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EVALUATING THE IMPACT OF TAX POLICY ON THE ASSETS OF AGRICULTURAL ENTERPRISE

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ABSTRACT

Every taxpayer is obliged to pay tax on their profits, but if taxpayers feel that the government is opaque and ineffective with their taxes, their willingness to pay taxes is reduced. At the same time, the higher the tax rate for tax subjects, the lower their interest in paying taxes. The optimal tax burden should be a burden that encourages people to work and stimulate businesses to create value. Each state seeks to maximize tax revenues as part of its tax policy, while at the same time ensuring that the tax system does not interfere with the economy or negatively affect the business environment. The state strives to maintain the most optimal state tax system and to support the market economy and competitiveness. Therefore, the state must have a tax administration that can collect taxes efficiently, and consequently, the tax system in the state should be such that the redistribution of collected taxes will be as efficient and fair as possible. The main goal of the article is to examine the dependence of tax policy on the agricultural business economy and find an effective variant of enterprise income taxation, which should have a positive impact on the business activity and competitiveness of companies in the selected sector of the economy and such taxation still would be beneficial for the state. The article will also set out some hypotheses based on the gained theoretical knowledge, as well as on the set research question.

Key words: agricultural enterprise, tax, tax burden, tax implications, tax policy
JEL codes: H20, H25, Q13, C19

THEORETICAL BACKGROUND

The current period can be characterized as a period of significant globalization of individual markets and economies. This globalization is inevitably reflected in individual tax systems, and such tax systems of individual states may compete or converge with each other. Tax competition occurs mainly indirect taxes, especially in the area of taxation of company profits, income from financial capital, etc. (Kovács, 2016). Governments often seek to reduce the tax burden on direct taxes, thereby seeking to support the business activity of taxable persons. Direct taxes can be used more often as a regulatory tool to make better use of various social savings, because on the one hand, they create tax justice, but on the other hand, they reduce

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the savings of taxable persons, as they pay part of their income in the form of taxes (Vančurová and Láchová, 2018).

The tax burden represents the degree of the burden imposed by the relevant tax legislation on individual tax subjects. This tax burden has a relatively large impact on the tax entities because they must pay individual taxes to the public budgets from the relevant tax base. The size of the tax burden itself affects the business activity of tax entities, and it can be stated that the lower the tax burden, the higher the activity of business entities (Harumová and Kubátová, 2006). In the EU agricultural taxation systems income from agricultural activities is subject to taxation. Due to the specificity of agriculture, there are constructions often used to reduce the tax burden borne by farmers (Gruziel and Raczkowska, 2018). The optimal tax burden should encourage businesses to create value (Nemec and Burák, 2016). A well-defined tax policy is very important, as the reasons for the failure of companies in certain market environments can be not only internal factors, such as insufficient market position or higher material costs but also external factors, which can include a high tax burden or non-competitive tax burden compared to other countries (Bielik and Turčeková, 2013).

The European Union is convinced that, although the individual Member States of the European Union decide on their taxes independently, thanks to its measures, these countries can achieve better results in this area. At the same time, European Union regulations aim to ensure that the Member States increase their competitiveness and that they are unable to worsen their position in international competition through their tax policies (Trautmann, 2014). The EU systems have taxes on holding wealth or part of it (on properties, agriculture) and on increase in property (Gruziel and Raczkowska, 2018). The harmonization of taxes within the European Union itself is also based on the fact that the individual countries of the European Union lose about EUR 50 billion each year due to tax fraud. Most of this amount is mainly related to cross-border VAT fraud, and therefore in 2016, the European Commission adopted a VAT Action Plan, which represented a reform of the VAT system so that the system was as administratively simplified as much as possible, using information and technological conveniences and eliminating inconsistencies in the individual tax systems of individual countries of the European Union relating to VAT (European Commission, 2015).

The European Union is currently seeking this coordination to gradually achieve harmonization not only of individual taxes but also, in the future, harmonization of tax rates. Coordination and harmonization themselves represent an approximation of laws, within the framework of which the legislation of individual countries is harmonized with the legislation and code of ethics of the European Union (Ficbauer and Ficbauer, 2012; Terra and Wattel, 2012). The governments of the countries try to define their tax policy in such a way that tax policy creates barriers as little as possible, which would have an impact on the economy and business environment. For this reason, tax policy should be as clear and efficient as possible, since only such a tax policy can provide sufficient resources for individual government budgets.

