

# The transactions in the agricultural land market in Slovakia

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**Abstract:** Data on the transactions with agricultural land in 2012, based on the primary data from the Research Institute of Geodesy and Cartography in Bratislava, were evaluated according to the legal status of the buyer and also whether the legal person was a national of the Slovak Republic, or had been resident abroad. The results of the data analysis pointed out that in the selected twelve districts of the Slovak Republic in 2012, there were 55.75% of legal persons, 44.10% of natural persons and 0.15% of subjects without determining the legal form involved in the transactions with agricultural land. Legal persons were divided into two categories, i.e. the entities with the nationality of the Slovak Republic and the entities domiciled abroad. The results showed that in 2012, within the study sample of buyers of the farmland, there were 99.91% of legal persons having the nationality of the Slovak Republic, and only 0.09% was other legal persons from abroad.

**Key words:** average market price of agricultural land, selected districts of Slovakia

Settled and consolidated land ownership increases the market value of agricultural land, simplifies the management options for agricultural land (purchase, lease) and reduces the cost of these operations. Also it stabilizes the land ownership and at the same time promotes the development of the land market (Buday and Vilček 2013).

The market price of land is formed in the open land market under the pressure of supply and demand and the relations among prices in one market (country, region, and municipality) are differentiated according to the economic and other objective characteristics of the land (Němec 2009; Štreleček et al. 2010).

The current status of the land resources management in Slovakia is characterized by an extremely fragmented land ownership, as well as the size of the utilised agricultural land in large farms (cooperatives, business companies) and self-employed farmers. Only few landowners utilise land for the business purposes. Most landowners lease their land (Bandlerová et al. 2011).

The large land fragmentation and the high number of the individual landowners hamper the development of the land market. The lack of transparency in market transactions and the lease of agricultural land owned by natural and legal persons is given by the absence of the functional statistical surveys and functional information networks. The access to documents that were the basis for the change of ownership, such as specific sales contracts, is not

possible, despite the fact that the cadastre is a public entity (Bandlerová 2000).

The situation of land resources management in Hungary and the agricultural land market in Hungary is described by Hamza and Miskó (2006).

Only the results of monitoring the transactions in the agricultural land market, forming part of the research activities of the Research Institute of Agricultural and Food Economics, which are implemented in collaboration with the Research Institute of Geodesy and Cartography, currently exist in Slovakia. The research results include the data from the land registry of the individual cases of sale transactions and their subsequent evaluation and the analysis using mathematical and statistical methods. Monitoring of market prices is provided by the Research Institute of Agricultural and Food Economics (RIAFE) since 2001. The results extend the existing Land Evaluation Data Bank that is part of the Central database of Ministry of Agriculture and Rural Development of the Slovak Republic (Buday et al. 2011, 2013).

## METHODOLOGY

The evaluation of an agricultural land transaction was based on the long-term analysis of the sample of 12 districts in Slovakia. The districts were selected based on their soil and climatic conditions of the region and the administrative division.

The data from the Land Registry about the land transactions were used as the input data for the research. The data collected from all the sale contracts announced on the deposit in the Land Registry for the period of the relevant calendar year were used for the analysis.

The data obtained were examined in terms of the location of the land within the municipality. The intravillan plots of land and the land classified as gardens were excluded from the evaluation process. The data were supplemented by the codes and names of the districts. Furthermore, the codes of size categories and their size ranges and also the codes of the relevant agricultural natural area and the agricultural production area have been added to the database.

Outcomes in the MS Excel format were evaluated by the analysis of the particular values, which is better suited for small and medium-sized samples, as well as the methods of statistical analysis.

The average market price of land was an essential variable of the analyses and was calculated as the weighted average for the districts, the type of plot, etc. According to the following formula:

$$PTC_{OK} = \frac{\sum TC_{poz} \times V_{poz}}{\sum V_{poz}}$$

$PTC_{OK}$  = the average market price for the district

$TC_{poz}$  = the average purchase (market) price of land

$V_{poz}$  = the area of land concerned

Alternatively,

$$PTCD_{OK} = \frac{\sum TCD_{poz} \times VD_{poz}}{\sum VD_{poz}}$$

$PTCD_{OK}$  = the average market price of selected types of land in the district,

$TCD_{poz}$  = the average purchase (market) price of the chosen type of land

$VD_{poz}$  = the area of land concerned

The transformation and data processing was performed using the UNIX operating system, the INFORMIX database system and the structured query language SQL. In addition to the analytical tools of Excel, the SPSS statistical software (Statistical Package for the Social Sciences) and the NCSS software (Number Cruncher Statistical Software) were used for the statistical evaluation.

