TAX SYSTEMS AND THEIR DIFFERENCES IN USE IN SELECTED COUNTRIES, DIGITALIZATION OF A TAX SYSTEM

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Abstract:
The article deals with taxes related to the real estate market. It presents the differences between the Czech and German tax systems described by Czech and foreign authors dealing with this or similar issues. The article also includes the authors' comments on tax sustainability and the connection of digitalization with the tax system and its impact on the real estate market in selected countries, more precisely in the Czech Republic and Germany. The authors of the article also discuss valuation methods, real estate acquisition tax, real estate tax and sales tax. They look at these topics from their own perspective and from the perspective of foreign and Czech authors. Specific examples of selected real estate, more specifically from the Hamburg area, are given in the article.

Keywords:
tax system, real estate taxes, sale of real estate, difference between Czech and German tax system, valuation of real estate.

JEL Classification:  H21, K11, G32

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1. Introduction
The real estate market in the Czech Republic was still growing at the end of November, i.e. in the third quarter. According to data from Hypoteční banka, apartment prices increased by 16.3% and land prices by 20.3%. This follows from the HB index, which also found that house prices rose by 15.8 percent. Investing in re-allocations is covered by Hromada and Krulický (2021). At the present time, when house prices are rising very rapidly, it is advantageous not to sell a property you own. Along with property ownership comes the obligation to pay taxes, which are determined by the Czech tax system. This is the property tax. Hromada (2019) discusses a similar topic in his article. Different real estate acquisitions have their specific taxes. In order to determine the correct price of the property, the property needs to be valued. The valuation of the property is based on a set method. The determination of the method depends on the type of property and the condition of the property. This article lists the most well-known valuation methods, such as the established value method, the income value method, the amortized cost method, the established normal cost method using a salability factor, or the residual value method. Along with taxes, the concepts of tax sustainability and digitalisation are also related. Real estate as an investment asset is discussed by Krulický and Horák (2019) and a similar topic is discussed by Vrbka et al.

In Germany, the commercial property that this article will deal with from a tax perspective is as follows. Necessary business property (Sections 4(1), 5 of the German Income Tax Act (Einkommensteuergesetz --EStG)) includes property that is used exclusively and directly for the taxpayer's own business purposes (cf. e.g., the decision of the Federal Finance Court (Bundesfinanzhof --BFH--) of 8 December 1993, XI R 18/93, BFHE 173, 137, BStBII 1994, 296, under II.1) and of 20 September 1995, X R 46/94, BFH/NV 1996, 393, under point 1.a, in each case with further references). This may also apply - irrespective of its amount - to a share in a limited liability company (cf. e.g., the BFH decisions of 22 January 1981 IV R 107/77, BFHE 133, 168, BStBII 1981, 564, and - as regards the special business assets of a co-owner - of 23 January 1992 XI R 36/88, BFHE 167, 491, BStBII 1992, 721). In principle, it is not sufficient to maintain business relations which normally exist with other companies (cf. BFH decision of 31 January 1991, IV R 2/90, BFHE 164, 309, BStBII 1991, 786; BFHE 167, 491, BStBII 1992, 721).

However, such an investment is used directly for the taxpayer's own business purposes if it is intended to provide decisive support for the taxpayer's business activities or if it serves to ensure the sale of the taxpayer's products (settled case-law, e.g., BFH decision, BFHE 164, 49, BFTA II 1992, pp. 21). e.g. BFH decisions of 9 September 1986, VIII R 159/85, BFHE 148, 246, BStBII 1987, 257; of 3 October 1989, VIII R 328/84, BFH/NV 1990, 361; in BFHE 173, 137, BStBII 1994, 296; in BFH/NV 1996, 393; of 15 October 2003, XI R 39/01, BFH/NV 2004, 622, with further references to case-law).

2. Searches and data
In the research and data, the article will deal with specific terms related to real estate taxes.

Tax system in the Czech Republic
The Czech tax system consists of two basic categories, namely direct taxes and indirect taxes. Direct taxes are specific in that the taxpayer (the one who pays the tax to the competent tax authority) is also the taxpayer (the one whose income/assets/activities are subject to the tax), whereas in indirect taxes the taxpayer is someone other than the one who is subject to the tax.
Direct taxes in the Czech Republic include corporate income tax, personal income tax, real estate tax (property tax), road tax (the above-mentioned real estate tax was also included in direct taxes). At the same time, direct taxes can be divided into two sub-categories, namely property taxes and pension taxes, with property taxes only including property taxes and the rest being pension taxes.

The second category is indirect taxes, which include VAT or value added tax, excise duties and environmental taxes. The single environmental tax is also known as a selective tax, i.e., it applies only to selected types of goods (e.g., solid fuels or electricity).

Pavel and Vítěk (2015) in their paper list the costs to be monitored in the Czech tax system. They also describe the methods they use to do this, such as electronic analyses that identify what factors influence costs. Janošíková (2015) in her article also discusses the tax system in the Czech Republic, but from the perspective of its changes in the 20th and 21st century. She uses scientific methods such as comparison, analysis and description to identify these changes. Ratman and Wroblowsky (2012) focus on the fragmentation of the tax system in the Czech Republic. They view it as a source of tax illusions and in the article the authors directly focus on its complexity and its development in the period 2003-2011.

Tax system in Germany

In contrast, the German tax system is complex and extensive. Germany has the highest tax burden along with social security contributions. In the case of the net tax burden, Finland leads with around 57%. The European average for income tax is around 36%. In Germany, there is a top tax burden of 45% according to § 32a EStG.

The basis of taxation is always a legal transaction. Knowledge of the civil law basis is therefore a prerequisite for the assessment of the tax procedure. These can be found decisively in the BGB. Although they are not always strictly observed (cf. § 20 EStG), they are decisive for the majority of all transactions. In order to assess German tax law in relation to real estate, it is necessary to deal primarily with commercial property. Then one must look at the parts of the real estate subordinate in value. A significant cost factor in the sense of business. There is also the land transfer tax and. The property tax associated with the real estate. This will also be dealt with briefly, although the land tax system is currently under considerable revision in all countries.