MATERIALS AND METHODS

Based on the acquired theoretical knowledge of the researched problem, we identified the research question: 'What effect does the size (assets) of the company have on the economy of the enterprise depending on the volume of income taxes levied within the selected agricultural sector?'. At the same time, hypotheses were determined based on the obtained theoretical knowledge, as well as on the established research question. These are the following hypotheses:

- H1: 'An increase in the non-taxable part of the tax base will have a positive impact on the business economy in the selected agricultural sector of the national economy'.
- H2: 'The reduction of the tax rate for enterprises with a turnover of up to 100 000 EUR per year will support the innovative potential of small businesses within the selected agricultural sector'.

Answers to the mentioned hypotheses and research questions can be obtained based on the analysis and evaluation of individual data, which will form a set of input data. The individual enterprises have been

studied and analysed by the statistical classification of economic activities SK NACE 2. These are enterprises in the agricultural sector, and no distinction will be made between the territorial scope of individual enterprises. The quantitative survey was conducted in the form of a questionnaire survey on a selected sample of respondents. This sample of respondents included more than 400 small and medium-sized enterprises, which exceeded the minimum established sample within 6 450 objects of research (Buliková, Bielik and Belinska, 2021).

To determine the sample size, we use a formula to determine the minimum sample size:

$$n \geq \frac{\left(z^2 \cdot p \cdot q\right)}{\Delta^2}, \quad (1)$$

where:
n – minimum sample size,
p, q – percentage of objects that can be inclined to one or the other variant,
z – reliability coefficient of the given statement,
Δ – maximum permissible error.

The questions in the questionnaire were scored statistically by a percentage score based on the number of responses to the suggested answer options. Some questions were assessed on a rating scale, where possible answers were assigned points from 1 to 5, and then the arithmetic mean was calculated, and based on the obtained value, the answer to the question was estimated.

Regression analysis examines the relationships between two or more variables. In linear regression, the expected value of a dependent variable is given by a linear combination of estimated coefficients and values of independent variables, which can be written as:

$$Y_i = \beta_0 + \beta_k X_i + \varepsilon_i, \quad (2)$$

where:
Y_i – dependent variable,
β_0 – locating constant,
β_k – regression coefficients,
X_i – independent (explanatory) variable,
ε_i – error term.

RESEARCH RESULTS AND DISCUSSION

Based on the analysis of selected business entities, which formed the examined sample in terms of assets of these business entities, the following indicators were obtained for 2019. Within the whole industry, the maximum asset value was 76 428 210 EUR and the minimum asset value was at the level of 3 314 EUR. The maximum value of tax payable was 2 116 044 EUR and the minimum value of tax payable was 0 EUR (Table 1).

Table 1. Key indicators of selected business entities by assets

Description	Value
Number of evaluated subjects	410
The minimum value of the company's assets	3 314
The maximum value of the company's assets	76 428 210
The average value of assets of selected business entities	1 833 876
The maximum value of the tax payable	2 116 044
The average value of tax payable of selected business entities	14 166

Source: own empirical research based on data of Finstat (2020).

The size of business entities was taken based on the size of the assets of enterprises, given that it is impossible to obtain from open sources the exact numbers of employees of individual business entities in the agricultural sector. Data is available only about the approximate number of employees, because of the total number of 6 540 economic entities, more than 3 000 entities do not specify the number of employees. For the analysis, we selected companies with the paired data on the statistical characteristics of the company's assets and the amount of tax payable. Both statistical characteristics are quantitative.

We used the method of regression analysis to find out how the number of assets affects the tax payable, in other words, how the tax changes on the change in the unit of assets in euros. The model was tested for multicollinearity before regression analysis. The presence of multicollinearity in the model has not been confirmed. Figure 1 shows that the calculated