## RESULTS AND DISCUSSION

### Area and number of sold land

Rating of the sale of agricultural land in terms of the legal form management, the nationality and regional division showed that the largest area of land sold to legal persons of the total area sold in 2012 was in the Topoľčany district and represented 22.64% of

Table 1. Number of plots and land area of entities (legal persons, individual persons) with land transactions in the selected districts of Slovakia in 2012

District	Legal persons		Natural persons		Undetermined	
	number of plots	area (m <sup>2</sup> )	number of plots	area (m <sup>2</sup> )	number of plots	area (m <sup>2</sup> )
Dunajská Streda	104	759 050	303	2 654 277	1	74
Trnava	1 659	7 701 763	535	3 107 642	–	–
Nitra	186	871 285	425	2 278 640	–	–
Topoľčany	3 296	23 019 510	1 251	8 187 997	–	–
Liptovský Mikuláš	5 360	4 469 199	978	2 343 895	1	8
Žilina	2 485	753 402	4 121	2 719 039	1	86
Banská Bystrica	31	62 841	266	239 207	–	–
Rimavská Sobota	1 859	7 720 782	1 754	7 289 955	5	120 054
Prešov	44	137 387	192	428 861	–	–
Svidník	–	–	12	110 069	–	–
Košice	491	7 082 545	786	5 262 051	13	33 046
Michalovce	640	4 098 836	620	10 213 675	–	–
Total	16 155	56 676 600	11 243	44 835 308	21	153 268

Source: Research Institute of Geodesy and Cartography, own calculations

the total sold area. Other districts, where there were performed more extensive (in terms of land area) land transactions by legal persons, appeared the Rimavská Sobota and Trnava, so all districts in the production areas of Slovakia. The area of agricultural land sold to legal persons in Rimavská Sobota was 7.59% of the total sold land in 2012. It was almost the same area in the district Trnava, which represented 7.58%. The smallest area of agricultural land sold to legal persons within the evaluated districts was in the Banská Bystrica district and it represented 0.06% of the total sold area. In only one monitored district, which was the Svidník district, the participants of transactions with agricultural land were not legal persons.

To the districts, where the largest area was sold to natural persons in 2012, there belonged the Michalovce district, and the scope of sold area was 10.05% of the total sold area. A larger scope of the agricultural land area sold to natural persons was also in the Topoľčany and Rimavská Sobota districts, but it did not reach sales volume of legal persons. It represented 8.05% in the Topoľčany district and 7.17% in the Rimavská Sobota district of the total sold area. The smallest area of agricultural land was sold in the Presov district (0.42% of total sold area), the Banská Bystrica district (0.24%) and the Svidník (0.11%); nevertheless, the sold area to natural persons in these districts was still larger than the sold area to legal persons. The sale of agricultural land to natural persons dominated in seven (in most) analysed districts, but overall for the monitored set of districts, there was a larger area of agricultural land sold to legal persons (Table 1).

It was found through the analysis of the representation of the sold area of agricultural land within legal persons that to the legal persons having the nationality

of the Slovak Republic, there has been sold 99.91% of the total sold area. There was sold only 0.09% of the sold area to legal persons from abroad in 2012 (Figure 1). The representation of the land sold in the monitored group of twelve districts showed, that the largest area of agricultural land sold to legal persons from Slovakia was in the Topoľčany district, and it was 40.57% of the total sold area to legal persons. Following in rank according to the land area sold to legal persons from Slovakia were the Rimavská Sobota district, where there was sold 13.62% of the total land sold to legal persons, and the Trnava district with the area that represented 13.59% of the total area of land sold to legal the Banská Bystrica district (0.11%). In the district Svidník, there has not been reported any sold area to legal persons neither from Slovakia, nor from abroad. Agricultural land sold to foreign legal persons featured in the Topoľčany district and the Žilina district. The area of agricultural land sold to foreign legal persons in the Topoľčany district was 0.04% of the total sold area to legal persons. In the Žilina district, it was a slightly higher land area, the volume of which was 0.05% of the total sold area to legal persons. The comparison of the land sold to legal persons from Slovakia and from abroad in two districts where there had been recorded the sale of land to foreign entities, showed that in the Topoľčany district, there was sold 99.89% of the land area to legal persons from Slovakia and 0.11% area of agricultural land to foreign legal persons. The area of the sold land to legal persons from Slovakia was 96.58% in the Žilina district and 3.42% to legal persons from abroad.

