



CAPITAL TAXATION EFFICIENCY OF AGRICULTURAL BUSINESSES IN THE SLOVAK REPUBLIC

Alena Andrejovská, Ján Buleca, Veronika Puliková

ABSTRACT

Effective tax rates are presented by indicators of the actual corporate tax burden, which take into account the impact of all the elements listed in the legislation. The submitted contribution explores the issue of effective taxation through effective average tax rates (EATRs) focusing on agricultural production enterprises. The analysis assessed the effect of changing the statutory tax rate (and other taxes and factors) on changing the effective average rate of capital. Taxation efficiency was monitored for selected intangible and tangible assets for 2004 and 2018. Analysis indicated a depreciation tax shield that tracked the amount of tax savings on capital investment as well as the economic rent of the project with taxation. The analysis showed that a 3% increase in the statutory rate over the reference period increased the effective average corporate rates for intangible assets by 13.35%, tangible assets by 14.25% and inventories by 16.63%. The highest annual tax saving was achieved in 2018 for tangible assets of € 4,647.50, with a four-year return.

Keywords: agriculture; burden; efficiency; tax; asset

INTRODUCTION

Market economy, capital mobility, and corporate tax efficiency are the concepts that are related to each other, and are currently putting strong pressure on investors as well as government officials in their decision making on investment placement. Major changes in the tax systems of the EU countries have resulted in the globalization and digitalization of the economy, which has substantially increased the geographical mobility of taxation. This has created a competitive environment between the tax systems that raised concerns about the level and fairness of the tax policies in a global perspective. From the point of view of economic efficiency, the tax systems should ideally be "neutral", particularly as regards the economic decisions. In fact, differences in corporate taxation in individual countries can only mean the differences in social security costs, producer costs, favouring one type of producer before another, and so on. Therefore, it is important to monitor the effective tax rates that examine the tax bases and provide sufficient information not only to investors about the volume and allocation of their investments, but also to government officials who create the tax legislation and modify the structure of tax systems.

Corporate tax rates are one of the decisive factors that influence the investors in deciding on the location of their investments and their business activities. The first and important dimension is the statutory tax rate (STR), given by the tax laws of each country. This is the easiest and the

most accessible way to get information on the tax conditions in a country, which is certainly not sufficient. It is more important to monitor the total tax burden, which represents the level of the corporate tax, as the share of the taxes paid on the total income and the profit of the enterprise in the country (Bird, 2000; Gupta, 2007; Bayer, 2012). Inappropriateness of using the statutory rates as an objective indicator in monitoring and subsequently comparison of the corporate tax rates has led to the deduction of the effective tax rates (ETR), which have significantly higher informative value (Baker and McKenzie, 1999; Barrios, Nicodème, and Sanchez Fuentes, 2014; Delgado, Fernandez-Rodriguez, and Martinez-Arias, 2014).

The tax rate, which significantly influences the tax burden in the form of statutory, effective and average rates, is an important information not only for investors but also for politicians and economists (Bánociová et al., 2014). In recent decades, the corporate tax system has undergone dramatic changes due to a fall in statutory but also effective tax rates, and a substantial widening of the tax base through the depreciations (Devereux, Griffith, and Klemm, 2002; Liu and Cao, 2007; Egger and Raff, 2015). The countries have strategically responded to tax cuts in competing countries that have helped attract the foreign investors. There are many methods for calculating the effective rates used to determine the effective taxation, such as a macro-based backward-looking measures, a micro-based

backward-looking measures, and a micro-based perspective measure. As reported by **Devereux and Griffith (1998)**; **Sørensen (2004)**; **Devereux, Lockwood, and Redoano (2008)**, the use of these methods depends on the data used, from the time perspective (past/future), but also from the monitored area (micro/macro-level). All three methods are based on the assumption that the market of production factors is competitive and the production function has the usual characteristics. In such a case, the decision on where and how much to invest is affected not only by the rate of capital taxation but also by other production factors (wages, energy, and land).