We will now focus on the difference in property taxes between the Czech Republic and Germany. Both systems have their particular specificities. First of all, we will focus on the German property tax.

Property tax

Each European Union country has a different approach to property taxation, which, along with the differences between other countries and the Czech Republic in terms of these approaches, is discussed in Jana Janoušková’s article "Approaches to Property Taxation in the Czech Republic and EU Countries" (2021). Tang et al. (2009) discuss property taxes as a means for the state to monitor and control the property market from a macro and microeconomic perspective. Ding (2010) deals with similar issues in his research. Rowland and Vochozka (2018) also address similar issues. In their paper, they describe in detail state control in the macroeconomic sphere in the real estate sector and the concepts of tax or real estate. In a
case study, Papcunova and Novakova (2019) look at property tax revenues and their impact on local governments from a financial perspective. In Germany, the property tax is specified as an in-kind tax and is linked to existing real estate. It is divided into three different categories:

- So-called property tax A: All agricultural and forestry operations fall under property tax A.

- So-called property tax B: Property tax B includes both developed and undeveloped land that is not used for agriculture and forestry. They are referred to as real estate.

- So-called property tax C: For property tax C, cities and towns can charge undeveloped land ready for development a higher property tax rate through a separate municipal rate. Individual state models exclude the C property tax. The C property tax was newly established by the law amending the Real Property Tax Law to mobilize developable land for development.

Property tax according to the Federal Collection of Laws

In Germany, according to Article 2(1), first sentence, of the Act of 13 August 1965 - BewÄndG 1965 - amending the Valuation Act (Federal Law Gazette I, p. 851), the full revaluation of real estate in the Federal Republic of Germany took place on the main valuation date of 1 January 1964. According to the explanatory memorandum to the government bill, the main aim of the new regulations at that time was to create legal standards suitable for finding uniform standard values that approximate market value as a basis for fair taxation (cf. BTDrucks IV/1488, p. 31).

However, the extensive valuation work for the 1964 main valuation could not be completed until the early 1970s. The new standard values were first applied on 1 January 1974. For this reason, the legislator provided in Article 2 of the Act of 22 July 1970 amending and supplementing the provisions of the Valuation and Income Tax Act (BGBl I p. 1118) that the date of the next main valuation would be reserved for a special law to be adopted at a later date. However, this has not happened to date; there is therefore currently no legal basis for a new main assessment of standard values.

Property tax under the laws of the Czech Republic

Also, in the Czech Republic, the name "property tax" has been officially used since 2014, but before 2014 the name "real estate tax" was used. Real estate tax is divided into land tax and building tax (No. 338/1992 Coll.). The real estate tax differs from other taxes in that it is paid by the taxpayer in advance, it is paid annually and a tax return - a repeated real estate tax return - must be completed at the beginning. However, this return only needs to be completed once, after which the relevant tax office itself will call for payment each year. Land tax and tax on buildings or units are calculated differently, but here the tax on buildings is important, so its calculation includes the built-up area, the number of storeys, a coefficient according to the size of the municipality (which can be found in the municipal ordinance) and a local coefficient, which is different for each municipality. The real estate tax in the regions of the Czech Republic was discussed in 2017, for example, by Janoušková Jana. Then in 2020, the governor of the Czech National Bank, Jiří Rusnok, let it be known that in his opinion the property tax is "extremely low" compared to other OECD (Organisation for Economic Co-operation and Development) member countries. In view of ever-increasing property prices, Jiří Rusnok came up with the idea of progressive taxation depending on the number of properties owned. "In our situation, an increase in property tax is proposed, especially for the second and additional property owned. I agree with the argument that it is not possible to simply increase the tax on a granny in the Orlické Mountains. But she has one property and she has a permanent...
residence there. But if someone has five apartments, so-called "for children", I do not see why they should pay an extremely low, de facto "social" property tax even in such a case," says Jiří Rusnok (2019).

**Real Estate Transfer Tax and Real Estate Acquisition Tax in the Czech Republic**

The Czech Republic deals with real estate transfer tax. It should be stressed that the real estate transfer tax is currently abolished. However, until 2020 this tax was in force and amounted to 4% of the purchase price paid by the buyer, as is the case with the tax on the acquisition of immovable property, there were also cases where the taxpayer was exempt from the tax. The reasons for the abolition of this tax were firstly the need to 'kick-start' the property market, which was under some pressure, particularly due to the coronavirus situation, and secondly rising property prices, which made home ownership unaffordable for many people and made buying property relatively expensive. "There is no justification for property tax - moreover, it is a revenue for the state budget, not the municipal budget. How does the state contribute to the sale or purchase of my property? What service does it provide in this regard? The municipality provides services that could increase the price of the property for the benefit of the seller - and the municipality does not receive any income from this tax. Is the sale of a house undesirable in the sense that taxing it is intended to discourage people from transacting? On the contrary, the state should encourage such transactions. They will lead to a more efficient use of the housing stock and increase the mobility of residents for work," said real estate expert from the law firm Squire Patton Boggs in early 2020 on the property tax. The economic aspects affecting the real estate market in the Czech Republic were discussed by Mr Svoboda in a 2015 article.

**Real Estate Transfer Tax and Real Estate Acquisition Tax in Germany**

By contrast, in Germany and the federal states in general, there is talk of a real estate transfer tax. The Land Transfer Tax is a tax on the transfer of immovable property to which the Länder are entitled within the meaning of Article 106(2)(3) of the Basic Law. In Section 11(1) of the Real Estate Transfer Tax Act (GrEStG), the Land legislature set the rate of the real estate transfer tax at 3.5 %. Since September 2006, the power to set the tax rate has been delegated to the Länder (Article 105(2a) sentence 2 GG). Apart from the Free States of Bavaria and Saxony, all Länder have made use of this power. As of 1 January 2015, the tax rates in these Länder ranged from 4.5 % to 6.5 %.