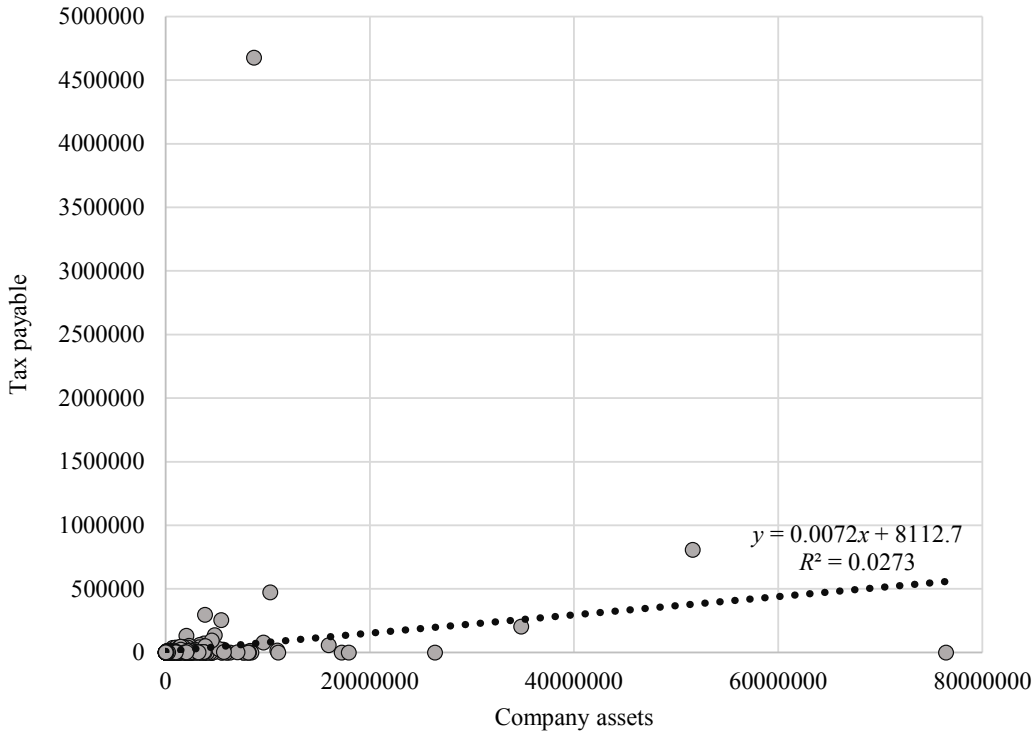

Figure 1. Comparison of enterprise size with tax payable in 2019

Source: own empirical research based on data of Finstat (2020).

coefficient of determination R^2 is 0.0273, indicating that the resulting simple linear model explains the 2.73% variability of the dependent variable (tax payable). The regression function has the form $y = 8\ 112.7 + 0.0072x$. The value of intercept $b_0 = 8\ 097.399$ means, that if the value of the assets were 0, then the amount of tax payable would be 8 112.7 EUR. From the calculated equation of the linear regression line, we can state that in the observed year 2019, an increase in the company's assets by 1 EUR would be associated with an increase in tax payable by 0.0072 EUR, which is insignificant. Figure 1 shows that there is a minimal positive relationship between tax payable and the company's assets.

At the same time, a non-linear regression analysis was performed. The coefficient of determination was 0.3938, which means that the estimated logarithmic regression model explains 39.38% of the variability. The model and coefficients are statistically significant ($p < 0.05$). The calculated values of the regression equation are also elasticities and can be interpreted in such a way: the growth of the company's assets by 1% will lead to an increase in tax payable by an average of 0.19%.

Based on the conducted qualitative and quantitative survey, it was possible to obtain answers to the established research question: 'What effect does the size (assets) of the company have on the economy of the enterprise depending on the volume of income taxes levied within the selected agricultural sector?'. The impact of the size of the enterprise on the economy of the enterprise has minimal dependence on the volume of income taxes levied within the agricultural sector. Based on the analysis carried out, it could be concluded that there is a minimal impact related to the size of the company expressed by the size of the company's assets and the amount of taxes levied (represented by the amount of taxes payable). If the assets of individual business entities were increased by 100%, there would be only a 1.03% increase in

tax payable, which can be considered as a negligible increase in tax payable. At the same time, as follows from the linear regression model, if the companies increase their assets by 1 EUR, the amount of tax payable will increase by 0.00195 EUR. It also follows from the above that the impact of the size of the company on the amount of levied taxes is weakly dependent.

Also, hypotheses were determined based on the acquired theoretical knowledge and the established research questions. These hypotheses were considered based on the obtained input data, their analysis, intercomparison, and evaluation, which allowed testing hypotheses.