A number of empirical studies (**McKenzie, Mintz and Scharf, 1997**; **Devereux and Griffith, 1998**, **Devereux and Griffith, 2003**; **Devereux, Griffith and Klemm, 2004**; **Kubátová and Říhová, 2012**; **Barrios, Nicodème and Sanchez Fuentes, 2014**; **Šimková, 2016**) investigated the impact of effective corporate tax rates on the company's economic behaviour, including their location, selection of investment opportunities, and spill-over income strategies. Others (**Gordon and Slemrod, 1998**; **Arnold and Schwelless, 2008**; **Vartia, 2008**; **Arnold et al., 2011**; **Vegh and Vuletin, 2015**) have used these rates to address the tax competition issues. **Suzuki (2014)** in his study in Asian countries, assessed the tax holidays as a means of attracting foreign capital and, in turn, the impact of tax holidays on the effective tax rates that varied according to the volume of capital contribution into individual schemes. Tax holidays for typical investments could be increased not only by the EATR, but also by EMTR (assuming 10% profit rate surplus), reflecting the extraordinary generous depreciation policies of some Asian countries.

The crucial indicator, apart from the tax holidays, is the size of the country and investment tax relief in form of the contributory capital that government can provide to individual investors. Small countries with almost zero effective tax rates can attract the most foreign capital. This finding is in line with a simple theoretical model of tax competition in which the optimal behaviour of small countries determines the reduction of the revenues at the source of taxation to the absolute minimum (**Gordon, 1986**; **Zodrow and Mieszkowski, 1986**). Larger countries can maintain relatively high effective tax rates. This finding is based on the asymmetric tax competition (**Bucovetsky, 1991**), as well as the "new trade theory" (**Haufler and Stahler, 2013**; **Baldwin and Krugman, 2004**). The theory of asymmetric tax competition has determined the differences in capital elasticity between small and large countries, where higher tax rates settings are more balanced. According to the new trade theory the countries with a large domestic market can still maintain higher tax rates. It should be kept in mind that when analysing the tax competition, which is often influenced by the level of effective tax rates, we should take into account the volume and allocation of the investment. An analysis of such tax competition is a challenge for the future.

Scientific hypothesis

In the study, we calculate the effective tax rate for agriculture companies for conditions in the Slovak Republic. In the long run, the effective tax rate is lower than the statutory one. This trend is recorded worldwide.

Basic hypothesis: Is the effective tax rate in Slovakia lower than the statutory rate in 2004 and 2018?

MATERIAL AND METHODOLOGY

The methodology for EATR calculation for capital was proposed by **King and Fullerton (1984)**, and extended by **Devereux and Griffith (1998)**. It represents the ratio of the actual rate of return before tax, required to reach a zero economic rent after tax (where the cost of capital is an initial investment), and the actual rate of return after tax for the shareholder.

The main source in calculating the effective average capital tax rate was the database of corporate taxation of the Centre for European Economic Research (**ZEW, 2018**), which provides estimates of effective average tax rates (EATRs) for European countries classified according to the asset types and sources of their funding within the period 1998 to 2018.

The aim of the contribution was to analyse and evaluate the efficiency of taxation of selected types of intangible and tangible assets of agricultural holdings on the basis of accounting and tax legislation in the Slovak Republic (SR) through the construction of the EATR model in the year 2004 (entry of the Slovak Republic into the EU) and the year 2018.

The assets were classified into seven categories of intangible and tangible assets (intangible assets; agricultural buildings; machinery for agriculture and forestry; basic herd and the draught animals; permanent crops; land; and inventories). The design of the EATR model takes into account the discounted value of multiplying of the variability of tax discrimination, and the difference between the revenues and the costs of the project. The revenues were taxed at the required rate of return and accounting depreciations without the impact of inflation. The costs reflected the shareholder's discount rate, accounting depreciation, and inflation. They include the formula $(1 - NPV \text{ tax depreciation shield})$, which expresses the tax savings from the depreciations. The sources for capital funding were divided into three groups, weighted by the **OECD (2011)** weights, and processed according to the OECD long-term statistics averages:

1. undistributed profit (55%);
2. new deposit (10%);
3. debt (35%).

The volume of corporate tax and the revenues from the interest deduction, that highlight the differences between the different ways of funding, are positively correlated.

