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# EVALUATION OF RENT PAYMENTS IN STARA ZAGORA DISTRICT

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#### ABSTRACT

The Stara Zagora region is characterized by the fact that there is a large number of agricultural producers who do not have enough land of their own to optimize their production. This causes increased interest and competition between them for free agricultural land, fields and permanent grassland. The purpose is to trace the dynamics of rent payments in Stara Zagora district, through dynamic relative values. A comparative analysis of the relative values characterizing the dynamics was used.

**Key words:** total factor productivity, prices, increase.

### INTRODUCTION

The study of lease relations is important for the assessment of the state of fixed capital in agriculture - agricultural land. In Bulgaria, the share of rented from the total used agricultural area is among the highest in the EU and affects millions of owners, which determines the great interest in the problem (1). Typical of agricultural production is its uncertainty and instability. They are related to the dependence of agricultural production on climatic conditions, on the spread of diseases and pests, on pests on crops and animals. Instability and uncertainty are also related to the existence of a time lag between the investment of capital and the receipt of results from them. This instability and uncertainty is also created by the presence of a large number of agricultural producers, each of whom can hardly influence the mechanisms of supply and demand of land and agricultural products.

The Stara Zagora district is the only one of the largest and fourth largest producers of plant products in Bulgaria. The sector maintains a livelihood of over 16% of the population. The

\*Correspondence to: Plamena Petkova, Trakia University, Faculty of Economics, Stara Zagora, Bulgaria, Student campus, email: plamenkapetkova@abv.bg; +359 899 89 09 38 product list included wheat (bread and feed), barley, corn (for grain and fodder), grapes, technical and essential oil crops, medicinal plants and herbs (2).

The purpose of this study is to establish the development of the levels of rental prices in Stara Zagora district for the period 2010-2019.

The object of the study are the rent payments in Stara Zagora district. The subject of the study is the dynamics of the prices of rent payments in two categories - fields and permanently grassed areas.

### **METHODS**

Basic and chain indices of price dynamics for the period 2010 - 2019 were used. The dynamics of wholesale prices of agricultural products reflects changes in their levels over a period of time (3, 4). Expressed as a percentage. Two methods are used to calculate it - by chain basis (chain index of dynamics) and by constant base (basic index of dynamics). In the chain base method, the price dynamics for each year of the period under review is calculated by assuming the previous year as a base equal to 100%. In the constant base method, the dynamics is calculated by comparing the prices for each year of the analyzed period with the prices in the initial year of the period.

The methods are complementary and the analysis of price dynamics is more accurate and clear if performed simultaneously by both methods. The base index shows the steady trend in price movements during the study period (whether they have increased or decreased). Find the reasons that led to this change in prices, chain indices must be calculated. They locate the specific moment (year, month) of the study period that had the greatest impact on the change in price. After tracking the chain price indices, it is established whether the change in prices during the whole period was only in one direction, whether it took place smoothly or sharply.

The analyzed data are taken from the regularly published reports of the National Statistical Institute. The prices of two categories were observed: fields and permanently grassed areas. Fields should mean regularly cultivated land, usually in the crop rotation system. Permanently grassed areas are lands used permanently (for five years or more) for growing grass fodder crops, by cultivation (sowing) or natural (self-seeding), and which are not included in the crop rotation.

## RESULTS

**Table 1** presents the dynamics of the average prices of contracts for lease / rent of fields for the period 2010-2019 for Stara Zagora district.

**Table 1.** Dynamics of the average prices of the contracts for rent / lease of fields for the period 2010-2019 for Stara Zagora

	2017 Jor Stara Zagora										
	Stara Zagora	2011	2012	2013	2014	2015	2016	2017	2018	2019	
		Year									
L											
	Basic index	140%	180%	180%	187%	193%	187%	207%	213%	233%	
	Chain index		129%	100%	104%	104%	97%	111%	103%	109%	

For Stara Zagora district there is a decrease in the prices of lease agreements in 2016. This reduction is in favor of producers, but affects the owners, as it leads to a reduction in the rent paid. In the next two years there is another increase, with the highest value seen in the last analyzed year - 233%. In the analysis of the indices of the dynamics on a chain basis, the decline in prices in

2016 is impressive. After 2017, there is a significant increase in the prices of lease agreements. The total increase of prices on a constant basis for the analyzed period is 93%.

**Table 2** presents the dynamics of the average prices of contracts for permanently grassed areas for the period 2010-2019 for Stara Zagora.

**Table 2.** Dynamics of the average prices of the lease / rent contracts for permanently grassed areas for the period 2010-2019 for Stara Zagora

Stara Zagora	2011	2012	2013 г.	2014	2015	2016	2017	2018	2019
	Year	Year	Year	Year	Year	Year	Year	Year	Year
Basic index	118%	191%	64%	64%	64%	64%	127%	64%	155%
Chain index		162%	33%	100%	100%	100%	200%	50%	213%

According to the amendments to the Law on Support of Agricultural Producers, the Ministry of Agriculture, Food and Forestry has created a layer of "Permanently grassed areas" in order to preserve permanently grassed areas, which is approved by order of the Minister of Agriculture. The areas included in this layer can be declared for support with direct payments only as permanently grassed areas.

From the obtained data on the dynamics of the prices of the contracts for permanently grassed areas for Stara Zagora district it is impressive that after 2012, when there is a maximum value (191%), there will be a decrease to 64% for a 4-year period. For 2018 there is again a decline to the levels of 2013-2016, after which there is a sharp rise to 155% for 2019. The probable reason for this is the green requirements offered at the European Union level, which are mandatory for agricultural producers. The largest difference in

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prices according to a chain index is observed for 2018-2019, and the smallest for 2012-2013.

### **CONCLUSIONS**

Insufficient amount of own land leads to competition between agricultural producers, which is reflected in the increase in the prices of lease agreements for fields and permanently grassed areas.

Rising prices for leases of fields and permanent grassland, combined with deteriorating climatic conditions and a steady increase in the prices of factors of production used in agriculture, lead to even greater uncertainty for producers.

Increased due to the above reasons lead to an increase in production costs, which has an

extremely negative impact on the economic efficiency of production.

On the other hand, it benefits owners who receive higher incomes from their property.

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