H1: 'An increase in the non-taxable part of the tax base will have a positive impact on the business economy in the selected agricultural sector of the national economy'. This hypothesis has been refuted. This hypothesis was examined in the context of the implemented questionnaire quantitative survey. Based on the above questionnaire survey, the following can be stated: the majority of respondents (92.7%) stated that the non-taxable part of the tax base was justified, 42.6% of respondents stated that it would be effective to increase the amount attributable to the non-taxable part of the tax base, 20.5% of respondents stated that the non-taxable part of the tax base should apply not only to natural persons but also to legal entities. Although most of the respondents consider that the non-taxable part of the tax base should be maintained and the amount of such non-taxable part of the tax base be increased, and at the same time that this item also applies to legal entities, this cannot be stated with confidence that increasing the amount of the non-taxable tax base would automatically contribute to the development of business entities and would have a positive impact on the economy of individual business entities within the sector. At the same time, the non-taxable part of the tax base currently applies only to natural persons, while in the given agricultural sector of the national economy other forms of business prevail.

H2: 'The reduction of the tax rate for enterprises with a turnover of up to 100 000 EUR per year will support the innovative potential of small businesses within the selected agricultural sector'. This hypothesis was refuted. There is no direct link between the innovation potential of small businesses and the level of the tax rate for such businesses with a turnover of up to 100 000 EUR. Within the agricultural sector, the analysis showed that companies with a turnover of up to 100 000 EUR pay taxes to a much lesser extent, which means that a possible reduction in the tax rate will not have a significant impact on their economic situation. At the same time, it cannot be assumed that the saved funds for income tax will be used by the company within the given sector for research or innovations. By reducing that tax rate, the money saved would support the economic position of businesses in the agricultural sector.

As a result of studying the impact of tax policy on the business economy, the following conclusions were made: agricultural enterprises are interested in reducing the income tax rate for both individuals and legal entities, businesses are interested in introducing a flat tax system, businesses are interested in maintaining deductible items and the non-taxable personal income tax base.

At present, there is no consensus among experts, politicians, and economists about what the optimal model of tax policy should look like, which would allow taxpayers to pay as low taxes as possible and at the same time would allow the state to collect sufficient funds to ensure its activities and functions. Each country tries to build its tax system, which consists of a tax policy and a tax system. Changes within the tax system can be made through legislative measures, which can be partial or complex, and which are often called tax reforms (Schultzová, 2012). Changes in tax compliance costs caused by the harmonization of corporate tax bases would have a significant and positive impact on gross domestic product (GDP) and welfare (Barrios, d'Andria and Gesualdo, 2020).

Our goal was to find an efficient variant of taxing enterprise income that would have a positive effect on the business activity and competitiveness of agricultural companies, and at the same time, such taxation would still be beneficial for the state. However, the role of the state should be to create a tax system that will be considered fair by both individual tax authorities and governments. Since such a tax system will fulfil state budgets so that the state and public

institutions can implement their policies. Therefore, it is necessary to constantly research the issue of taxes so that the resulting tax system is constantly improved.

The main challenge for the future is to develop an assistance mechanism for enterprises whose activities will be paralyzed by the emergence of a national or global crisis. This mechanism should include the following measures:

- direct non-repayable financial assistance to affected enterprises;
- cheap reimbursable financial assistance to businesses due to reduced sales and maintaining employment;
- the creation of a permanent employment fund (*kurzarbeit*), to which enterprises will contribute and raise the necessary funds in the case of a crisis;
- tax incentives for income tax, as well as VAT for business entities (income tax) and certain commodities (value-added tax) within the certain sectors that will be most affected by the crisis.

CONCLUSIONS

In the research paper, we assessed the impact of tax policy on the assets of enterprises in the agricultural sector. We defined the theoretical basis of the paper with a focus on tax and tax policy, the structure of the tax system, and tax burden, as well as describe tax trends in the European Union and their impact on the business sector.

From the results of the study, it can be concluded that there is a minimal relationship between the size of the enterprise, expressed by the size of assets and the tax payable. Enterprises in the agricultural sector prefer that fixed costs and the non-taxable part of the tax base be preserved, which may also be because some of the enterprises in this sector operate as natural persons – private farmers. Business entities operating in the agricultural sector agree that business entities with a turnover of up to 100 000 EUR should have a lower tax burden.

The state implements its tax policy through appropriate legislation or tax reforms. At the same time, when developing proposals for adjusting the existing tax policy in the agricultural sector, tax policy should be more closely aligned with the tax policy of the European Union and the Slovak Republic, which may lead to an increase in tax revenues in the sector by increasing the production of certain goods as part of more efficient use of the land fund; increasing tax revenues within the industry due to increasing employment in the industry; improvement of the economic situation of individual enterprises, which could lead to their development and subsequent increase in production, will be directly related to the increase in tax revenues in the agricultural sector.

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