Capital Placement in the Context of Effective Corporate Taxation in the V4 Countries

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ABSTRACT

As globalization unfolds, economic space opens up. The opportunities for investors to choose the most suitable location for their investment are broader. Investors do not orient the investments where it is advantageous in terms of natural conditions, but where it is more favorable tax conditions. This results in global inefficiency. Taxes are not the only decision-making criterion for investors. There are a number of factors and support from the state, which also can attract or discourage investors. The article deals with the issue of the actual corporate tax burden, through average effective tax rates (EATR). There is a presumption, the statutory tax rate is not a reliable indicator of the tax burden. The aim of the article is to analyze tax systems in The Visegrad Group and to find out the actual tax burden, which is defined by effective taxation. The efficiency of taxation was monitored for selected intangible and tangible assets for 2004 and 2018. The analysis focused on Hungary's attractiveness for foreign investors. In the V4 countries, the impact of the change in the statutory tax rate on the change in the effective average rate on capital was assessed. The result is that Hungary is the most attractive country for foreign investors (EATR - 10.6%). Next is the Czech Republic (EATR - 16.8%), Poland (EATR - 17.1%) and the least attractive country is Slovakia (EATR - 18.7%). Because of information about effective corporate taxation, it is possible to assess and determine the best position for investing capital.

INTRODUCTION

Globalization and the openness of economies have provided diminishing barriers to the mobility of capital between countries. In the case of the V4 countries, it is the actual topic because countries belong to the group of transition economies. Countries have removed the last barriers to capital mobility in 2004 by moving to a market economy and integrating into the European Union. Despite the single market and efforts to gradually unify tax systems in the EU, the corporate tax is increasingly becoming a matter of competitiveness of the states. Business decision-making on investment placement is a very complex process that is influenced by a large number of factors (macroeconomic indicators, infrastructure, education, HR costs, law enforcement, political deci-

sions, and others). Company taxation remains one of the main factors influencing the final decision on the investment location. On the other hand, the intention of the state is to create the most effective tax system to stimulate business within the country and also to attract foreign investors. This is an indirect effort to increase the volume of tax revenues. Tax legislation varies from country to country, which means the statutory tax rates are not considered an appropriate instrument for comparing the actual company tax burden between countries. A more objective indicator for determining the tax burden is the effective tax rates. Effective tax rates can be used as a business decision-making tool to allocate business activities to countries with a lower tax burden. They are also used by the state, which can increase the efficiency and attractiveness of the tax system by analyzing the evolution of effective tax rates.

1. LITERATURE REVIEW

Corporate taxation is an important fiscal instrument of the state through which the government can influence the development of macroeconomic indicators. It is also a source of the state budget. In 2017, revenues from corporate tax accounted for approximately 9.7% in Slovakia, 4.9% of Hungary state budget, 5.7% in Poland and 9.5% in the Czech Republic (OECD, 2019). Corporate taxation (among other factors such as the availability of production factors, labor costs, social policy, value added tax, and others) is one of the most important factors influencing investors' decision-making on investment projects. The tax environment affects the amount and distribution of profits, the creation of an optimal financial and property structure, or investments. Companies seek to maximize profits by minimizing tax liability (Szarowska, 2011). As already mentioned, companies compare the amount of taxation and according to it decide on the allocation of investments. The question remains, according to which element, companies compare the tax burden. The statutory tax rate established by the government creates an image of the amount of taxation in the country. There may be inconsistencies in the international comparison of the tax burden, due to the different legislative conditions for the tax base and the accounting rules that a country applies (Cozmei 2015). Effective tax rates have become a solution to the problem of ascertaining the actual level of taxation as well as the international comparison of tax systems. Effective tax rates are indicators that take into account all aspects of the country's tax system. Effective tax rates can also explain the large variations in statutory rates such as Slovakia (21%) and Hungary (9%). Countries with a low statutory tax rate may have a tax base defined too broadly, and countries with a high statutory tax rate may have a defined tax base too narrowly. Giannini and Maggiulli (2002) emphasize that is not possible to calculate a universal ETR because the different methods pursue a different goal. The basic methods of calculating ETR include method from King and Fullerton (1984). This method has been extended over time by the OECD (1991). Both of the methods of calculating the tax burden have been further extended by Devereux and Griffith (1998). Their method is currently used internationally.