According to Section 8(1) of the German Real Estate Transfer Tax Act (GrEStG), the real estate transfer tax is generally calculated on the value of the consideration (standard assessment base). Consideration is defined in § 9 GrEStG. In the case of a purchase, it is the purchase price (§ 9 (1) no. 1 GrEStG). The substitute assessment base under Section 8(2) GrEStG applies in the absence of consideration (sentence 1(1)), in the case of conversions, contributions and other acquisitions under a memorandum of association (sentence 1(2)) and in the case of transfers of at least 95 % of shares in partnerships and limited liability companies (sentence 1(3)). In the case of the application of the substitute tax base, the transfer tax is calculated on the basis of the values within the meaning of Section 138 of the Valuation of Property Act (BewG), according to which the values of agricultural and forestry property and real estate are determined in accordance with Sections 139 to 150 of the Valuation of Property Act (BewG).
Originally, the standard basis of assessment for real estate transfer tax under Section 11 GrESTG 1919 was the fair market value of the property. If the sale price was higher, it was decisive according to § 12 GrESTG 1919. § 10 (1) GrESTG 1940 provided that the tax was calculated on the basis of the value of the consideration. According to the explanatory memorandum to the Act (cf. RStBl 1940, p. 387 <404>), the calculation of the tax on the basis of the fair market value led to considerable additional work for the tax authorities and, in particular, to numerous appeals due to differences of opinion with the tax debtors. The substitute assessment base according to Section 10(2) GrESTG 1940 was the value of the property within the meaning of Section 12 GrESTG 1940. Even after the real estate transfer tax reform in 1983, the tax is assessed on the basis of the value of the consideration pursuant to Section 8(1) GrESTG 1983. This formulation of the standard basis of assessment has remained unchanged to this day.

Income tax on the sale of real estate

This chapter will also deal with the difference between the Czech Republic and Germany. Specifically, the tax on income from the sale of real estate.

While in the Czech Republic, the sale of real estate means income, which means that this income must be subject to income tax on the sale of real estate, which is listed in § 4 and § 10 of the Income Tax Act. This income must be taken into account in the previous year's income tax return (done retrospectively). However, in the case of sale of immovable property, there are five cases where this income will be exempt from tax. In the first case, the seller is exempt if he has owned the property for at least five years (ten in the following year), then if he has lived in the property sold for at least two years (immediately before the sale), then in the case of a transfer of condominium membership rights, if the seller wants to use the money to meet his own housing needs (one year time test), or in the last case, inheritance.

Exemption from income tax on real estate in the Czech Republic

It should be noted here that the exemption from taxation of income from the sale of real estate in cases where the seller has lived in the property sold for at least two years or has owned the property sold for at least five years is only available if the property has not been included in the business property.

If the seller has not met the conditions for exemption, he is obliged to declare and tax the income from the sale of the property in due time. The income from the sale of the property (sale price) falls under other income. Compared to income, expenses in the form of the purchase price (the price at which the seller bought the property in previous years) must be included here. Expenses may also include, for example, costs associated with the sale. If there is a situation where Income exceeds Expenditure, the positive difference is subject to income tax, otherwise no property tax is payable. The income tax rate is 15% for individuals and 19% for corporations.

However, there may be a situation (mentioned above) where the owner (self-employed person) uses the property partly for his/her own gainful activity. In this case, he must put it into business property. If the property is partly used, it is put into the business property in its entirety, but depreciation and other expenses are then divided into taxable and non-taxable (e.g. according to the proportion of the area in m2). The property is then included in business assets either at cost (if acquired for consideration in the five years prior to its inclusion in business assets), at
acquisition cost (acquired or manufactured for own use) or at replacement cost (otherwise). If a self-employed person sells property included in business assets, the income received must be taken into account in business income as other income. If the sale takes place more than five years after the asset has been removed from the business assets, the asset is exempt from tax.

**Exemption from property tax in Germany**

In Germany, this tax is governed by Section 22 No. 2, Section 23 (1) sentence 1 No. 1 EStG, income from private sales transactions is also considered to be income from sales transactions of real estate where the period between acquisition and sale does not exceed ten years. According to Section 23(3), first sentence, of the EStG, the profit or loss from private sales transactions is the difference between the sales price on the one hand and the acquisition or production costs and costs related to the proceeds on the other. The cost of acquisition or production is reduced by deductions for wear and tear, increased deductions and special depreciation, insofar as they have been deducted in the determination of income within the meaning of Section 2(1), first sentence, No. 4 to 6 of the EStG (Section 23(3), fourth sentence of the EStG). According to Section 23(1)(1)(1a) EStG, in the version in force until 31 December 1998, transactions involving the sale of immovable property were taxable only if the period between the acquisition and the sale did not exceed two years.

Pursuant to StEntlG 1999/2000/2002, Section 23(1) sentence 1 no. 1 EStG was amended so that a ten-year period now applies. The new provision applies to all sales transactions for which a binding contract was validly concluded after 31 December 1998 (Section 52(39) sentence 1 EStG as amended by StEntlG 1999/2000/2002). According to the BVerfG's decision in BVerfGE 127, 1, BStBl II 2011, 76, the retroactive extension of the speculation period from two to ten years is unconstitutional and therefore invalid on the ground of violation of the constitutional principles of the protection of legitimate expectations to the extent that value additions in capital gains which arose before the promulgation of StEntlG 1999/2000/2002 on 31 March 1999 and which were recognised for tax purposes after the promulgation of StEntlG 1999/2000/2002 are recognised for tax purposes.