Additional input data:

- (r): real rate of return determined as 5% of the alternative investment,
- (p): required rate of return before tax determined at the 20% level,
- (π): inflation rate (of 2%),
- (δ): accounting depreciation rate determined by **ZEW (2018)**,
- (τ): effective statutory tax rate (22%),
- (e): effective real estate tax rate determined from the statutory real estate rate (n) 0.25%, reduced by the corporate tax rate (22%). Since the **ZEW (2018)** model considers a market value that does not share in all countries

with a purchase price, it determines a uniform and optimal basis to capture the market value of 0.36%.

(v): Valuation of inventory loss may use:

- *FIFO method*: this method is used for valuation of inventory loss when the first inventory increase valuation price is used as the first price for inventory loss valuation ($v = 1$).

- *LIFO method*: is used for inventory valuation when the last inventory increase valuation price is used as first to evaluate the inventory loss. In the Slovak Republic (SR) this method is not allowed ($v = 0$). The weighted arithmetic mean is determined from actual purchase prices as the share of inventory in stock value, and the total inventory in stock state in the quantitative units, at least once per a month ($v = 0.5$).

- *Predetermined Inventory Price*: this is the price for fast-moving inventories (mostly in agriculture), in case of which we often do not yet know their price at the time of placing in storage ($v = 2$).

(\emptyset): tax depreciation for tangible assets will be used in a straightforward or accelerated manner in accordance with the **Law no. 595/2003**. Intangible assets are depreciated in accordance with this Act for a maximum of 5 years up to their entry price.

(i): a nominal interest rate that would increase with the increase of inflation and an increase in the real interest rate.

(ρ): the shareholder's discount rate.

(γ): the variability of the shareholder's tax discrimination, which reflects the ratio of the funds from the investment to the alternative investment funds. If we eliminate the personal income tax at this value, a value of 1 is set, as the shareholder will not be discriminated when deciding for the investment, but for the possibility of depositing of his funds in the bank.

(A): the depreciation tax shield is determined by multiplication of the net present value by the tax coefficient.

(τ): tax savings, since the depreciations constitute a cost item that reduces the tax base of the company. In case of an increase of corporate tax rates, or a decrease in nominal interest rates, this saving will increase. Indicator in the form:

$$A = \tau \phi \left\{ \left(\frac{1}{(1+\rho)} \right) + \left(\frac{1}{(1+p)} \right)^2 + \dots + \left(\frac{1}{(1+\rho)} \right)^T \right\} \quad (1)$$

The effective average tax rate (EATR) is defined as the ratio of the current value of the taxes paid and the net present value of the revenue flows, excluding the initial investment costs. The method of the EATR determination consist of the proportional reduction of the economic rent generated by the investment due to the $EATR = (R^* - R)/R^*$ taxation. This method does not define the EATR for investment projects which are marginally without taxation $R^* = 0$. A different approach that follows the difference between R^* and R in relation to the net present value of the return on investments before tax $p/(1+r)$ was proposed by **Devereux and Griffith (1998)**. This relationship takes into account the impact of marginal personal effective tax rates on the capital gains accruing to the investors from this investment, which reduces the post-tax economic rent:

$$ATR = \frac{R^* - R}{\frac{p}{(1+r)^T}}, \quad (2)$$

where the R^* is the economic rent flows from the project without tax and expresses the difference between the required rate of return before tax and the real interest rate from the next investment. To determine the present value of the project's profit, it is necessary to discount it with the real interest rate:

$$R^* = \frac{p-r}{1+r} \quad (3)$$

The evaluation tracks the different assets and the equation is adjusted (reduced/increased) by the individual indicators.

Intangible assets, machinery for agriculture and forestry, basic herd, and the draught animals were calculated using the equation in the basic form:

$$R_{1,3,4} = \frac{\gamma}{1+\rho} * \{[(p + \delta) * (1 + \pi) * (1 - \tau)] - [\rho + \delta * (1 + \pi) - \pi] * (1 - A)\} \quad (4)$$

For agricultural buildings and permanent crops, equation (4) was reduced by e – tax on real estate (from buildings: the tax rate + (number of floors * surcharge on the floor) * the size of the building) and (from land: tax rate * the size of the land * value of the land), this tax is the direct cost to this type of asset.

$$R_{2,5} = \frac{\gamma}{1+\rho} * \{[(p + \delta) * (1 + \pi) * (1 - \tau)] - [\rho + \delta * (1 + \pi) - \pi] * (1 - A)\} - e \quad (5)$$