There are two different rates of corporate taxation. Effective marginal tax rate (EMTR) and the effective average tax rate (EATR). Their biggest advantage is a simple approach that provides a common framework for analysis. This analysis allows accurate comparison of tax systems. It makes it possible to compile aggregate indicators that include and quantify the basic characteristics of tax systems and allow comparisons of tax regimes across countries over time. In this way, the interactions between the most important aspects of tax regimes are emphasized and the weight of the specific characteristics of tax systems in determining the effective tax burden is taken into account. Obviously, these characteristics are particularly useful for tax policy makers (Giannini, Maggiulli, 2002). The calculation of indicators must also be based on certain tax and economic assumptions. The tax assumptions include the statutory tax rate, tax deductions, property taxes paid by corporations. The economic assumptions are a real rate of return, inflation, etc. In calculating, it is necessary for the investor to determine the proportions the investment will be in each type of asset or industry, and also the proportion that investor will use different sources of financing. The calculation must apply the same conditions for all countries to assess the impact of the tax

system in isolation and abstract away from the impact of different economic conditions in the countries (Elschner and Vanborren 2009; Mendoza et al., 1994). Effective tax rate indicators also have several limitations. The prerequisite for these methods is the expected rate of return is not less than the cost of capital. The methods do not include the situation the companies will be un-profitable. Any specific elements of tax systems, such as different asset depreciation rules, pro-gressive taxation, accounting for inventory loss by LIFO, FIFO, reserves, tax planning, and tax eva-sion and many others are not also included in the model. On the other hand, these elements could be included, but the model would become too complicated and results difficult to interpret as tax systems alone (Giannini and Maggiulli, 2002; Martinez-Mongay, 2000).

2. RESEARCH

The aim of the article is to monitor the real corporate taxation in the V4 countries and evaluate its impact on efficiency. The first part focuses on the development of the statutory tax rate in the V4 and the reasons for changes. The study continues the analysis of effective corporate taxation using the effective average tax rate (EATR) indicator for the period 2004 to 2018.

We analyze effective taxation by calculating EATR based on the methodology of King and Fullerton (1984) and Devereux and Griffith (1998). It is used by the Center for European Economic Research (Spengel et al., 2018). This is a forward-looking method. There is a presumption the in-vestors use it before investing in the country. Into the calculations entered data on the tax system of individual countries from European Commision (2018). The arithmetic mean (overall EATR) was calculated from the resulting values. The results of effective taxation are compared with the statu-tory tax rate. This step allows us to determine whether the actual taxation is higher or lower than the statutory tax rate and how much it differs from it. The result of the analysis is a comparison between STR and ETR. There is a presumption that statutory rates do not provide accurate infor-mation on the tax burden. Based on the assumption the investor prefers a lower tax burden than a larger one, we set the hypothesis:

H1: At present, the best decision of a foreign investor is to place its activities in Hungary if it chooses from the V4 countries.

