SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF THE SILESIAN UNIVERSITY OF TECHNOLOGY 2025
ORGANISATION AND MANAGEMENT SERIES NO. 220

VAT IN POLAND AND SELECTED EUROPEAN UNION COUNTRIES

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Purpose: The aim of this study is to identify how the VAT rate in Poland compares to other European Union countries. Additionally, the article aims to emphasize the essence of harmonization of the tax systems of EU countries in the context of this tax and to point out problems with its collection. The study aims to identify similarities and differences in the VAT structure and rates.
Methodology: This study employed a comparative analysis to examine the VAT system in Poland and selected European Union countries. The research covers Poland and other EU Member States, with the analysis based on data from 2023, which remains valid in the following year. Secondary data were sourced from the Official Website of the European Union. A comparative analysis of standard VAT rates and reduced rates across EU countries was conducted, focusing on both their number and values. The data were also subjected to statistical and descriptive analyses.
Findings: The results of the study indicate that the tax arrangements for goods and services tax vary across EU Member States. This variation arises from EU regulations, which allow for a degree of discretion by setting only a lower limit for the standard rate. Member States are then permitted to apply rates suited to their individual needs, provided they comply with EU requirements. Compared to the approaches adopted in other countries, Poland's standard VAT rate is higher than the EU average. Consequently, in the majority of Member States, the standard VAT rate is lower than 23%. This can be viewed positively from the perspective of generating greater tax revenue for the state budget, or negatively from the taxpayer's viewpoint, who directly bears the cost of this tax, which impacts the price of goods and services subject to the rate. In Poland, two reduced rates are applied, a common practice in EU countries. These rates apply to a specific group of goods and services, thereby supporting citizens' ability to purchase them. There is a difference of 3 percentage points (p.p.) between these rates in the Polish tax system, which can be seen as a relatively narrow range of reduced rates compared to other EU Member States. Non-compliance remains a problem for VAT collection. The problem raised is that consumers have no incentive to ask for an invoice because they prefer to buy products and services without additional VAT included in the purchase price. The carousel and missing trader frauds mentioned in the text also pose a significant threat to VAT harmonization.
Originality: Although VAT is one of the main sources of budget revenues in European Union countries, there are only few studies comparing in detail the differences in its structure between Poland and other EU countries. Research so far focuses mainly on the general principles of

harmonization, ignoring detailed differences in VAT rates. This study aims to fill this gap. This article examines the differences and similarities in the VAT systems of individual EU Member States, using examples from across the EU, in comparison with the solutions adopted in Poland. It is aimed at entrepreneurs planning to enter foreign markets, as well as anyone interested in VAT.
Keywords: VAT, European Union, harmonisation, reduced rates.
Category of the paper: Literature review.

1. Introduction

Taxes are a common public levy applied in nearly all countries worldwide. However, each country has a different approach to structuring this aspect of its economy, leading to variations between national tax frameworks. Taxes paid by the public form the foundation and cornerstone of the economy. The need for tax harmonization appeared for the first time in the European Union (Peci, 2017). By uniting Europe, the European Union aims to achieve tax harmonisation, which involves aligning the tax systems of the Union's Member States as closely as possible and establishing common norms and standards (Kuraś, 2009). The harmonization process started with the first Council Directive of April 1967 and continued through subsequent directives. This process included the adoption of VAT and the ongoing convergence of rates and structures among Community members. Over the years, the European Commission has developed various proposals aimed at standardizing VAT rates and harmonizing its structure. An important part of the debates on the practical implementation of unified VAT rates were issues related to determining the ranges in which VAT rates should fall, the selection of products subject to a reduced rate and resolving problems related to the application of a zero rate to selected goods (Frenkel, Razin, Symansky, 1991). Harmonisation of tax systems is essential, as one of the EU's primary tasks is to create an internal market based on the four freedoms: the movement of goods, capital, services, and people (Kuraś, 2009).