In case of the land, accounting and tax depreciations are excluded from equation (5), i.e. $\delta = 0$, $(1 - A) = 0$ (the land constitutes a specific group of undepreciated assets).

$$R_6 = \frac{\gamma}{1+\rho} * \{[p * (1 + \pi) * (1 - \tau)] - [\rho - \pi]\} - e \quad (6)$$

For inventories, e : the tax on property is excluded from the equation (6), and the whole formula is reduced by the multiplication of the tax rate, the inflation rate, and the inventory valuation method. If the company decides for the *LIFO* method (the cost also includes the increase in the price level, we will insert 0 instead of v , that will reset the whole expression). In case of the *FIFO* method $v = 1$, while in the method of the weighted arithmetic mean $v = 0.5$, and in case of the method of predetermined inventory price we will use the $v = 2$ (which we have set as the basis, since it represents the agricultural fast-moving inventories).

The equation has the form:

$$R_6 = \frac{\gamma}{1+\rho} * \{[p * (1 + \pi) * (1 - \tau)] - [\rho - \pi]\} - v * \tau * \pi \quad (7)$$

The investment was realized from the own funds (from undistributed profit and the new deposits) and from the external resources (out of debt). In the absence of personal taxes, $\gamma = 1$, the last indicator will always be zero, and capital costs for investments funded by new capital and investments funded by retained earnings will be equal. The difference is only in financing in the form of debt. To keep costs as low as possible, the companies try to optimize their capital structure. Corporate tax is the cost of equity financing, and often this cost is higher than other costs, such as this in form of interests, which are a tax-deductible item, thereby causing a reduction in the tax base, so called interest tax shield. Therefore, the economic rent of the project with taxation should be increased by the ratio of the discounted value of the difference between the discount rate of the shareholder and the nominal interest rate, and by the interest tax shield. It is necessary not to forget the effective

rate of real estate tax paid in the period of direct investment activity ($1 + e$).

Equation for debt financing has the form:

$$F^{DE} = \frac{\gamma \cdot (1+e) \cdot (\rho - i + \tau)}{1+\rho} \quad (8)$$

Equation for financing through a new deposit has the form:

$$F^{NE} = - \frac{\rho(1-\gamma)(1+e)}{1+\rho} \quad (9)$$

Statistic analysis

For the calculation of ETR for agricultural companies in the Slovak Republic we use the method from **Devereux and Griffith (2003)**. Calculations were based on this methodology and modified for the conditions of Slovakia. Specifically, there were changes in the methodology for calculating tax deductions for all monitored assets, as well as determining the valuation of inventories and tax burden from the point of view of real estate tax. The calculation is extensive and the individual sub-calculations were given in the previous paragraph.

RESULTS AND DISCUSSION

The EATR for agricultural holdings was monitored within the years 2004 and 2018, with the entry year 2004, when a 19% flat tax was introduced. Since this period, the statutory rate has increased up to the current 22% (used in the analysis), (23% tax rate in 2013 represents the only change since 2004). Table 2 takes into account developments since 1991, which are connected to the formation of the Slovak Republic.

The tax depreciations that are necessary to determine the tax base have undergone a change that has increased the number of depreciation groups from 4 to 6 and prolonged the depreciation period for individual groups in 2015 (Table 3).

For the straight-line method of depreciation, the share of the entry price and depreciation period was used. This method takes only a fraction of the annual depreciation, depending on the number of months since the property was put into use. In the last year, the remaining months of the year are counted. The tax and accounting depreciation rates for the monitored assets are mentioned in the methodology of the work.

Real estate tax (land tax and building tax) is a local tax and is imposed by a city or municipality (Table 4).

The land tax was determined by multiplying the land area in m^2 and the corresponding value per $1m^2$. The building tax was determined by the area of the built-up area in m^2 and the tax rate determined in the generally binding regulations. The **ZEW (2018)** calculates the tax on invested capital (real estates) in buildings by an indirect method. Table 4 shows a four-fold increase in the level of the nominal real estate tax base since 2005. In the effective real estate tax, the amount has been distributed with the direct correlation since 1991, when it increased by 0.01% up to the year 2005. After this period, there was also a single four-fold increase.