The calculation of EATR is based on data that define the economic environment and assump-tions for the investment. Data is preset and apply to all countries. It ensures the comparability of results between countries by allowing an isolated assessment of the tax system for investment. Spengel et al. (2018) define it as economic parameters. We consider five categories of assets: intangible assets, buildings, tangible assets, financial assets, and inventories. The calculation con-sists of a discounted value, which is determined as the variability of tax discrimination and the difference between the project's revenues and costs. Revenues are taxed at the required rate of return and depreciation without the effect of inflation. The costs reflect the shareholder's discount rate, accounting depreciation, and inflation. Part of the calculation is a formula (1 - NPV), which expresses the tax savings on depreciation. The sources of capital funding were divided into three groups and weighted by OECD weights (1991) drawn from long-term statistical averages of OECD countries:

- retained earnings (55%),
- new deposit (10%),
- debt (35%)

Input data:

- (p) - required pre-tax return on investment of 20%,
- (δ) depreciation rate for assets. Average value of accounting depreciation for types of assets:
  - intangible assests - 15,35 %

- o buildings - 3,1%
- o machinery and equipment - 17,5%
- o financial assets - 0
- o inventories - 0 (Spengel at al., 2018),
– (r) the real interest rate (which an investor would have achieved by investing in an alternative investment) - 5%,
– (π) expected inflation rate - 2%,
– (ρ) discount rate,
– i - nominal interest rate (excluding personal taxation) - 7,1%, calculated according to i = (1 + r) * (1 + π).

The second category of input data is that of national tax systems.

– (τ) – the effective statutory tax rate

In calculating the hypothetical tax burden, the statutory tax rate does not enter itself as defined by law but enters as an effective statutory rate. In addition to the basic legal component, it may include other statutory items. In the case of Slovakia, the Czech Republic, and Poland, the statutory tax rate is equal to the effective statutory tax. In Hungary, they also have additional items. There is eg. local business tax. The maximum is 2%. It is applied in full in the calculations. The second is an innovation tax of 0.3%, which applies to large corporations. These taxes are deductible expenses.

– (e) - effective real estate tax rate (the book value or the market price of the property. In some cases, the building may be valued by the tax authority itself on the basis of its allocation, not linked to the purchase price),
– (ϕ) - tax depreciation
– (γ) - expresses the ratio of funds from the investment to funds from the alternative investment - value is 1 (there is no possibility of depositing its finances in the bank),
– (A) - depreciation tax shield - expresses tax savings (if corporate tax rates increase or nominal interest rates decrease, the tax savings increases), calculation: (NPV * τ),
– (τ) – tax savings.

EATR is defined as the ratio of the present value of taxes paid to the net present value of income flows, excluding initial investment costs. The determination of the EATR consists of a proportional reduction in the economic rent generated by the investment as a result of taxing $EATR = (R^* - R)/R^*$. An approach that follows the difference between R^* and R n proportion to the net present value of return on investment before tax $p/(1 + r)$ was suggested by Devereux and Griffith (1998). This relationship takes into account the effect of marginal personal effective tax rates on the capital profit from this investment, which reduces the economic rent after tax. The formula for EATR calculation:

$$EATR = \frac{R^\circ - R}{p/(1+r)} \qquad (1)$$

The value of R° is 14.29%, calculated according to the formula:

$$R^\circ = \frac{p-r}{1+r} \qquad (2)$$

The economic rent R° is the difference between the required return on investment of 20% and the real interest rate of 5%. The investor would receive this real interest rate when choosing an alternative investment. The difference is discounted at a real interest rate of 5%. We obtained the present value of economic rent.

The value of net current economic rent after tax R is determined by the formula:

$$R = \frac{\gamma}{1+p} * \{(p+\delta)*(1+\pi)*(1-\tau) - v\tau\pi - [p+\delta*(1+\pi)-\pi]*(1-A)-(1+p)* e\} + F^{NE} + F^{D}$$

(3)

The value of net present rent is influenced by a number of factors. The main factors are the parameters of the domestic tax system - STR, tax depreciation, depreciation period of assets, tax treatment of inventories, real estate tax and costs of different methods of financing.

Variables F reflect the impact of additional costs resulting from external financing. It is defined as the net present value of the cash flows arising the investment is financed from new deposits or credits. For debt financing, F^{D} has the form:

$$F^{D} = \frac{\rho - i(1-\tau)}{(1+\rho}$$

(4)

Financing through the new deposit has the form:

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

(5)

In our calculations, we exclude the effects of personal taxation. The cost of new deposits is zero.