Tax harmonisation is a necessary component of increasing integration. As a general principle, the higher the degree of integration between states, the more permanent the internal links between them become, and the greater the need for tax harmonisation. In such a context, the development of foreign investment would be facilitated, and individual EU Member States would no longer be able to compete by lowering taxes. In the long term, this could lead to financial instability and undermine public finances. Furthermore, tax harmonisation would help prevent potential conflicts arising from tax differences between countries on shared economic matters, such as transport or agriculture (Kuraś, 2009).

For the most part, EU Member States are reluctant to implement the tax changes required by the Union, which consistently enforces the provisions of the Treaty. Harmonisation encompasses both direct and indirect taxes and aims to establish similar tax conditions across Member States (Piłatowski, 2012).

Value-added tax (VAT) is particularly attractive as a revenue instrument in environments about weak law enforcement. However, non-compliance remains a problem for VAT. This is obvious in the case of business-to-business relationships and consumers (B2C), due to the fact that consumers have no incentive to ask for an invoice and prefer to buy products and services without VAT (Naritomi, 2019). In this situation, there is scope for companies to evade the contract and collusion between the company may occur and the client. So at the end of the value chain, VAT has a last mile problem (Beuttner, Tassi, 2023). Another problem is carousel or missing trader fraud. In 2012, Michel Aujean pointed out that that carousel fraud may be the most obvious and inevitable consequence of an insufficiently harmonized VAT system in intra-EU trade (Aujean, 2012). Eleven years later, Ilir Murtezaj still notes that despite great efforts, the tax systems of EU member states have not yet been fully harmonized (Murtezaj, 2023).

Value-added tax is a cornerstone of state revenue for the members of the European Union. However, tax policies vary across countries, resulting in different regulations governing VAT. Over the years, the European Union has sought to harmonise this aspect, but this remains challenging due to the variation in rates between countries. Harmonising these rates could lead to price increases – in countries with lower rates – or a reduction in tax revenue in countries with higher rates. In 1992, a minimum level for the goods and services tax rate was established for Member States. The standard rate must be no less than 15%, while for reduced rates, the VAT rate must not fall below 5%. The Fourth Directive outlines which goods and services can be subject to reduced rates. However, in 1996, the maximum standard VAT rate was set at 25% (Kuraś, 2009).

The document outlining the common VAT rules for all Member States is Council Directive 2006/112/EC of 28 November 2006 on the common system of value-added tax (OJ L 347, 11.12.2006, pp. 1-118). It sets out mandatory standards that must be applied, and national VAT systems must be adapted to comply with the requirements of the Directive. The common system applies up to and including retail sales. The Directive defines both the scope of the subject and the scope of the object, specifying rate levels, exemptions, and many other important aspects. However, the guidelines contained in the legislation often allow some flexibility for Member States. For example, Article 97 states that the standard VAT rate should be higher than 15%, meaning it can be set at any rate between 16% and 23%.

The Council of the European Union adopted the aforementioned Directive, considering a range of factors that influenced its final content. The changes introduced by this document's entry into force significantly impacted the regulations previously adopted by the Member States. As a result, a transitional period was established, during which each country had time to amend its legislation to comply with the terms of the Directive. The Directive also specified the rules for international transactions within the European Union during the transitional period (Council Directive 2006/112/EC of 28 November 2006 on the common system of value-added tax, OJ L 347, 11.12.2006, pp. 1-118).

In addition to domestic transactions, EU Member States also engage in international trade among themselves. These transactions are classified as intra-Community acquisitions of goods or intra-Community supplies of goods, depending on the entity's position in the transaction. Such transactions occur when both the seller and the buyer are subject to VAT. If the taxpayer meets the formal requirements to obtain an identification number from the relevant Member State, they may apply a 0% VAT rate. This is advantageous for taxpayers, as it ensures that the VAT rate of another country does not apply, which could otherwise discourage international transactions. This system has a positive effect on the economic development of Member States (Więckowski, 2021).