This procedure is unconstitutional, since capital gains include value additions that arose before the promulgation of StEntlG 1999/2000/2002 on 31 March 1999 and were realised tax-free under the previously applicable legal situation or could have been realised tax-free because the old speculation period had expired. In this respect, a specifically consolidated property position has already been created, which is subsequently devalued by the retroactive extension of the speculative period. According to the decision of the BVerfG in BVerfGE 127, 1, BStBl II 2011, 76, the taxable capital gain is not determined on the basis of the original acquisition or production costs, but on the basis of the value ratios at the time of the promulgation of StEntlG 1999/2000/2002 on 31 March 1999 (see judgment of the Tax Court of Lower Saxony of 21 August 2013, 9 K 252/11, EFG 2013, 1840, under 1.b bb).

In this respect, the market price, i.e., the fair market value at the time (and not the amortised acquisition or production costs), must be taken into account. Given the difficulty and susceptibility to disputes in determining the correct value at that point in time, this value can be determined by estimation (BVerfG decision in BVerfGE 127, 1, BStBl II 2011, 76, under C.II.2. b cc (3); cf. also FG Düsseldorf, judgment of 25 April 2013, 8 K 3988/11 F, juris margin no. 24). Like the taxation of business profits, the taxation of private capital gains pursuant to section 23 EStG and the related consideration of the special depreciation and amortisation
applied is intended to ensure that the increase in the value of individual assets is only recognised in a manner that is not demanding on the taxpayer's liquid assets at the time of realisation of the gain by sale.

This does not occur because the appreciation or hidden provision arises only at that point in time, even though both were available to the taxpayer earlier and, in the case of special depreciation, also had a tax effect in its favour. On the contrary, the taxation of the earlier additions to the assets, and hence the offsetting of the special depreciation and valuation allowances used, is offset at the time of sale. In this respect, according to the BVerfG, the determination of the profit under Section 23 of the EStG at the time of sale follows the logic of the general determination of the profit for business purposes when individual assets are sold (cf. BVerfG decision in BVerfGE 127, 1, BStBl II 2011, 76, under C.II.2.b bb).

This systematic link between income taxation of profits, which is characterised by the equation of assets and the realisation principle, is equally disturbed by the retrospective recognition of appreciation and the reversal of special depreciation claimed. If the amounts of depreciation are included in the determination of capital gains which had effect before the 1999 tax year and the reversal of which would have been taxable only at the end of 1998, there can therefore be no question of 'catching-up' taxation (cf. BVerfG decision in BVerfGE 127, 1, BStBl II 2011, 76, under C.II.2.b bb). Rather, taxation applies to components of profits without consequences that would not have been subject to income tax until then.

**Tax related to the sale of real estate**

However, there are also taxes associated with the sale and possession of a property. The sale of real estate means income, which means that this income must be subject to income tax on the sale of real estate, which is specified in Section 4 and Section 10 of the Income Tax Act. This income must be taken into account in the income tax return for the previous year (it is done retrospectively). However, in case of sale of immovable property, there are five cases where the income will be exempt from tax. In the first case, the seller is exempt if he has owned the property for at least five years (ten in the next year), then if he has lived in the property sold for at least two years (immediately before the sale), then in the case of transfer of membership rights to a condominium, if the seller wants to use the money to meet his own housing needs (one year time test) or in the last case of inheritance.

It should be noted here that exemption from taxation of income from the sale of real estate in cases where the seller has lived in the property sold for at least two years or has owned the property sold for at least five years is only possible if the property has not been included in the business assets.

If the seller has not met the conditions for exemption, he is obliged to declare and tax the income from the sale of the property in due time. The income from the sale of the property (sale price) falls under other income. Compared to income, the expenditure in the form of the purchase price (the price at which the seller bought the property in previous years) must also be included here. Expenses may also include, for example, costs associated with the sale. If there is a situation where the Income exceeds the Expenditure, the positive difference is subject to income tax, otherwise no property tax is payable. The income tax rate is 15% for individuals and 19% for corporations.

However, a situation may arise (mentioned above) where the owner (self-employed) uses the property partly for his own gainful activity. In this case, he must put it into business property. If
the property is used in part, it is entered into the business property in its entirety, but depreciation and other expenses are then divided into taxable and non-taxable (e.g. according to the ratio of the area in m²). The property is then included in the business property either at cost (if acquired for consideration within five years prior to its inclusion in the business property), at cost (acquired or produced on own account) or at replacement cost (otherwise).

If the self-employed person sells the property included in the business property, the income received must be taken into account in the business income as other income. If the sale takes place more than five years after the property has been removed from business property, the property is exempt from tax.

**Awards**

The valuation of property is also different in the Czech Republic and Germany. In the Czech Republic, it is a somewhat simpler procedure with clear procedures, but in Germany it is extensive and includes multiple methods, which will be presented below. First, the article will deal with valuation in the Czech Republic.

In case the owner wants to sell his property, the valuation of the property is also important for him. Valuation is also addressed by Mareček et al (2019). The valuation of a property is done for several reasons, one of the reasons may be the aforementioned sale of the property, in which case both the seller and the buyer can have the property valued. The seller has the valuation done so as not to sell the property so called undervalued, and the buyer has it done so as to be sure not to overpay for the property. Valuations can also be used in probate proceedings or, for example, when arranging a mortgage loan. Nedvědová and Schneider Heralová (2013) deal with a similar topic. Valuation of real estate in the Czech Republic can be carried out in several ways, but the different valuation methods are always influenced by the object and purpose of the valuation. There are seven basic methods. namely, the established intrinsic value method, the income value method, the annuity valuation method, the established normal value method using the marketability coefficient, the index method, the comparison method and the residual valuation method. Endel et al. (2020) mention in their article that the method of valuation of houses in tax assessment is outdated and based on the practice of the 1980s. In their research, the authors selected more than 100 properties and then analyzed and tested the valuation methods that took into account wear and tear values. The valuation of a set of properties using the comparative method is also discussed by Krulicky and Vochozka (2021).