Regarding the number of plots sold to legal persons from Slovakia in 2012, there was sold 16 062 (99.62%) and the number of plots sold to legal persons from

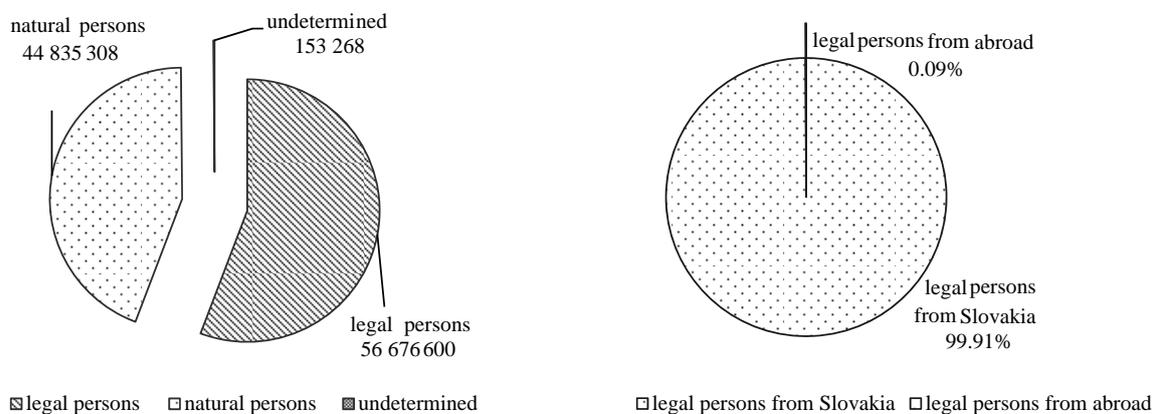


Figure 1. Representation of legal/natural persons, entities of Slovakia and foreign entities in land transactions in selected districts in Slovakia in 2012

Source: Research Institute of Geodesy and Cartography, own calculations

abroad was just 93, what represented 0.58%. Based on the district division, the most plots were sold to legal persons from Slovakia in the Liptovský Mikuláš district, representing 33.18% of the total number of the sold plots to legal persons. Furthermore, according to the number of plots sold to legal persons from Slovakia, there followed the Topoľčany district (20.33%) and the Žilina district (14.88%). In these two districts, there was also recorded the sale of agricultural land to foreign legal persons. It was 0.07% of the total number of plots sold to legal persons in the Topoľčany district and the number of plots sold to legal persons from abroad represented 0.50% of the total number of sold plots in the Žilina district (Table 2).

The evaluation of the sold agricultural land area to natural and legal persons as well as to legal persons from Slovakia and from abroad by the size categories of plots showed that in the size category of plots up to 1 ha, there was sold to legal persons from Slovakia and to natural persons a smaller area than in the size category over 1 ha. On the contrary, there was sold a larger area of agricultural land in this size category (up to 1 ha) to legal persons from abroad than in the size category over 1 ha. The largest area of agricultural land within the types of entities was in this size category sold to legal persons from Slovakia (60.76%), then to natural persons (39.15%) and the smallest area (0.10%) was sold to legal persons from abroad. The largest area of agricultural land within

the size intervals was among legal persons (domestic and foreign) and also natural persons in the range from 5 000 up to 10 000 m<sup>2</sup>.

There was sold to legal persons from Slovakia and natural persons a bigger area of agricultural land in the size category over 1 ha than in the size category up to 1 ha. A smaller area of land in this size category compared to the size category up to 1 ha was sold to foreign legal persons. According to the sales volume of agricultural land in this size category, within the types of entities there were in the first place the legal persons from Slovakia, to whom the sold land area represented 53.00%, followed by natural persons (46.97%) and the third in order were with 0.03% of sold land the foreign legal persons. The largest land area sold to legal persons from Slovakia was in the size range from 20 000 up to 50 000 m<sup>2</sup>. The natural persons have had the largest sold land area in the size range over 100 000 m<sup>2</sup>. The entire land area sold to foreign legal persons in the size category over 1 ha was in only one size range, from 10 000 up to 20 000 m<sup>2</sup>.