Intra-Community acquisition and intra-Community supply are analogous to the concepts of import, i.e. bringing goods into one's own country (Słownik języka polskiego PWN, Księgarnia internetowa [PWN Polish Dictionary]), and export, i.e. selling goods or services abroad (Słownik języka polskiego PWN, Księgarnia internetowa). However, these terms apply exclusively to transactions between economic operators within the European Union. Such transactions are harmonised in the context of value-added tax, with uniform rules applicable across all Member States, irrespective of national VAT regulations. This harmonisation promotes greater freedom and facilitates the development of international transactions (Ministry of Finance, podatki.gov.pl).

2. Research Results

Comparison of Basic VAT rates

All EU Member States are required to apply a goods and services tax within their tax systems and to comply with the European Union's regulations, which stipulate that the standard VAT rate should be no less than 15%. This condition is fulfilled by all Member States (see Table 1).

Table 1.
Basic VAT rates in EU countries

EU Member State	Basic rate	Relationship to EU requirement
Austria	20%	+ 5 p. p.
Belgium	21%	+ 6 p. p.
Bulgaria	20%	+ 5 p. p.
Cyprus	19%	+ 4 p. p.
Czech Republic	21%	+ 6 p. p.
Germany	19%	+ 4 p. p.
Denmark	25%	+ 10 p. p.
Estonia	20%	+ 5 p. p.
Greece	24%	+ 9 p. p.
Spain	21%	+ 6 p. p.
Finland	24%	+ 9 p. p.

Cont. table 1.

France	20%	+ 5 p. p.
Croatia	25%	+ 10 p. p.
Hungary	27%	+ 12 p. p.
Ireland	23%	+ 8 p. p.
Italy	22%	+ 7 p. p.
Lithuania	21%	+ 6 p. p.
Luxembourg	17%	+ 2 p. p.
Latvia	21%	+ 6 p. p.
Malta	18%	+ 3 p. p.
Netherlands	21%	+ 6 p. p.
Poland	23%	+ 8 p. p.
Portugal	23%	+ 8 p. p.
Romania	19%	+ 4 p. p.
Sweden	25%	+ 10 p. p.
Slovenia	22%	+ 7 p. p.
Slovakia	20%	+ 5 p. p.

Source: Own study based on the Official Website of the European Union, https://europa.eu/youreurope/business/taxation/vat/vat-rules-rates/index_pl.htm, 10 April 2023.

The standard tax rate on goods and services, as set by legislators in individual EU Member States, varies, as shown in Table 3. Each country applies a specific rate established by national regulations that comply with EU requirements. Despite being subject to common regulations, differences in rates between countries arise because these regulations are not rigid and allow for a certain degree of flexibility. In the context of the standard VAT rate, only a minimum rate is mandated.

In all Member States of the European Union, the standard rate of goods and services tax ranges from 17% to 27%, inclusive. This represents a range of 10 p.p., highlighting a significant disparity between the lowest and highest rates applied across countries. Eleven distinct standard VAT rates are implemented throughout the European Union. Notably, the only rate between 17% and 27% that is not applied in any Member State is 26%.

The most common standard VAT rate in European Union countries is 21%, which is applied in six Member States: Belgium, the Czech Republic, Spain, Lithuania, Latvia, and the Netherlands. This rate is lower than the 23% rate applicable in Poland. In contrast, the rates of 17%, 18%, and 27% are each applied in only one Member State: Luxembourg, Malta, and Hungary, respectively.

The lowest standard VAT rate applicable within the European Union is 17%, which is only applied in Luxembourg. This rate is 2 p.p. higher than the minimum required rate of 15%. In comparison to Poland's standard VAT rate, the Luxembourg rate is 6 p.p. lower. Consequently, each PLN net of sales of goods and services subject to this rate generates PLN 0.06 more revenue for the Polish state budget than would be the case if Poland applied the Luxembourg rate.

The highest standard VAT rate applicable within the European Union is 27%, which is only applied in Hungary. This rate is 12 p.p. higher than the minimum required rate of 15%. In comparison to Poland's standard VAT rate, the highest rate is 4 p.p. higher. Consequently, each PLN net of sales of goods and services subject to this rate generates PLN 0.04 less revenue for the Polish state budget than would be the case if Poland applied the rate in Hungary.