3. RESULTS

3.1 Development of the STR in the V4 countries

STR is one of the most important elements determining the tax burden and a primary indicator that is taken into account deciding on business activities. Slovakia has undergone many changes to the tax system. One of them was a reduction in STR from 25% to 19%. Slovakia has the highest income tax rate among V4 countries since 2013. In 2018 Slovakia has a rate of 21%. According to this indicator, it should be the least attractive for the placement of business activities (Mura, 2019). In 2004, the country introduced a flat tax of 19%. This tax rate was in effect until 2012 and its task was to simplify the tax system and support the business environment. In 2013, the STR was increased to 23%. The reason was the government's intention to increase tax revenues to bring the general government deficit below 3% of GDP (Trend, 2012). However, the increase did not produce the desired effect. The businesses began to lower tax bases and create losses. The government preferred to reduce tax evasion, leading to the introduction of tax licenses (Pravda, 2014). After this year, the tax rate fell by 1 percentage point to 22% and was valid until 2016. In 2017, the rate was further reduced to 21%. The small drop was criticized as a "cosmetic" adjustment before the presidential election, which would not improve the business environment. Applying higher taxes could reduce tax revenues in the long term (Trend, 2012).

The Czech Republic has seen a downward trend since 1998 when the STR was 35%. The decrease lasted until 2010. In 2003, the tax rate was 31%. The Czech government needed to support the business environment. The 2001 statistics said more than 70% (of the 220, 000) of companies reported no profit or stated a loss. The emigration of companies abroad was also registered. The Czech government responded with tax reforms. First the government planned to reduce STR in three years by 7%. Companies criticized the rate cut was accompanied by a significant widening of the tax base. In 2007, the government resumed the planned rate cuts. The planned rate cut was 21% to 19% for 2009.
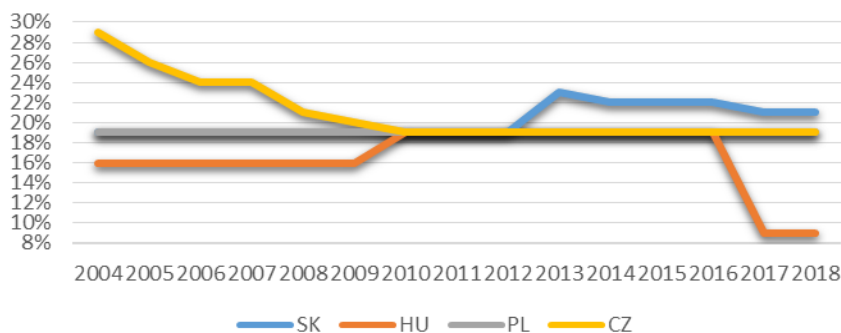
Figure 1. Development of the statutory tax rate in V4 in 2004-2018

Source: KPMG (2019)

Poland is the only country of the Visegrad Group that has not changed STR during the reporting period. Since joining the European Union in 2004, it has applied a tax rate of 19%. Hungary is deviating from these countries. Since 2017, it has been applying a 9% tax rate. Since 2004 (EU accession year), a corporate tax rate of 16% has been in effect until 2009. Since 2010, the corporate tax rate of 19% was valid. This rate increase of 3% was intended to compensate for the abolition of the so-called "solidarity tax", which the government imposed on corporations of 4% on the same tax base. In 2006, Hungary introduced a 10% tax rate, which was applied to income of up to EUR 50 mil. HUF. This threshold has been gradually increased up to 2011 to EUR 500 mil. HUF. In this way, Hungary wanted to support small businesses. In 2017, corporate taxes were radically reformed. The government abolished progressiveness and introduced a flat tax of 9%, making Hungary the country with the lowest rate among the V4 countries and generally the lowest in the EU.