Regarding the number of plots, in the size category up to 1 ha in all types of entities (legal persons from Slovakia, foreign legal persons and natural persons), there was sold a higher number of plots than in the size category of plots over 1 ha. The highest number of plots in this size category was sold to legal persons from Slovakia and it represented 58.09% within

Table 2. Number of plots and land area of entities (legal persons from Slovakia, legal persons from abroad) in land transactions in the selected districts of Slovak Republic in 2012

District	Legal persons together		Legal persons from Slovakia		Legal persons from abroad	
	number of plots	area (m <sup>2</sup> )	number of plots	area (m <sup>2</sup> )	number of plots	area (m <sup>2</sup> )
Dunajská Streda	104	759 050	104	759 050	–	–
Trnava	1 659	7 701 763	1 659	7 701 763	–	–
Nitra	186	871 285	186	871 285	–	–
Topoľčany	3 296	23 019 510	3 284	22 994 461	12	25 049
Liptovský Mikuláš	5 360	4 469 199	5 360	4 469 199	–	–
Žilina	2 485	753 402	2 404	727 604	81	25 798
Banská Bystrica	31	62 841	31	62 841	–	–
Rimavská Sobota	1 859	7 720 782	1 859	7 720 782	–	–
Prešov	44	137 387	44	137 387	–	–
Svidník	–	–	–	–	–	–
Košice	491	7 082 545	491	7 082 545	–	–
Michalovce	640	4 098 836	640	4 098 836	–	–
Total	16 155	56 676 600	16 062	56 625 753	93	50 847

Source: Research Institute of Geodesy and Cartography, own calculations

this size category. Second in order of the number of sold plots were natural persons, where the share of sold plots was 41.55%. The number of sold plots to foreign legal persons was 0.36%. Within the size range, the highest number of plots was sold to legal persons from Slovakia in the size category from 100 up to 1 000 m<sup>2</sup>. The highest number of plots was also sold to natural persons in the size category from 100 up to 1 000 m<sup>2</sup>. The highest number of plots sold to foreign legal persons was in the size category up to 100 m<sup>2</sup> (Table 3).

In the size category of plots over 1 ha, there was in all types of entities sold a smaller number of plots compared to the category up to 1 ha. The legal persons from Slovakia were the first in order of the number of sold plots with 66.04%, followed by natural persons, where the number of sold plots represented 33.91%. There was sold to legal persons from abroad only 1 plot in the size category over 1 ha, what represented 0.05%, and this plot came under the size range from 10 000 up to 20 000 m<sup>2</sup>. The largest number of sold land in the same size range (from 10 000 up to 20 000 m<sup>2</sup>) was also among other types of entities.

The analysis of the area of sold agricultural land within the types of entities and in the terms of the type of land delivered the results that to legal persons from Slovakia and also to natural persons in monitored year 2012, there was sold arable land in the largest extent. The sold arable land represented 58.51% for legal persons from Slovakia and 41.47%

for natural persons. The least area of arable land was sold to legal persons from abroad and the range was 0.02%. Second in order by the land type was the permanent grasslands, which had for legal persons from Slovakia and natural persons almost the same range. The range of land sold to legal persons from Slovakia was 50.16% and to natural persons 49.73%. There was sold to foreign legal persons 0.11% of the permanent grassland. Vineyards were sold only to legal persons from Slovakia and to natural persons. The scope of sale to legal persons from Slovakia was 43.72% and to natural persons, there was sold 56.28% of vineyards. Orchards were also sold only to legal persons from Slovakia and to natural persons. The sale of orchards to legal persons from Slovakia represented 1.74%, and the sale to natural persons represented 98.26%. There was sold to foreign legal persons, by the type of land, only the arable land and permanent grassland. The area of permanent grassland sold to legal persons from abroad was larger than the sold arable land (66.16%).