In Germany, by contrast, the valuation of real estate, which is relevant to both the present questions and the constitutional complaints, is regulated in detail in §§ 68-94 BewG. These provisions are supplemented by a detailed set of subordinate legislation, in particular the Real Estate Valuation Directive - BewRGr - of 19 September 1966 (BStBl I, p. 890). Pursuant to section 68(1) of the BewRG, (private) immovable property essentially includes land, buildings, heritable rights to buildings and residential and fractional ownership under the German Housing Act. The Valuation Act values so-called economic units to be determined in accordance with a market view (§ 2 BewG). According to Section 70(1) of the Valuation Act, each economic unit of real estate constitutes land within the meaning of the Valuation Act, with a distinction being made between undeveloped and developed land (Sections 72 to 90 of the Valuation Act); special provisions exist for land in a state of disrepair, hereditary building rights, residential and co-ownership rights and for buildings on other people's land (Sections 91 to 94 of the Valuation Act).
Comparative value method

Section 194 of the BewG contains two methods in a graduated relationship. According to Section 194(1) BewG, the value of the heritable building plot is to be determined primarily by the comparative value method pursuant to Section 183 BewG, either on the basis of the comparative purchase prices pursuant to Section 183(1) BewG, which are communicated by the expert commissions pursuant to Sections 192 et seq. of the BauGB, or by means of comparative coefficients derived from the purchase prices determined and communicated by the expert commissions. Where neither the comparative purchase prices nor the comparison coefficients are available, the value is composed of the part of the value of the land pursuant to section 194(3) FL and, where applicable, the part of the value of the building pursuant to section 194(4) FL in accordance with the financial mathematical method pursuant to section 194(2) FL as so determined by the tax authorities (cf. R B 194(2) sentence 1 of the Inheritance Tax Guidelines of 01.09.2013 - Inheritance Tax Regulations 2013--). Pursuant to Section 14 (1) ImmoWertV, the market correction coefficients serve to record general value ratios in the real estate market.

According to Section 14 (2) ImmoWertV, this also includes factors for adjusting the values of heritable building rights or heritable building land calculated on the basis of financial mathematics. Although this provision does not, in itself, open up a valuation method based on financial mathematics, it presupposes it. Otherwise, it would be vacuous for lack of a connecting factor for the market adjustment factor. The substantive valuation principles in Section 8 of ImmoWertV also imply that the financial mathematics method is in principle possible as a combination of different types of valuation. According to Section 8(1), first sentence, of the immoWertV, the comparative value method (Section 15 of the ImmoWertV), including the land value method (Section 16 of the ImmoWertV), the capitalised profit method (Sections 17 to 20 of the ImmoWertV), the property value method (Sections 21 to 23 of the ImmoWertV), or several of these methods are used to determine the market value.

Choice of method in accordance with Section 8(1) sentence 2 of ImmoWertV

The choice of method shall be made in accordance with Section 8(1) sentence 2 of the ImmoWertV. Pursuant to Section 8(1) sentence 3 ImmoWertV, the market value is determined from the result of the method or methods used, taking into account its or their predictive value. This provision specifies in two respects that one of the three methods of valuation need not necessarily be chosen for the valuation of a particular property, but that two or three of these methods may also be used, both by the words 'or several of these methods' and by the words 'the method or methods used'.

The use of more than one method is conceivable on the one hand as an average, on the other hand as a synthesis of the components of the different valuation methods, as long as this complies with the requirements of § 8(1) sentence 2 ImmoWertV. All components of the value must be determined in accordance with ImmoWertV. Standardisation and lump-sum calculations according to the BewG are not applicable. The interest rates for real estate are to be determined in accordance with Section 14(3) ImmoWertV (cf. in this respect the BFH judgment of 18 September 2019 - II R 13/16, BFHE 266, 51, BFH/NV 2020, 118, para. 18). The valuation must be focused on the fair market value. According to Section 9 (2) sentence one of the Valuation Act (BewG), the fair market value is determined according to the price that would be achieved in the ordinary course of business in the event of a sale based on the nature of the property. Ordinary course of business within the meaning of Section 9(2), first
sentence, of the Capital Market Enterprise Act (FL) means business which is conducted in accordance with the principles of the market economy of supply and demand and in which the parties are able to act without coercion and not out of necessity but voluntarily in order to protect their interests (cf. BFH judgments of 15 March 2017 - II R 10/15, BFH/NV 2017, 1153, paragraph 22, and of 15 March 2018 - VI R 8/16, BFHE 261, 122, BStBl II 2018, 550, paragraph 34, in each case with further references). The ordinary course of trade is therefore essentially the entire market. While § 194 BewG provides for the statutory priority of the comparative value method, this is not the case in the case of a valuation pursuant to § 8 ImmoWertV.

Residual method

The residual method is a valuation method commonly used in the real estate industry for investment decisions, primarily used to determine the value of land. According to the OVG Lüneburg (judgment of 25 January 2001, 1 L 5010/96, Baurecht 2011, 1798), the residual value method determines the value of land from the difference between the income value and the actual value of the building (residual value); the residual value method is intended to be a combination of the income method and the WertV property method (OVG Lüneburg, judgment of 25 January 2001, 1 L 5010/96, Baurecht 2011, 1798). Accordingly, the residual value method is intended to serve the investor in examining the purchase price for the yet-to-be-developed land, which is only approximately sustainable in a particular case. For this purpose, the capitalised yield value or the project capitalised yield value (without taking into account the value of the land) is first determined after completion of the development, i.e. taking into account the interest rate of the property and the multiplier within the meaning of section 16(3) WertV.