3.2 Analysis of the evolution of effective taxation in V4

3.2.1 Slovakia

The real estate tax is an important factor affecting the real taxation of buildings. The tax base for the calculation is the area in square meters. The tax rate is in absolute value and is determined by location and type of building. The statutory real estate tax rate (STR) increased by 0.33% and the effective tax rate (ETR) by 0.25% (Tab. 1).

Table 1. Real estate tax rate in SR in 2004-2018

Year	STR	ETR
2004	0,11 %	0,09 %
2005-2012	0,44 %	0,36 %
2013-2018	0,44 %	0,34 %

Source: Spengel et al. (2018)

Another factor affecting real taxation is tax depreciation. In 2015, the depreciation rules were significantly tightened. The original four depreciation groups have been extended to the current 6 groups. The depreciation period has been extended for some types of assets (Tab. 2). This change also had an impact on reducing tax savings. Since 2004, there have been no significant changes in the amortization of intangible assets. In this case, the tax depreciation is applied in accordance with the accounting depreciation. However, intangible assets are amortized over a maximum period of 5 years.

Table 2. Depreciation groups of tangible assets in the SR

Depreciation group	Number of years
1.	4
2.	6
3.	8
4.	12
5.	20
6.	40

Source: Act no. 595/2003 Coll. on Income Tax. Codex

The development of the STR and the EATR is an indicator of the tax burden. The estimated tax burden is currently higher than before 2013. The predicted tax burden in 2012 was approximately 17%. In 2018 it reached 18.7%. The difference between STR and EATR is relatively the same from year to year. We assume that the changing statutory tax rate had a dominant influence on the change in EATR. Changes in the depreciation policy did not affect the amount of EATR assets observed by us. For example, industrial buildings were included in the 4th depreciation group before 2015, where the number of depreciation years was 20. Since 2015, industrial buildings have been in the 5th depreciation group, for which the same number of years applies. The relationship between the development of STR and EATR is confirmed by a statement by Dias and Reis (2018). The authors argue the development of STR affects effective taxation positively but inflexibly. We observe this situation in the case of Slovakia in 2013 when the statutory rate increased by 4 percentage points from 19% to 23%. The ETR also increased, but only by 3.5%. From 2013 to the present, the statutory rate has been reduced by 2%. The observed decline in effective taxation is 1.8%. For investors, the information about the effective taxation according to the source of the property financing is crucial. There are three basic sources of business financing: new equity (NE), retained earnings (RE) and debt. In the case of financing assets through debt, the companies can apply interest expenses as tax expenditures. This way they reduce the tax base. Effective taxation according to NE and RE has the same curve because we have taken away from the personal taxation of the entrepreneur in the calculations. In Slovakia, we can observe a significant difference in effective taxation for financing. The highest tax intensity was in 2013, where EATR RE/ND acquires the value of 23.1% and EATR debt is 15.1%. The difference is up to 8 percent. The currently predicted tax burden is 21.1% on own deposits and retained earnings and 13.8% on debt financing.

3.2.2 Czech Republic

STR in the Czech Republic was the only country in the V4 to have a downward trend. Businesses are not subject to any taxation at lower government levels, or additional percentages to the STRs are not applied. The EATR calculation for buildings is the same as for Slovakia. In comparison with Slovakia, we can evaluate the effective rates of the real estate tax in the Czech Republic as more favorable. There was a slight increase from 0.07% to 0.085% (Tab.3).

Table 3: Real estate tax rate in CZ in 2004-2018

Year	STR	ETR
2004-2007	0,09 %	0,070 %
2008-2009	0,09 %	0,080 %
2010-2018	0,11 %	0,085 %

Source: Spengel et al. (2018)

The depreciation policy in the Czech Republic is divided into six depreciation groups for tangible fixed assets. The number of years of depreciation is from 3 to 50 years (Tab. 4). In 2005-2007, the 1st group was extended to a group 1a, which contained motor vehicles (depreciated over 4 years). During the period, a large number of legislative changes occurred in the field of depreciation. These changes did not affect the calculation of the EATR.