The number of sold plots by the land type in the selected districts of Slovakia in 2012 was, according to the evaluation results, the greatest in the arable land sold to legal persons from Slovakia, which was 55.36%. The plots of arable land sold to natural persons represented 44.53%. The sale of plots of arable land to foreign legal persons represented 0.11%. The plots of permanent grassland were sold to legal persons from Slovakia in the greatest number, which represented

Table 3. The number and area of land sold to legal persons and natural persons according to the size categories of plots and size range in the selected districts of Slovakia in 2012

Size of plots (m <sup>2</sup> )		Legal persons from Slovakia		Legal persons from abroad		Natural persons	
over	up to	number of plots	area of plot (m <sup>2</sup> )	number of plots	area of plot (m <sup>2</sup> )	number of plots	area of plot (m <sup>2</sup> )
0	100	4 170	112 042	71	1 645	2 861	96 840
100	1 000	4 888	2 200 691	14	5 827	3 891	1 906 960
1 000	2 500	2 718	4 418 518	3	5 542	1 989	3 232 396
2 500	5 000	1 771	6 343 437	2	7 071	1 128	3 960 082
5 000	10 000	1 292	9 041 482	2	14 732	746	5 054 720
up to 1 ha		14 839	22 116 170	92	34 817	10 615	14 250 998
10 000	20 000	746	10 057 609	1	16 030	359	4 941 129
20 000	50 000	373	10 660 241	–	–	162	4 945 649
50 000	100 000	64	4 633 798	–	–	45	3 205 409
100 000	and more	40	9 157 935	–	–	62	17 492 123
over 1 ha		1 223	34 509 583	1	16 030	628	30 584 310
Total		16 062	56 625 753	93	50 847	11 243	44 835 308

Source: Research Institute of Geodesy and Cartography, own calculations

66.17%. There was sold to natural persons 33.00% of plots of the permanent grasslands and to foreign legal persons, there was sold 0.83% plots of the permanent grassland. The plots of vineyards were sold to legal persons from Slovakia in the amount 46.08% and a little greater extent (53.92%), in the terms of the number of plots of the vineyards, were sold to natural persons. Orchards were also sold in a greater number to natural persons, but the difference was much bigger. There was sold to legal persons from Slovakia only 1.74% of the number of plots. A much greater sale of the plots of orchards was noticed among natural persons and it represented 98.26%. There were not sold any plots of vineyard or orchard to foreign legal persons (Table 4).

### The average market price of agricultural land

The comparison of the average market prices of agricultural land within the types of entities (legal persons, natural persons, legal persons from Slovakia, legal persons from abroad) showed that the total average market price of plots was the highest for natural persons in the selected districts of Slovakia

in 2012, and it was 0.95 EUR/m<sup>2</sup>. The average market price of plots for foreign legal persons was lower by 0.03 EUR/m<sup>2</sup> than for the natural persons. Legal persons from Slovakia had the lowest average market price (0.45 EUR/m<sup>2</sup>) from the assessed types of entities.

Within the districts, there was the highest average market price recorded in the Banská Bystrica district among natural persons, and it was 9.35 EUR per m<sup>2</sup>. The second in order was the average market price (6.60 EUR/m<sup>2</sup>) in the Prešov district and it was also among natural persons. The Prešov district had also the third highest average market price, and it was among legal persons from Slovakia, which was 5.55 EUR/m<sup>2</sup>. The lowest average market prices were recorded in the Topoľčany district where the average market price received by natural persons had the value 0.09 EUR/m<sup>2</sup>, and among foreign legal persons it was only 0.01 EUR/m<sup>2</sup> (Table 5).

The analysis of the average market price of agricultural land regarding legal persons and natural persons according to the size categories of plots brought the result that in the plots size category up to 1 ha, there was for all types of entities a higher average market price compared to the size category over 1 ha. The highest average market price (2.32 EUR/m<sup>2</sup>)

Table 4. Representation of plots sold to legal persons and natural persons by the type of land in the selected districts in Slovakia in 2012

District	Legal persons								Natural persons			
	from Slovakia				from abroad							
	arable land	vineyard	orchard	permanent grassland	arable land	vineyard	orchard	permanent grassland	arable land	vineyard	orchard	permanent grassland
Dunajská Streda	92	–	1	11	–	–	–	–	279	–	4	20
Trnava	1 539	21	3	96	–	–	–	–	455	10	–	70
Nitra	156	–	–	30	–	–	–	–	344	25	1	55
Topoľčany	2 667	13	1	603	5	–	–	7	843	4	1	403
Liptovský Mikuláš	2 745	–	–	2 615	–	–	–	–	570	–	46	362
Žilina	928	–	–	1 476	16	–	–	65	3 068	–	6	1 047
Banská Bystrica	12	–	–	19	–	–	–	–	156	–	–	110
Rimavská Sobota	1 230	13	–	616	–	–	–	–	1 244	11	2	497
Pprešov	24	–	–	20	–	–	–	–	161	–	–	31
Svidník	–	–	–	–	–	–	–	–	11	–	–	1
Košice	415	–	–	76	–	–	–	–	631	–	–	155
Michalovce	472	–	–	168	–	–	–	–	508	5	–	107
Total	10 280	47	5	5 730	21	0	0	72	8 270	55	60	2 858