The funding methods that were processed during the analysis were oriented to financing from undistributed profit, new deposits and debt. In analysing there is an absence of personal taxes (the dividend tax that will be

applied in the Slovak Republic for the year 2017 (in 2018)). Capital costs for investments funded by a new deposit and investments funded by undistributed profits will be equal.

The analysis revealed an effective average rate, a tax shield, expressing the tax savings and an economic rent of the project with taxation, which means the financial benefit of the related project (Table 5).

The differences occurred between the two monitored periods, 2004 with the rate of flat tax applied in that period at the level of 19%, and the current 22% tax rate. When assessing the depreciation tax shield, the highest annual tax saving for the 100,000 € model investment was achieved for tangible assets (machinery for agriculture and forestry, together with base herd and draught animals), where their four-year depreciation period in 2004 brought savings to taxes of € 16,050; and € 20,550 to € 20,590. On the other hand, the lowest tax savings were found for investments into agricultural buildings, as these assets have the longest return (20 years) and the lowest opportunity to reduce the tax base through tax depreciation. The tax savings amount for 2004 would be € 9,990 and an annual savings of just € 499.50. For 2018, it would increase up to € 11,590. Intangible assets for the five-year return period showed 15.54% (in 2004) and 17.99% (2018) savings from the purchase price.

Another monitored indicator, creating the part of the EATR, is the economic rent of the project with tax, which expresses the size of the project's financial benefit with the aspect of taxation. The lowest EATR rate belongs to the highest value of the indicator (R).

In an investor decision-making on investment placement into the agricultural assets in the Slovak Republic, the most favourable option would be the investments into the land and agricultural inventories, which showed the highest levels of the economic rent, but the lowest EATR rate. The economic rent on land was 0.1033 in 2004 and dropped to 0.0976 by 2018 when founding from own resources. Decrease in funding from 0.1159 to 0.1122 was found also when funding from foreign sources. Subsequently, the EATR rate showed the lowest taxation 20.79% in 2004, increasing to 23.78% in 2018 with funding from own resources, and also in funding from foreign resources the rate recorded increase from 22.05% to 25.25% within the monitored period. A similar, but slight 10% increase was shown in case of the inventories. The EATR rate reached 22.73% in 2004 and 26.51% in 2018 in inventories when funding from own resources, and 24.00% and 27.98% when funded by foreign resources. The negative decision would be the investment into intangible assets (EATR average of 43.41%) and to tangible assets: machinery for agriculture and forestry, basic herds, and draught animals, where the EATR rate was 47.83% in 2018 when funded by own resources, and 49.29% when financed by foreign resources. This was the highest EATR rate for monitored tangible assets over the reference periods. The differences between the observed periods were due to the 3% increase in the statutory rate, reflected in the result of the calculations by increasing the effective average corporate rates for intangible assets by 13.35%, for tangible assets by 14.25%, and for inventories by 16.63%.

Table 1 Input data for analysis.

Asset	Accounting depreciation ZEW (δ)	Recalculated life	Tax depreciation (\emptyset)
I. Intangible assets	15.35% = 0.1535	5 years	100/5 = 20%
II. Agricultural buildings	3.1% = 0.031	20 years	100/20 = 5%
III. Agricultural and forestry machinery	17.5% = 0.175	4 years	100/6 = 25%
IV. Basic herd and draft animals	17.5% = 0.175	4 years	100/6 = 25%
V. Growing units of permanent crops	4.5% = 0.045	12 years	100/12 = 8,33%
VI. Estates	x	x	x
VII. Inventory	x	x	x

Note: Source: own processing according to (ZEW, 2018).

Table 2 Development of corporate tax rates in Slovakia.

Year	Statutory tax rate	Effective tax rate
1991 – 1999	40	40
2000 – 2001	29	29
2002 – 2003	25	25
2004 – 2012	19	19
2013	23	23
2014 – 2016	22	22
2017 – 2018	21	21

Note: Source: own processing according to (ZEW, 2018).

Table 3 Depreciation period for tangible assets.

Group	Years	Assets
1.	4	agricultural and forestry machinery, basic herd and draft animals
2.	6	-
3.	8	-
4.	12	basic herd and draft animals
5.	20	agricultural buildings
6.	40	-

Note: Source: own processing according to (ZEW, 2018).