Table 4: Depreciation groups of tangible assets in the CZ

Depreciation group	Number of years
1.	3
2.	5
3.	10
4.	20
5.	30
6.	50

Source: Act No. 586/1992 Coll. on Income Taxes. Collection of Laws.

The Czech Republic differs from other countries by the depreciation of intangible assets. There is no fixed depreciation period in this country and companies do not follow the accounting depreciation. The legislation determines the minimum depreciation period for various types of intangible assets (Tab. 5). When calculating the EATR, the composition of assets is the same as that of Slovakia. Automobiles and most machinery belong to the second depreciation group. The depreciation policy in Slovakia includes this property in the first group. The depreciation period for the second depreciation group in the CZ is 5 years. It was important to choose what kind of intangible assets would be included in the calculation. In the case of software, the number of years of depreciation is 3 and 6 years for patent. For our calculations, we used a depreciation group that includes software because we consider software as the most common type of intangible assets.

Table 5: Depreciation of intangible fixed assets in the CZ

Property	Depreciation period in months
Audiovisual work	18
Software and intangible research results	36
Other intangible assets	72

Source: Act No. 586/1992 Coll. on Income Taxes. Collection of Laws.

STR and EATR have a downward trend until 2010. The depreciation policy and property taxes have not changed significantly over the whole period. All EATR changes were due to decreasing STR. The evolution of the EATR followed the evolution of the STR, narrowing the gap between them. The difference between the STR and the EATR decreased from 3.3% in 2004 to 2.2% in 2018. The analysis confirmed the assertion of inflexible adaptation of the EATR to changes in STR (Hanlon and Heitzman, 2010; Feld and Heckemeyer, 2011). The decrease in STR did not cause the EATR to decrease in the same ratio. Between 2004 and 2010, STR lost 9 percentage points. The EATR drop was only 7.9%. There is a difference between EATR RE / ND and EATR debt. In the case of EATR RE / ND, the values move almost identical to STR. In the case of EATR debt, businesses face a significantly lower tax burden. Knowing the capital structure, businesses can determine the specific value of the EATR they will use to make decisions.

3.2.3 Hungary

Hungary has long been a low-tax country. While other V4 countries have a noticeable down-ward trend in STR, Hungary has been applying a rate of 18% since 1995, which was significantly lower than the rates in the other countries. Hungary was the country with the lowest tax rate. In addition to STR, companies have to pay a local business tax of up to 2% and also a so-called innovation tax of 0.3%. Real estate tax is calculated similarly to all countries. This is the product of the area in square meters and the tax rate. For comparability, we use the data reported by Spengel et al. (2018). The author used the estimated average value per square meter. ETR for buildings slightly increased, while STR remained unchanged.

Table 6: Real estate tax rate in HU in 2004-2018

Year	STR	ETR
2004-2006	1,00 %	0,84 %
2007-2009	1,00 %	0,80 %
2010-2016	1,00 %	0,81 %
2017-2018	1,00 %	0,91 %

Source: Spengel at al. (2018)

Depreciation policy has not changed since 2004 until now. Unlike other countries in Hungary, there are no depreciation groups in which the assets would be classified. The depreciation rate is determined for a specific type of asset (Tab. 7). Intangible assets have no maximum depreciation period. In this case, the tax depreciation is identical to the accounting depreciation. As the depreciation period is unspecified, we used the most effective depreciation method in the calculations - the shortest - 2 years. In the case of depreciation of buildings, there are three basic groups for which different depreciation rates apply. Which group of the building belongs to is given by durability, technical criteria and material of its construction. In the calculation, we considered industrial buildings in the first group with a depreciation rate of 2%. For fixed tangible assets (with the exception of buildings), we assumed with an annual depreciation rate of 33%.