Source: Research Institute of Geodesy and Cartography, own calculations

was for natural persons. The second in order by the amount of the average market price were legal persons from abroad; regarding whom the average price was 1.35 EUR/m<sup>2</sup>. The lowest average market price in this category had legal persons from Slovakia and its value was 0.52 EUR/m<sup>2</sup>. In the terms of the size range, there was the highest average market price received from legal persons from abroad (6.56 EUR per m<sup>2</sup>) and the natural persons (9.71 EUR/m<sup>2</sup>) in the size range from 100 up to 1000 m<sup>2</sup>. There were sold to legal persons from Slovakia plots in the size range up to 100 m<sup>2</sup> for the highest average market price (3.97 EUR/m<sup>2</sup>).

In the size category of plots over 1 ha, the average market prices of agricultural land were significantly lower than in the size category of plots up to 1 ha. The highest average market price in this size category had the plots sold to legal persons from Slovakia and their value was 0.40 EUR/m<sup>2</sup>. In this size category, there were plots sold to natural persons for the average price 0.31 EUR/m<sup>2</sup>. The lowest average market price, which, after rounding to two decimal places was worth 0.00 EUR/m<sup>2</sup>, had the plots sold to legal persons from abroad. The highest average market price in this size category within the size range was reported regarding legal persons from Slovakia and natural persons in the size range from 20 000 up to 50 000 m<sup>2</sup>. Plots sold to legal persons from abroad

Table 5. The average market price (EUR.m<sup>2</sup>) of agricultural land at entities (legal persons, natural persons) in the selected districts of Slovakia in 2012

District	Legal persons		Natural persons
	from Slovakia	from abroad	
Dunajská Streda	2.03	–	1.75
Trnava	0.41	–	1.29
Nitra	0.84	–	1.83
Topoľčany	0.38	0.01	0.09
Liptovský Mikuláš	0.55	–	1.17
Žilina	2.26	1.81	3.80
Banská Bystrica	3.32	–	9.35
Rimavská Sobota	0.19	–	0.35
Prešov	5.55	–	6.60
Svidník	–	–	1.38
Košice	0.46	–	1.26
Michalovce	0.29	–	0.16
Total	0.45	0.92	0.95

Source: Research Institute of Geodesy and Cartography, own calculations

belonged only into one size range (10 000–20 000 m<sup>2</sup>) and the plots had within size category over 1 ha overall the lowest average market price with the indicated value 0.00 EUR/m<sup>2</sup> (Table 6).

In the terms of the evaluation of the average land market price by the type of land, of all types of entities there was the highest average market price of arable land (1.13 EUR/m<sup>2</sup>) recorded in natural persons. The second in order was the level of the average market price of the arable land sold to legal persons from Slovakia and its value was 0.38 EUR/m<sup>2</sup>. The average market price of the arable land sold to foreign legal persons had the lowest value, which was 0.05 EUR/m<sup>2</sup>. On the contrary the permanent grasslands, which had the highest average market price (1.37 EUR/m<sup>2</sup>), were sold to foreign legal persons. Legal persons from Slovakia had the average market price of the permanent grasslands 0.63 EUR/m<sup>2</sup>. At the natural persons, there was the average market price of permanent grasslands even lower and its value was 0.60 EUR/m<sup>2</sup> (Figure 2).

The land types of vineyards and orchards were sold to natural persons and legal persons from Slovakia only. The sale of these land types were not recorded among the foreign legal persons. The average market price of vineyards was higher for the natural persons, where it had the value 1.36 EUR/m<sup>2</sup>, and it was about 5.9 times higher than for the legal persons from Slovakia. Orchards were sold for a conversely

Table 6. The average market price (EUR/m<sup>2</sup>) of agricultural land in entities (legal persons, natural persons) by the size ranges in the selected districts in Slovakia in 2012