The geographical distribution of VAT rates across European Union countries is shown in Figure 1. Poland has the highest standard VAT rate compared to the rates of its neighbouring Member States. The distribution of rates varies according to the geographical location of the countries. Higher rates are generally applied in the northern and southern parts of the European Union, while lower rates tend to be found in the centrally located countries.

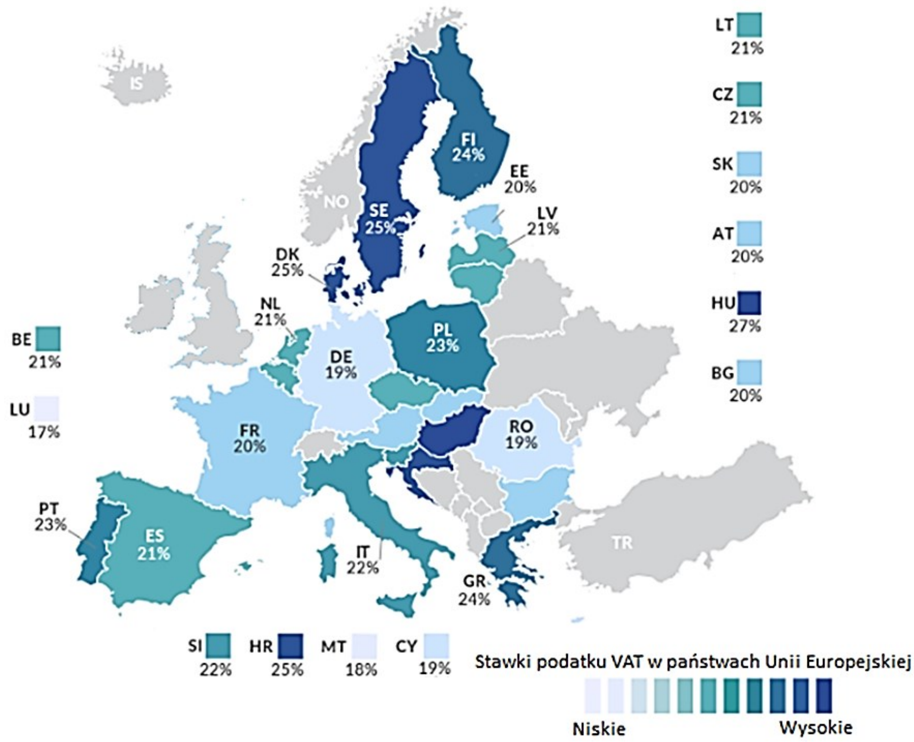

Figure 1. Geographical distribution of standard VAT rates in the European Union.

Source: own study based on: European Commission, 'Taxes in Europe Database v3', and Asquith R., 'Vat & GST rates 2023', https://files.taxfoundation.org/20230130150714/VAT_Rates_2023.png?_gl=1*1evf6vs*_ga*MjE0NTE5NTMwNC4xNjgyNDQyOTg0*_ga_FP7KWDV08V*MTY4MjQ0Mjk4NC4xLjEuMTY4MjQ0MzI4My42MC4wLjA, 5 April 2023.

The arithmetic mean of the standard VAT rate in the European Union is approximately 21.52%. This average is higher for some countries and lower for others. The value of 21.52% represents the hypothetical standard VAT rate that would exist in each country if the rates were averaged, taking into account all the rates currently in force. A comparison of the rate in Poland and selected EU countries to the arithmetic mean of all Member States is shown in Figure 2.