The project costs (demolition costs, production costs, first rental costs, risk contingency allowance and business profit) are then deducted. The acquisition costs (land transfer tax, notary fees, brokerage fees) are then deducted from the resulting provisional value and the remaining amount is discounted by a present value factor taking into account the expected construction period and duration of construction. The resulting residual amount is the balance of the (undeveloped) property (cf. Vogel, Grundstücks-markt und Grundstückswert - GvG - 1994, 347). The residual value method is justified, among other things, by the fact that standard land values do not sufficiently reflect urban development trends because standard land values are not future-oriented but are derived from past sales (Vogel, GuG 1994, 347, 348).

Thus, in the Senate's view, the residual value method leads to anticipation of promising future (positive) property development. Thus, the value resulting from the residual value method does not reflect the current market value, but assumes future value development based on the project planning of the property.

Ellwood's method

Based on debt financing and equity risk, it is used to arrive at market value. The development of the value/return over a ten-year period shows possible misestimates of the market value. Nothing more. No speculation into the future is made, no forecast of value change is made. Ellwood has developed an analytical tool that combines the necessary changes in value with considerations of yield. Interpretation is left to the expert, be it appraiser or investor. However, the procedure can also be reversed to derive market value directly from assumptions about debt and equity and from forecast performance. At this point, it should again be made clear
that this method of determining market value is problematic and not without risk. Nevertheless, the direct determination of market value using the Ellwood method is practiced.

Digitization

Digitisation is slightly more advanced in Germany than in the Czech Republic. These differences in digitisation are specified in more detail in the following paragraphs.

Germany has an internationally competitive tax code and a well-functioning tax enforcement system. However, tax law and tax enforcement are in a changing social and economic environment. The progressive mechanisation and digitalisation of all areas of life, increasing global economic integration and demographic developments towards an ageing society and a declining population also pose major challenges for tax law and tax enforcement.

Measures for technical, organisational and legal modernisation are therefore necessary to keep the tax system up-to-date and efficient and to perform its tasks effectively. The Tax Modernization Act ensures the uniformity of taxation and the constitutional requirements for tax enforcement under the circumstances. It reduces the bureaucratic burden and takes due account of the interests of all stakeholders.

The planned measures concern three areas of activity:

1. Increasing cost-effectiveness and efficiency through greater use of information technology and more targeted use of resources,
2. simplifying and facilitating tax management

Redesigning the legal basis, in particular the German Tax Code (AO), in view of emerging challenges and the solutions planned to address them.

Data from the Czech Statistical Office

According to data from the Czech Statistical Office, 81% of Czechs over the age of 16 used the internet in 2019, with almost all 15-year-olds having access to it. As for children, 97% of them already have access to the internet at home. Rozsa and Machová (2020) also discuss digitalisation. With these findings and the general awareness of widespread digitalisation, it goes without saying that digitalisation must have affected taxes, tax returns, communication with tax authorities, etc. The digitisation of public administration is now also enshrined in Law No 12/2020 Coll. This law should guarantee the right of citizens to communicate electronically with the state, which will make it easier for citizens to communicate with the authorities. The law has several advantages, one of which is the right to submit documents in any format that can be sent via a data box, unless an electronic form or a predetermined method of electronic communication with the authority in question is published. In the field of taxation, the tax portal MoJe, which is essentially an online tax office, has been launched for the citizens of the Czech Republic. Thanks to this portal, citizens can process their tax returns and other obligations online.

"We appreciate that the My Taxes system, for example, was launched in this parliamentary term and we hope that in the next phases it will bring additional functionalities useful for companies," said Bohuslav Čižek, Director of the Economic Policy Department of the Confederation of Industry of the Czech Republic (2021).

3. Methodology
Tax policy is crucial to the sustainability goals because it creates the economic framework for investment, employment and innovation, while providing the government with the resources to finance public spending. Better policy alignment and credibility measures would contribute significantly to increasing private investment and closing the global investment gap by encouraging capital flows from rich countries to developing countries in need of investment.

Businesses provide or deliver goods and services of value, and thereby significantly stimulate investment, productivity, broad-based economic growth and job creation. Given their diversity and scale, from small and medium-sized enterprises (SMEs) to multinational companies, they are also one of the most important sources of expertise, creativity and innovation. These in turn help to address the many challenges of sustainable development.

A high share of the informal economy leads to low tax bases, which further reduces potential tax revenues and increases distortions. However, the tax base should be as broad as possible to avoid distortions in tax rates.

The EESC stresses that successful domestic resource mobilisation requires (1) tax decisions to be open and transparent, (2) systems to ensure accountability of CSOs and parliamentarians, (3) governments to be transparent about taxes and spending, and (4) taxes to be visible.

The private sector has an important role to play in promoting gender equality. Wage policies and workplace training and development are important for promoting gender equality, career advancement and professional development. Women's participation in the global economy offers enormous opportunities and should serve as a stimulus for broad-based economic growth, innovation and productivity.

Policies for taxing the digital economy should be designed to promote, not hinder, economic growth and cross-border trade and investment. Given the growing importance of digital businesses, a new methodology for tax linkage and profit sharing needs to be developed. This should be used to determine tax rights between countries where digital businesses are based and countries where they are sold.

In the EESC's view, any new rules for intergovernmental distribution of tax rights must be fair both between small and large consumer countries and between developed and developing countries. Contributions in the form of innovation, entrepreneurship etc. must be properly rewarded. Corporate tax revenues may seem small in relation to total tax revenues, but they play an important role in mobilising resources and financing essential infrastructure, R&D, education and health care, etc.

The EESC notes that EU Member States are among the leaders in meeting the Sustainable Development Goals. However, it stresses that the EU and its Member States must take action and ensure sustainable financial and fiscal systems in order to achieve the SDGs. The involvement of civil society organisations at all levels is crucial to achieving the SDGs, as civil society is a key stakeholder in the implementation of the 2030 Agenda and much of the investment needed comes from the private sector.