Size of plots (m <sup>2</sup> )	Legal persons		Natural persons
	from Slovakia	from abroad	
over 0	3.97	5.11	6.64
up to 100	1.25	6.56	9.71
1000	0.48	0.01	1.90
2500	0.52	0.01	0.96
5000	0.33	0.01	0.79
10000	0.52	1.35	2.32
up to 1 ha	0.31	0.00	0.56
20000	0.65	–	0.75
50000	0.21	–	0.38
100000	0.29	–	0.11
over 1 ha	0.40	0.00	0.31
Total	0.45	0.92	0.95

Source: Research Institute of Geodesy and Cartography, own calculations

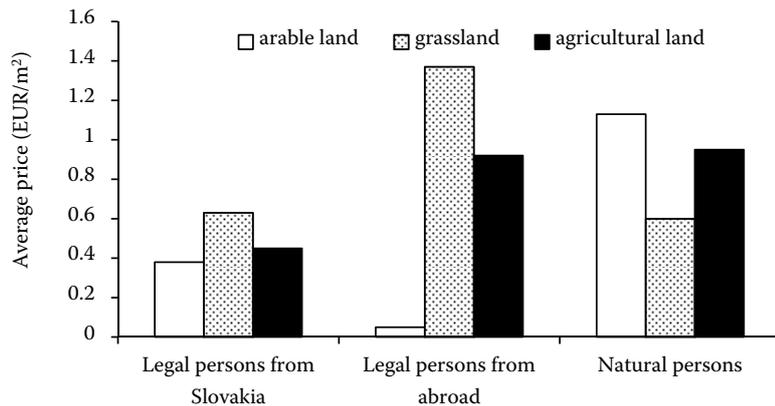


Figure 2. The average market price of the arable land, permanent grasslands and agricultural land for legal persons and natural persons in the selected districts in Slovakia in 2012

Source: Research Institute of Geodesy and Cartography, own calculations

higher price (1.78 EUR/m<sup>2</sup>) to legal persons from Slovakia and this average market price exceeded that for natural persons about 3.5 times (Table 7).

## CONCLUSION

In total, the average market price of agricultural land in 2012 for 12 selected districts of Slovakia was worth 0.67 EUR/m<sup>2</sup> and it declined compared with the previous reporting years. To the previous year, its value decreased by 0.42 EUR/m<sup>2</sup>. The average market price of the arable land reached 0.69 EUR/m<sup>2</sup>

and the average market price of the permanent grassland was 0.62 EUR/m<sup>2</sup>. Vineyards had the highest average market price, which represented 0.87 EUR/m<sup>2</sup>. In 2012, the orchards were sold at the average market price 0.53 EUR/m<sup>2</sup>.

The evaluation of the agricultural land transactions in 2012, based on the data from the Research Institute of Geodesy and Cartography in terms of whether the buyer was a legal or natural person, and also whether the legal person was a national of the Slovak Republic, or he/she was resident abroad, brought the result that 55.75% of legal persons, 44.10% of natural persons and 0.15% of subjects without specifying the legal form

Table 7. The average market price (EUR/m<sup>2</sup>) of land at entities (legal persons and natural persons) according to land type in the selected districts of Slovakia in 2012

District	Legal persons								Natural persons			
	from Slovakia				from abroad							
	arable land	vineyard	orchard	permanent grassland	arable land	vineyard	orchard	permanent grassland	arable land	vineyard	orchard	permanent grassland
Dunajská Streda	2.30	–	28.00	0.32	–	–	–	–	1.82	–	8.45	0.56
Trnava	0.41	0.52	0.28	0.45	–	–	–	–	1.35	0.39	–	0.91
Nitra	0.84	–	–	0.51	–	–	–	–	1.82	4.29	0.58	0.86
Topoľčany	0.17	0.01	0.02	1.61	0.01	–	–	0.01	0.11	0.48	0.00	0.03
Liptovský Mikuláš	0.74	–	–	0.38	–	–	–	–	1.75	–	0.53	0.92
Žilina	6.33	–	–	0.98	0.64	–	–	1.86	4.14	–	0.95	3.31
Banská Bystrica	4.17	–	–	2.56	–	–	–	–	8.33	–	–	9.90
Rimavská Sobota	0.21	0.15	–	0.16	–	–	–	–	0.39	0.16	0.18	0.17
Prešov	11.94	–	–	1.78	–	–	–	–	11.85	–	–	1.91
Svidník	–	–	–	–	–	–	–	–	1.35	–	–	2.49
Košice	0.53	–	–	0.41	–	–	–	–	1.35	–	–	0.79
Michalovce	0.45	–	–	0.14	–	–	–	–	0.25	0.90	–	0.12
Total	0.38	0.23	1.78	0.63	0.05	–	–	1.37	1.13	1.36	0.51	0.60

Source: Research Institute of Geodesy and Cartography, own calculations

participated in the agricultural land transactions in the selected twelve districts in Slovakia. The data analysis of legal persons showed that within the sample of the buyers of agricultural land, there were 99.91% of legal persons having the nationality of the Slovak Republic, and only 0.09% other legal persons from abroad.