Table 7: Depreciation of fixed assets in HU

Property	Depreciation rate
Buildings - long - term construction	2,0 %
Buildings - medium - term construction	3,0 %
Buildings - short - term construction	6,0 %
Machinery and equipment	30,0 %
Computers and similar equipment	33,0 %
Other tangible assets	14,5%
Intangible assets	according to accounting depreciation

Source: pwc (2019)

From the V4 countries, the ratio between the development of EATR and STR is more interesting. In most years, effective taxation was equal to the statutory tax rate. In the case of Slovakia, the Czech Republic and Poland, EATR is lower than STR. In the Hungary, the EATR exceeded the statutory rate (Fig. 2) in years when these rates did not equal. This is due to another tax tools to STR, which cause the effective statutory rate to be higher than the externally presented statutory rate.

We can see the difference in 2007-2009. There was tax tool called solidarity tax of 4%, which was applied in the same way as the local tax and the innovation tax.
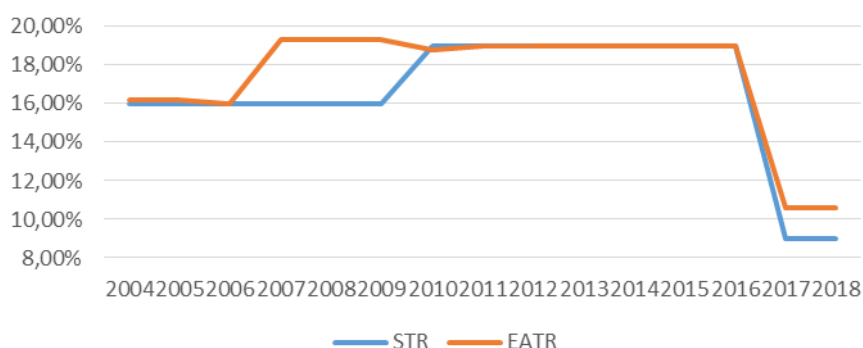

Figure 2. Development of STR and EATR in HU in 2004-2018

Source: Spengel et al. (2018)

It is interesting to observe the change in the EATR RE / ND and EATR debt after a radical reduction of the statutory rate by 10% in 2017. In the case of financing the investment from retaired earnings and new deposits, the EATR fell from 21.5% to 11.9%. From the investor's point of view, this is a very positive step. In the case of debt financing, there was a decline from 14.2% to 8.1%.

3.2.4 Poland

Poland is a country whose tax system is stable. During the reporting period, no changes were made to the statutory corporate tax rate and businesses are not burdened by various local taxes. Depreciation policy classifies assets into nine groups. In Poland, the individual groups are divided according to the character of the assets and each group consists of several subgroups.

Table 8: Depreciation groups of fixed assets in Poland

Depreciation group	Asset	Depreciation rate
0.	Land	no amortization
1.	Buildings	1,5% - 10% (industrial - 2,5%)
2.	Engineering buildings	2,5% - 20%
3.	Boilers and electrical machines	7% - 14%
4.	Machinery and apparatus	7% - 30%
5.	Specialized equipment	7% - 25%
6.	Technical devices	4,5% - 25%
7.	Vehicles	7% - 20%
8.	Tools and movables	10%-25%

Source: THE ACT Of Laws of 1992 No. 21 item on corporate income tax

The classification of assets changed during the reporting period. Changes were made in 1999, 2010 and 2016. Although the classification of assets has changed, the assets in our analysis were not subject to these changes. Between 2004 and 2018, the depreciation period of the assets and the depreciation rates did not change. As in previous countries, we calculate the effective rates for

intangible asset according to Spengel et al. (2018), for industrial buildings and smaller machinery and equipment. STR for real estate increased by only 0.05% between 2004 and 2018 (Tab.9).