The EESC welcomes the Tax Cooperation Platform jointly established by the United Nations, the Organisation for Economic Co-operation and Development (OECD), the International Monetary Fund (IMF) and the World Bank Group (WBG), as it will facilitate interactions on standardisation, capacity building and technical assistance in the field of international taxation. The EESC believes that the European Union should also participate in this platform.
The EESC believes that the work of the UN Committee of Experts on International Cooperation in Tax Matters in the area of taxation/private investment and the SDGs is extremely important for the development of the global dialogue. They also make an important contribution to mutual learning and exchange of best practices. The EESC stresses that European civil society must play an active role in this important international debate. (...) Some of the sustainability objectives in the area of climate change could be better achieved through a coherent framework and implementation plan for taxing the consumption of natural resources.

Greening taxes could serve both to combat climate change and to protect terrestrial and marine ecosystems. By changing the structure of commodity prices, tax policy can help to promote affordable and clean energy and create incentives for responsible use of shared natural resources.

In economic terms, environmental taxes serve to offset negative externalities, i.e. where polluters can pass on the costs of environmental damage to society, e.g. as a result of greenhouse gas emissions. The involvement of civil society and business in the design of this type of tax would be very useful. It would ensure that policies strengthening the regulatory framework align incentives for the private sector with public objectives.

An example of a combination of different tax policies would be the phasing out of subsidies for inefficient fossil fuels. This would allow governments to make significant budgetary savings while making these fuels less attractive to businesses and consumers. If these savings were then used to increase the share of renewables in global energy supply, universal access to clean energy could be promoted. Other policy measures such as incentives for investment in energy infrastructure for clean energy supply would also facilitate decoupling economic growth from environmental degradation.

Aligning business incentives with public objectives is in line with the Addis Ababa Action Agenda, which encourages businesses to consider the environmental, social and governance implications of their actions in their core business activities. Businesses provide valuable goods and services and thus play a key role in stimulating investment, productivity, broad-based economic growth and job creation. Given their diversity and scale, from small and medium-sized enterprises (SMEs) to large multinational companies, they are also an important source of expertise, creativity and innovation, which in turn help to address many of the challenges of sustainable development. In order to achieve sustainability goals in the fight against climate change, the private sector should follow a code of conduct to significantly increase green investments and reduce or eliminate investments with negative environmental impacts.

Given the interdependence of the sustainability objectives, civil society participation is essential to ensure that all three dimensions of sustainable development (economic, social and environmental) are taken into account in policy design and implementation. Environment-related taxes tend to be regressive in nature, meaning that they mainly burden low-income households. Consequently, it is also important to continue to ensure the social sustainability of policies.

The EESC is opposed to arbitrary taxation, which would have a negative and disproportionate impact on the poor and less well-off members of society and would also undermine various sustainability objectives. For example, a significant increase in taxation on goods and services for which there are no viable alternatives would be a mere burden without achieving the stated objectives.
The EESC highlights the role of civil society organisations in monitoring the implementation of the sustainability objectives, in ensuring the social acceptability of measures and draws attention to the need to review the indicators.

In the EESC’s view, the right conditions need to be created for private and public resources to be channelled into the long-term sustainable investments that are essential for a sustainable economy.

According to Mortgage Golem, it has been revealed that in 2019 the topic of tax on the transfer or acquisition of real estate has once again taken center stage. The rate in the year in the Czech Republic on the price of real estate was 4%. Compared to other selected European countries where real estate transfer taxes are applied, it can be very inaccurate. In some countries the transfer tax can be very low but with high fees such as notary, land registry and other fees. The study found that it also depends very much on the location of the property. The following table breaks down the international comparison of property transfer tax.

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<table>
<thead>
<tr>
<th>States</th>
<th>Amount of real estate transfer tax in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgie</td>
<td>0.10</td>
</tr>
<tr>
<td>Španělsko</td>
<td>0.06</td>
</tr>
<tr>
<td>Francie</td>
<td>0.0509</td>
</tr>
<tr>
<td>Finsko</td>
<td>0.04</td>
</tr>
<tr>
<td>Česká republika</td>
<td>0.04</td>
</tr>
<tr>
<td>Rakousko</td>
<td>0.035</td>
</tr>
<tr>
<td>Německo</td>
<td>0.035 0.065</td>
</tr>
<tr>
<td>Řecko</td>
<td>0.0309</td>
</tr>
<tr>
<td>Švédsko</td>
<td>0.015</td>
</tr>
<tr>
<td>Polsko</td>
<td>0.02</td>
</tr>
<tr>
<td>Dánsko</td>
<td>0.006</td>
</tr>
<tr>
<td>Velká Británie</td>
<td>0.05 0.04</td>
</tr>
<tr>
<td>Lotyšsko</td>
<td>0.05 0.02</td>
</tr>
</tbody>
</table>

Tab. 2 Amount of real estate transfer tax in %
4. Results

For the results, a specific situation was selected and the results are described below and evaluated.

The solution to the specific situations

In the case of the situation of the married couple from Hamburg. If it were situation A, where the couple acquired the property on 1 July 2008 for EUR 3 000 000 and subsequently sold it on 15 March for EUR 350 000, the property would today be subject to property tax in the Czech Republic for each year of ownership and, by reason of the sale, to personal income tax. To calculate the property tax, it is necessary to know the type of property, the built-up area in m², the number of storeys, the coefficient according to the size of the municipality and the local coefficient.