Based on the evaluation of the average market price for the categories of subjects, monitored in the terms of the type of land, the highest average market price of the arable land (1.13 EUR/m<sup>2</sup>) was reported in the category of natural persons. The average market price of the arable land for legal persons from Slovakia was the second highest in a row and its value reached 0.38 EUR/m<sup>2</sup>. The average market price of the arable land for foreign legal persons was the lowest one with the value 0.05 EUR/m<sup>2</sup>. The highest average market price of the permanent grassland (1.37 EUR/m<sup>2</sup>) was recorded for foreign legal persons. The second highest in a row was the average market price of the permanent grassland (0.63 EUR/m<sup>2</sup>) for legal persons from Slovakia.

In the case of natural persons, the price of the permanent grassland was the lowest, at the level 0.60 EUR/m<sup>2</sup>. The high market price of the permanent grassland per m<sup>2</sup> paid by foreign legal persons reflected the fact that subsequently the grassland was utilized for the recreational and sport activities (construction of slopes, sports centres). This is supported by the fact that the highest market prices were recorded in the districts suitable for tourism, for example, in the district of Žilina (mountain areas).

According to the preliminary information, the agricultural land market in Slovakia revives before the end of the sale moratorium of agricultural land to foreigners (the 1<sup>st</sup> of May 2014). Specific data for the analysis will be available in 2015.

## REFERENCES

- Bandlerová A. (2000): Trh s poľnohospodárskou pôdou na Slovensku a vo vybraných štátoch EÚ. (Agricultural land market in Slovakia and in selected EU countries.) In: Medzinárodný vedecký seminár k aktuálnym otázkam v poľnohospodárskom a potravinárskom komplexe. University of Slovak Agriculture in Nitra, Nitra, pp. 22–27; ISBN 80-7137-722-8
- Bandlerová A., Schwarcz P., Marišová E. (2011): Držba pôdy a rozvoj vidieka na Slovensku. (Land tenure and rural development in Slovakia.) Acta Regionalia et Environmentalica, 8: 6–15.
- Buday Š., Grausová G., Rybár V. (2011): Analýza vlastníckych a užívateľských vzťahov k poľnohospodárskej pôde vo vybraných regiónoch Slovenska. (Analysis of Proprietary and User Relations to Agricultural Land in Selected Regions of Slovakia.) Study No. 175/2011, RIAFE Bratislava; ISBN 978-80-8058-554-9
- Buday Š. et al. (2013): Rozvoj trhu s pôdou a trhu nájmu v podmienkach EÚ. (Development of the Land Market and the Land Rent Market in Conditions of EU.) Scientific monograph No. 182/2013, RIAFE, Bratislava; ISBN 978-80-8058-586-0
- Buday Š., Vilček J. (2013): Kategorizácia a hodnotenie poľnohospodárskych pozemkov na Slovensku. (Classification and Evaluation of Agricultural Land in Slovakia.) Mendel University in Brno, Brno; ISBN 978-80-7375-789-2
- Hamza E., Miskó K. (2006): Characteristic of land market in Hungary at the time of EU accession, In: International Scientific conference, October 2-6, 2006, Nový Smokovec; ISBN 80-8058-455-1
- Němec J. (2009): Predikcia trhových cien a trhu s pôdou v Českej republike a v niektorých krajinách EÚ. (Prediction of market prices and the land market in the Czech Republic and in some EU countries.) In: Zborník z medzinárodnej vedeckej konferencie: Rozvoj vidieka a trhu s pôdou v kontexte spoločnej poľnohospodárskej politiky EÚ. 5–7 October 2009, Štrbské Pleso. RIAFE, Bratislava; ISBN 978-80-8058-526-6
- Střeleček F., Lososová J., Zdeněk R. (2010): The relation between the rent and price of agricultural land in the EU countries. Agricultural Economics – Czech, 56: 558–568.

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