Table 4 Development of real estate tax rates in Slovakia (%).

Year	Statutory tax rate	Effective tax rate
1991 – 1999	0.11	0.07
2000 – 2003	0.11	0.08
2004	0.11	0.09
2005 – 2012	0.44	0.36
2013 – 2016	0.44	0.34
2017 – 2018	0.44	0.35

Note: Source: own processing according to (ZEW 2018).

Table 5 EATR calculation values (2004 – 2018).

Title	Values					
	Tax depreciation rate	Accounting depreciation rates	Depreciation tax shield (A)			
			2004		2018	
Intangible assets	20%	15.3%	0.1554		0.1799	
Agricultural buildings	5%	3.1%	0.0999		0.1159	
Agricultural and forestry machinery	25%	17.5%	0.1605		0.1859	
Basic herd and draft animals	25%	17.5%	0.1605		0.1859	
Growing units of permanent crops	8.33%	4.5%	0.1250		0.1448	
Estates	-	-	-		-	
Economic rent after tax	Retained earnings		New deposit		Debt	
	2004	2018	2004	2018	2004	2018
Intangible assets	0.0666	0.0564	0.0666	0.0564	0.0792	0.0710
Agricultural buildings	0.0874	0.0794	0.0874	0.0794	0.1000	0.0940
Agricultural and forestry machinery	0.0630	0.0518	0.0630	0.0518	0.0756	0.0664
Basic herd and draft animals	0.0630	0.0518	0.0630	0.0518	0.0756	0.0664
Growing units of permanent crops	0.0826	0.0741	0.0826	0.0741	0.0952	0.0887
Estates	0.1033	0.0976	0.1033	0.0976	0.1159	0.1122
Inventories	0.0996	0.0924	0.0996	0.0924	0.1122	0.1070
EATR (in %)	Retained earnings		New deposit		Debt	
	2004	2018	2004	2018	2004	2018
Intangible assets	40.06	45.41	40.06	45.41	41.32	46.87
Agricultural buildings	29.14	33.34	29.14	33.34	30.40	34.08
Agricultural and forestry machinery	41.95	47.83	41.95	47.83	43.21	49.29
Basic herd and draft animals	41.95	47.83	41.95	47.83	43.21	49.29
Growing units of permanent crops	31.66	36.12	31.66	36.12	32.92	37.58
Estates	20.79	23.78	20.79	23.78	22.05	25.25
Inventories	22.73	26.51	22.73	26.51	24.00	27.98

Note: Source: own processing.

We could state, that the effective rates that assessed the location of the investment used take into account the economic conditions associated with the cost of the capital, the amount of accounting and tax depreciations, the rate of inflation, and the nominal interest rate (the so-called discounted shareholder rate). With the existence of taxes, the return on investment is changing and ensuring the optimality requires the same return on different types of investment at a given margin. These rates will take into account the most optimal and the most effective conditions for investors to decide. **Cozmei (2015)** proved, that the effects of globalization have a significant impact on a wide range of national policies, including economic and tax policy. She stated that one of the manifestations is the competition of the countries in lowering the corporate tax rates in order to gain more foreign capital investment, which, on the other hand, endanger the collection of corporate income taxes. The author also stated that based on her findings it has not been confirmed, that over time the decrease in pressure on corporate tax rates has reflected in a decline of the corporate revenues. According to **Blechová (2015)**, the impact of the taxes on the return of planned investments (in case of their implementation in different countries) was negatively correlated, the higher was the

indicator of effective average taxation, the less attractive were these countries for potential investors. In our case, the rate was based on the type of capital, and the land and inventories were the most attractive investments for prospective investors. **Devereux (2006)**; **Feld and Heckemeyer (2011)**; and **Devereux, Griffith, and Klemm (2004)** stated that the differences in the tax rates had a clear impact on the location of investments. The tax rate (effective average, but also marginal) and the legal tax base will be the decisive factors based on which the future investors will decide on the volume and allocation of their investments. In other words, investors do not control the tax revenues that differ endogenously with output fluctuations and changes in the tax base due to other factors, the rates are decisive. On the contrary, **Feldstein, Dicks-Mireaux, and Poterba (1983)**; **Dwenger, Rattenhuber, and Steiner (2017)**; and **Arulampalam, Devereux, and Maffini (2012)** confirmed that the increase in corporate tax rates resulted in an increase of negative impacts through lower investment and thus to a reduction in returns from other production factors, such as capital. The authors further stated that while small countries with a small share of domestic markets set their effective tax rates to almost zero values, large countries maintain much higher effective tax rates. In