The property type in Hamburg is probably a detached house, the number of floors and the built-up area were not specified in the example, therefore one floor and a built-up area of 180 m² was assumed. Since the municipality size coefficient and the local coefficient are determined by the local ordinance of the municipality where the property is located, Hamburg had to be compared with cities in the Czech Republic and only then the tax was calculated. Hamburg is a city with more than 1 600 000 inhabitants, so, as far as the size coefficient is concerned, it was given a coefficient of 4.5, which is also the coefficient of the largest city in the Czech Republic, Prague, with 1 300 000 inhabitants. For the local coefficient it was a bit more complicated, to assign the administrative coefficient it was necessary to convert the price from EUR to CZK, so the price of the property in the Czech Republic would be CZK 7 500 000. Only properties for sale in the Prague 9 district, which has a local coefficient of 2.5, were found in the survey at a price of CZK 7 500 000. If it was a property with a local coefficient of 2.5, it could only be sold in Prague. The resulting property tax in the Czech Republic for this property in Hamburg would be CZK 5 573 for each year of ownership.

However, the couple sold the property after less than five years and the sale of the property is subject to personal income tax. The seller is exempt from tax in the five cases mentioned above, the situation of the Hamburg couple could theoretically meet the second case, namely that they have lived in the house for at least two years, but this fact was not mentioned in the assignment, so that the income from the sale, namely EUR 50 000 in the Czech Republic, would probably be subject to personal income tax at 15 %. The tax on the income from the sale of the property would therefore be EUR 7 500. Only one of the spouses files the tax return.

The second possible situation of the Hamburg couple differed in that the spouses contributed a re-allocation to a business property, where 10% of the property was used for business purposes, and they removed the property from the business property before the sale, i.e. on 1 March 2013. In the Czech Republic, the property is classified as a business asset at cost, i.e.
EUR 300 000. Depreciation and other costs related to the property are then calculated according to the part used for business purposes, in our case 10%. However, if the expenditure is for building alterations, renovation and modernisation up to a maximum of EUR 40,000 (it must not be a technical improvement of the property), the spouses can include the whole amount in their tax expenses. Since both spouses have contributed the property to the business as- is, they will split the expenses in the proportion in which each spouse uses the property for his or her business. As in the first case, the spouses must pay property tax on the property, but the property tax here will be the same as in the previous situation.

As in Situation A, the spouses have sold the property, but in the Czech Republic such income is exempt from tax if at least five years have elapsed between the removal from business property and the sale. Therefore, this condition for exemption was not met in our case and the income would have to be taxed at 19%.

**Tab. 2** Dealing with the situation - comparison between Hamburg and the Czech Republic

<table>
<thead>
<tr>
<th>situation A</th>
<th>purchase</th>
<th>sale</th>
<th>coefficient</th>
<th>country</th>
<th>population</th>
<th>tax</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 000 000€</td>
<td>350 000 €</td>
<td>4,5</td>
<td>ČR</td>
<td>1 600 000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7 500 000 Kč</td>
<td>2,5</td>
<td>ČR</td>
<td>1300 000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5 573</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Situation B</th>
<th>contribution</th>
<th>in the CR - business asset</th>
<th>depreciation</th>
<th>construction expenditure</th>
<th>taxation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10%</td>
<td>300 000 €</td>
<td>10%</td>
<td>400 000 €</td>
<td>19%</td>
</tr>
</tbody>
</table>

*Source: Own processing*

**5. Conclusion**

The article deals with taxes related to the real estate market. It presents the Czech and German tax system and the real estate tax system. It focuses mainly on real estate acquisition tax, real estate tax and real estate sales tax. Another topic covered is the valuation of real estate in Germany and the Czech Republic, with a focus on the methods used in valuation. Specific examples are given at the end of the article, where properties from the Hamburg area are selected.

The authors discuss the Czech tax system, which they divide into two basic categories, namely direct and indirect taxes. The article then examines each category in more detail. The authors also mention indirect taxes, which are the second category of the tax system and include VAT, excise duties and ecological tax or selective tax. Methods are used to calculate the costs.
associated with indirect taxes, which are analysed, and the factors affecting the costs are identified. Comparisons are made between different views of the tax system in the past and in the current 21st century, its complexity, the use of methods such as descriptive comparisons and different analyses. Furthermore, the paper discusses differences with Germany in this area.

In the chapter on the real estate tax, the authors discuss the meaning of this tax. This tax is divided on the basis of Act No. 338/1992 Coll. and the authors focus on the differences between the Czech real estate tax and the approaches to real estate taxation in European Union countries. Thanks to the results of the analysis, which was created for a study examining the assessment of revenues between 2009 and 2017 for the Czech Republic and Slovakia, it was found that Czech municipalities have a lower share of property tax revenues. The paper also highlights the contributions and opinions of authors who are involved in the macroeconomics of the state and their control of real estate and tax concepts. The article also discusses property taxes in Germany, their complexity and specificity.

Appreciation occurs when the owner decides to sell his property. The authors of the article discuss this issue in terms of the importance of valuation. As it has its own specificities, the authors stress the importance of valuation. In the Czech Republic, valuation occurs in several cases and in several ways. Cases where valuation occurs are sale, donation or inheritance proceedings, for example. There are several methods used in the Czech Republic. The choice of method depends on the subject of the valuation and the purpose for which the property is valued. The article lists the valuation methods. It lists the seven most commonly used methods, which include the income method or the method of determining price, usually using a salability coefficient. The article also mentions research by other authors who have selected over a thousand properties on which to examine and analyse valuation methods. However, the difference between the Czech Republic and Germany is very significant. The article mentions the different methods and the different way of valuation.

Another research problem related to tax sustainability is addressed by other foreign authors from the shareholder side. Compared to Germany, the Czech Republic lags far behind in this area. The digitalization and its link to taxes in the Czech Republic has been identified through research. The research was conducted using data from the Czech Statistical Office. This digitisation was enacted by Act No 12/2020 Coll.

In the Czech and German tax systems there are differences but also similarities. There could be unification in the case of digitalisation, where Germany is much more modern than the Czech Republic. German residents can visit a server and arrange any service for property taxes at anytime and anywhere. This service is not very widespread in the Czech Republic and could be dealt with in more detail. It goes without saying that every tax system has its pros and cons, and this is because of the laws of the country in question, which must be followed.

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