18 819 | 18 391 | 21 069 | 20 372 | 16 795 | 20 273 | 23 155 | 22 053 | 27 190 | n.a. | n.a. | n.a. |
| Czech Republic | n.a. | n.a. | 1 556 | 1 403 | 1 528 | 1 522 | 1 561 | 1 621 | 1 625 | 1 867 | 2 375 | 2 250 |
| Denmark | 9 734 | 10 490 | 10 330 | 12 211 | 12 920 | 14 669 | 15 995 | 18 787 | 22 791 | 27 112 | 31 652 | 25 919 |
| England and Wales | 9 152 | 10 067 | 11 668 | 11 824 | 11 046 | 10 415 | 11 330 | 12 442 | n.a. | n.a. | n.a. | n.a. |
| Finland | 3 122 | 3 426 | 3 933 | 4 039 | 4 246 | 4 700 | 5 197 | 5 377 | 5 979 | 6 250 | 7 000 | n.a. |
| France* | 3 269 | 3 440 | 3 590 | 3 710 | 3 860 | 3 970 | 4 110 | 4 260 | 4 370 | n.a. | n.a. | n.a. |
| Germany | 9 436 | 8 939 | 9 081 | 9 427 | 9 465 | 9 184 | 9 233 | 8 692 | 8 909 | n.a. | n.a. | n.a. |
| Ireland | 8 976 | 11 175 | 12 816 | 13 897 | 13 574 | 14 397 | 16 258 | 16 230 | n.a. | n.a. | n.a. | n.a. |
| Italy | 12 814 | 13 177 | 13 654 | 14 266 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Latvia | n.a. | n.a. | n.a. | n.a. | 546 | 526 | 1 001 | 2 183 | 3 786 | 3 552 | 1 940 | 1 015 |
| Lithuania | n.a. | n.a. | 294 | 321 | 468 | 390 | 406 | 536 | 734 | 831 | 1 075 | 971 |
| Luxembourg | n.a. | n.a. | 97 410 | 10 970 | 11 2270 | 15 195 | 15 837 | 14 874 | 17 047 | 16 920 | 17 853 | 20 003 |
| Malta | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 129 819 | 130 000 | 130 000 | 130 000 | 130 000 |
| Netherlands | 24 013 | 29 904 | 35 713 | 37 150 | 40 150 | 34 160 | 31 432 | 30 235 | 31 276 | 34 969 | 40 916 | 47 051 |
| Northern Ireland (UK) | 12 930 | 12 550 | 15 807 | 16 018 | 19 808 | 21 604 | 23 997 | 29 010 | n.a. | n.a. | n.a. | n.a. |
| Romania | n.a. | n.a. | 351 | 308 | 278 | 237 | 284 | 879 | n.a. | n.a. | n.a. | n.a. |
| Scotland | 4 213 | 3 756 | 5 372 | 4 126 | 7 426 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Slovakia | n.a. | n.a. | 895 | 878 | 888 | 912 | 946 | 981 | 1 017 | 1 121 | 1 211 | 1 256 |
| Spain | 6 095 | 6 823 | 7 292 | 7 553 | 8 026 | 8 553 | 9 024 | 9 714 | 10 402 | 11 070 | 10 974 | 10 465 |
| Sweden | 1 638 | 1 749 | 1 989 | 1 988 | 2 019 | 2 126 | 2 455 | 3 351 | 3 706 | 3 957 | 4 181 | 3 748 |
| United Kingdom | 9 068 | 10 130 | 11 620 | 11 909 | 10 955 | 10 178 | 11 128 | 12 975 | 13 382 | 16 036 | 17 773 | n.a. |
| Wales | 6 928 | 7 490 | 8 173 | 8 349 | 10 366 | 9 403 | 9 535 | 8 595 | n.a. | n.a. | n.a. | n.a. |

n.a. – not available

* - arable land prices

Sources: Eurostat http://europa.eu.int/comm/agriculture/agrista/2004/table_en/338.pdf

http://europa.eu.int/comm/agriculture/agrista/2005/table_en/338.pdf, 25.10.2007.

http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/dataset?p_product_code=APRI_AP_ALAND 27.07.2011.

Table 8. Rental level of the arable land in selected European countries (Euro/ha).

| | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Belgium | 178,41 | 184,80 | 188,30 | 188,30 | 189,00 | 197,00 | 200,00 | 203,00 | n.a. | n.a. | n.a. | n.a. |
| Bulgaria | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 73,21 | 97,15 | 98,68 | 102,26 | 115,04 | 128,85 |
| Czech Republic | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 53,75 |
| Denmark | n.a. | n.a. | 344,12 | 363,79 | 386,25 | 411,00 | 418,82 | 416,81 | 479,82 | 479,29 | 520,25 | 534,77 |
| Germany | n.a. | 173,00 | n.a. | 182,00 | n.a. | 193,00 | n.a. | 197,00 | n.a. | n.a. | n.a. | n.a. |
| Greece | 425,62 | 435,79 | 446,61 | 455,01 | 477,44 | 501,69 | 516,70 | 515,00 | 502,20 | 508,30 | 501,70 | n.a. |
| Spain | 139,85 | 152,49 | 160,65 | 161,46 | 167,91 | 178,71 | 179,57 | 187,00 | 191,00 | 192,00 | 195,00 | n.a. |
| France | 127,98 | 132,00 | 131,90 | 131,20 | 132,00 | 131,50 | 131,40 | 130,70 | 129,70 | n.a. | n.a. | n.a. |
| Hungary | n.a. | n.a. | n.a. | 43,35 | 48,48 | 56,09 | 60,76 | 66,84 | 71,07 | 92,06 | 98,45 | 92,32 |
| Malta | 19,82 | 20,25 | 37,94 | 38,04 | 37,49 | 35,98 | 35,82 | 35,66 | 83,18 | 83,18 | 83,18 | 83,18 |
| Netherlands | 385,21 | 454,00 | 508,00 | 533,00 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Austria | 243,38 | 244,18 | 241,98 | 244,13 | 266,57 | 267,45 | 273,82 | 282,35 | 286,16 | 305,13 | 321,17 | 326,06 |
| Poland | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 20,02 | 25,64 | 36,73 | 22,88 |
| Finland | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 155,63 | n.a. | n.a. | n.a. | n.a. | n.a. |
| Sweden | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 126,00 |

n.a. – not available

Sources: Eurostat http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/dataset?p_product_code=APRI_AP_ALAND 27.07.2011.

Discussion

The examination of the change of land use and land ownership draw attention to the problem – it is typical to the new member states –, that in the large size holdings – independently of the organizations' structure – the proportion of the leased land are high. On the one hand the rent appears in the production expenses, spoils the producers' competitiveness but on the other hand competitiveness of the farms renting land increase through the machinery using intensification.

From the time of integration, the prices of the land suddenly started to increase. In that situation large number of agricultural land owners will be interested in land leasing, treating land as capital investment. Increase of the land prices will influence for the fees of leasing and at the same time it can change the profitability of agriculture.

In Poland we can observe the large land prices differentiation between the provinces. In the provinces where the family farm are strong the land prices are very high but in the regions where the family farms are crumbled or there are different difficulties in farming land prices are very low.

In Hungary the land prices and the rent prices are increasing in variable rate year by year. Measurable differences can observe within land prices between the regions. The value of the price is determined by the location, the cultivation, and the quality of land.

The research shows, that the processes going on in the examined two East European countries – on different historical traditions – resulted in different polarized land structure with a different measure. Though the proportion of middle estates are low, a slow process of land concentration in these two countries begun.

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