developed countries with high capital incomes, various tax breaks, contributions and tax holidays can lead not only to increased EMTR but also to an increase in EATR (Mendoza, Razin, and Tesar, 1994). Šimková (2016) in her analysis, following the EATR design for Slovak conditions stated that setting the tax rate is a rather complicated process of seeking a compromise. On the one hand, the countries want to maximize the taxes because they represent the income of the state budget, and on the other hand there are the interests of the business sphere and the consumers who take the taxes as a necessary evil.

The *Corporate Taxation Principle* means that the profit is immediately taxed at the shareholders' level (the tax rate of the shareholders is used as a tax rate for investment profits). Since the taxation of capital gains is limited to each asset, capital gains tax on shares cannot be considered. There are many empirical studies and research that deal with effective corporate taxation. Arachi and Biagi (2005); and Hanlon and Heitzman (2010) investigated the impact of the differences in effective rates on investment decisions in European countries. Alvarez and Koskela (2005); and Gries, Prior and Sureth (2012) followed in theoretical level the impact of taxation on investment under uncertainty conditions. Devereux, Griffith, and Klemm (2002); and Stickney and McGee (1982) noted, that in various forms of EATR tracking, capital can be funded from different resources, including the use of debt. All these outcomes have highlighted the importance of monitoring effective taxation and its need for decision-making of the foreign investors.

CONCLUSION

An analysis of the structure and description of the construction of the effective average tax rate (EATR) model impact on capital, as well as the changes in statutory tax rate (and other taxes) and other factors reflection into the change in the effective rate were investigated. An important aspect was also the way of funding either by own or by the foreign resources. The analysis depicted a tax depreciation shield that determined the amount of tax savings on capital investment. The highest annual tax saving was achieved in 2018 for tangible assets (machinery for agriculture and forestry; and basic herd and the draught animals) and consisted of a yearly savings of € 4,647.50, with a return in four years, with the depreciation period having played an important role here. The lowest tax savings were obtained in the investments into agricultural buildings (€ 579.50), as these assets have the longest return and the smallest possibility to reduce the tax base through the tax depreciations. Intangible assets with the shortest time of return showed 15.54% (in 2004) and 17.99% (in 2018) savings from the purchase price. The EATR included an economic rent of the project with taxation, which reflected the size of the project's financial benefit with the aspect of taxation. In the analysis, the lowest value was found in case of the land and the inventories in both observed periods under both funding ways. A negative decision would be made by an investor if he would invest in an intangible asset; and in tangible assets in machinery, devices, and equipment.

Significant differences also occurred in the assessment of individual observed periods, as a 3% increase in the

statutory rate over the period, increased the effective average corporate rates by an average of 14.74%.

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Contact address:

*Alena Andrejovská, Technical University of Košice, Faculty of Economics, Department of Humanities, Boženy Němcovej 32, 040 01 Košice, Slovakia, Tel.: +421903950939,
E-mail: alena.andrejovska@tuke.sk
ORCID: [0000-0001-5954-3008](https://orcid.org/0000-0001-5954-3008)

Ján Buleca, Technical University of Košice, Faculty of Economics, Department of Humanities, Boženy Němcovej 32, 040 01 Košice, Slovakia, Tel.: +421915986905,
E-mail: jan.buleca@tuke.sk
ORCID: [0000-0002-6613-2167](https://orcid.org/0000-0002-6613-2167)

Veronika Puliková, Technical University of Košice, Faculty of Economics, Department of Humanities, Boženy Němcovej 32, 040 01 Košice, Slovakia, Tel.: +421918309843,
E-mail: veronika.pulikova@tuke.sk
ORCID: [0000-0003-4751-0959](https://orcid.org/0000-0003-4751-0959)

Corresponding author: *