Based on the development of EATR, we can mark the Polish corporate tax system as the most stable. For the whole period, there were no changes that would significantly affect the development of hypothetical taxation. The EATR is around 17.1%. The difference between EATR and STR is small, about 2 %. Looking at the EATR in terms of the source of funding, we find a relatively large difference in EATR RE / ND and EATR debt. The EATR RE / ND is 19.3%, which is only 0.03% higher than the STR. On the other hand, in external financing, the EATR is around 12.7%. The difference between rates is up to 6.6%.

Table 9: Real estate tax rate in PL in 2004-2018

Year	STR
2004-2006	0,19 %
2007	0,20 %
2008-2009	0,21 %
2010	0,23 %
2011	0,21 %
2012	0,24 %
2013-2016	0,25 %
2017-2018	0,24 %

Source: Spengel at al. (2018)

3.2.4 Comparison of taxation in V4 countries

The corporate taxation principle means the profit is immediately taxed at shareholder level (the shareholder tax rate is used as the tax rate for investment profits). Since the taxation of capital gains is for each asset, taxation of capital gains on shares cannot be envisaged. Arachi and Biagi (2005), Hanlon and Heitzman (2010), Feld and Heckemeyer (2011) examined the impact of differences in tax rates on investment decisions when investing capital in another country. According to Barrios et al. (2014), countries with lower actual corporate tax burdens will be more attractive to investors. Attracting more businesses should translate into an increase in tax revenue. Other important factor is the activity of domestic entities. The analysis carried out gave us an answer to the question, which of the V4 countries is the most attractive for investment placement, ie where the investment would be subject to the lowest taxation. It should be stressed all V4 countries were part of the Eastern bloc in the past and belonged to the group of countries referred to as transition economies. This factor has also had a significant impact on their tax system, which is very similar. Therefore, the main parameter causing differences in the EATR is the statutory tax rate. For Slovakia, the Czech Republic and Poland, the average EATR is lower than STR.

In the last year the statutory tax rate of 21% was applied in Slovakia, while the EATR was 18.7%. In Poland, the STR was 19% and the EATR was 17.1%. The Czech Republic applied a statutory rate of 19% and an EATR of 16.8%. But for Hungary, the effective tax rate is higher than STR. Despite the 9% statutory tax rate applied, the EATR was 10.6%. This is confirmed by the opinions of Kubatova (2011), Alvarez and Koskela (2005) and Gries et al. (2012) the STR is not a reliable indicator of countries' tax burden. It was confirmed by Nicodème (2001) that large differences in statutory rates may conceal smaller differences in effective tax rates. If the investor is currently to decide to place business activities in some of the countries according to the EATR, then Hungary is the most attractive country with a value of 10.6%. This fact confirms the established hypothesis in

the analysis. The Czech Republic is second with 16.8% and Poland with 17.1%. Slovakia is the least attractive country with an EATR of 18.7%.

CONCLUSION

With the existence of taxes, the return on investment changes and ensuring optimum requires the same return on different types of investment at a given margin. Investors will take into account the most optimal and efficient conditions for their investment placement. The EATR is an indicator that analyzes effective taxation in isolation from economic conditions and the impact of foreign countries. The development of the EATR was relatively uniform in all countries and its statutory tax rate had the greatest impact on its value. We confirmed the change in the statutory rate affects the EATR in a positive direction, but inflexible. For all countries except Hungary, EATR values were below the nominal tax rate. In the case of Hungary, we have observed the EATR values exceed the statutory tax rates. In 2017, the nominal tax rate of 9% began to apply, but the EATR was 10.6%. As we expected, Hungary offers the lowest real taxation and is the most attractive tax system. Our analysis has been completed at a time when new tax laws are being introduced. In the case of Slovakia, this is the abolition of tax licenses and Poland is reducing the reduced tax rate for small businesses from 15% to 9%. It is also important to monitor the further development of STR and ETR in Hungary, as the last observed statutory tax rate was at 9%. In our analysis, we did not have the opportunity to capture the effects of this taxation. It is also necessary to follow the development of effective tax rates in the V4 countries and other European Union countries in the future.

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