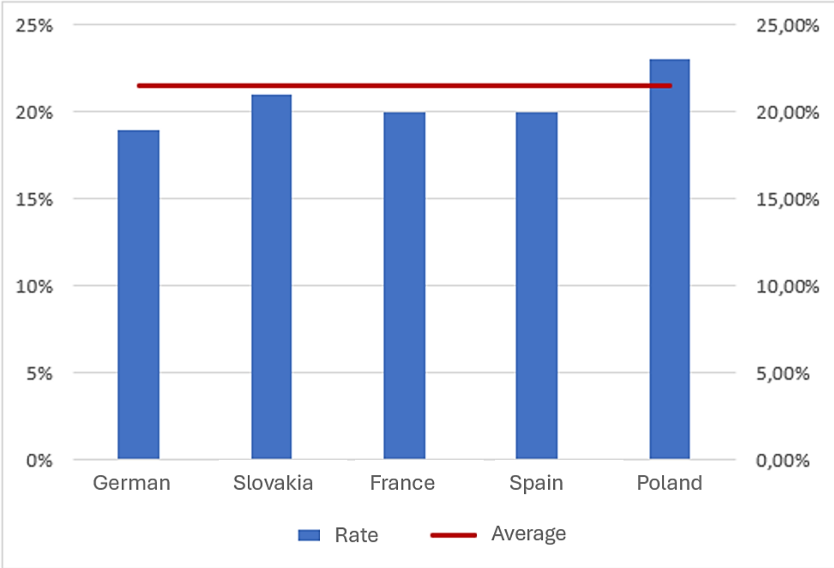

Figure 2. Comparison of VAT rates of selected countries in relation to the EU arithmetic mean.

Source: own study based on the Official Website of the European Union, https://europa.eu/youreurope/business/taxation/vat/vat-rules-rates/index_pl.htm, 10 May 2023.

All of the countries selected and described above, when compared with Poland, have a lower VAT rate than both the rate applied in Poland and the arithmetic mean of all EU countries (Table 2).

Table 2.
Deviation of VAT rates in selected countries from the EU average

State	VAT rate	Deviation from EU arithmetic mean
Germany	19%	-2.52 p.p.
Spain	21%	-0.52 p.p.
Slovakia	20%	-1.52 p.p.
France	20%	-1.52 p.p.
Poland	23%	+1.48 p.p.

Source: own study based on the Official Website of the European Union, https://europa.eu/youreurope/business/taxation/vat/vat-rules-rates/index_pl.htm, 10 March 2023.

Germany has the lowest basic VAT rate in the comparison above, with a rate of 19%. This is 4 p.p. higher than the minimum required by the Community and 4 p.p. lower than the rate applied in Poland. The rate in Germany is also approximately 2.52 p.p. lower than the EU average. For this rate to exceed the EU average, it would need to be increased by more than 2.52 p.p., e.g., by 3 p.p., bringing it to 22%. Even then, the German rate would still be lower than the rate applied in Poland. The 4 p.p. difference corresponds to an additional PLN 0.04 for every PLN net of sales of goods or services subject to VAT, meaning the Polish state budget receives PLN 0.04 more for every PLN of sales under the Polish VAT rate compared to the German rate.

In both Slovakia and France, the basic VAT rate is 20%, which is 1 p.p. higher than the rate in Germany. This means that goods and services subject to this rate in France and Slovakia contribute PLN 0.01 more to the state budget from each PLN of net revenue from sales compared to the German rate. The Slovak and French rates are 3 p.p. lower than the basic rate in Poland. This implies that for every PLN of net revenue from sales, the state budget receives PLN 0.03 more when applying the Polish VAT rate of 23%.

The 20% rate applied in France and Slovakia is 1.52 p.p. lower than the EU average rate, meaning these countries can be classified among those with a basic VAT rate lower than the average rate across EU Member States.

The standard VAT rate in Spain is 21%, which is higher than in the other countries compared to Poland in Figure 1. This rate is 2 p.p. lower than the rate applied in Poland, meaning that with the Spanish rate, the inflow to the state budget from VAT on each net PLN of sales would be PLN 0.02 lower. Additionally, the Spanish rate is 0.52 p.p. lower than the EU average, which represents a smaller difference than that seen in the other countries compared to Poland.

In Poland, the only country analysed in Figure 1, the basic VAT rate is higher than the EU average, which classifies Poland as a country with a higher VAT rate compared to the rest of the European Union. The rate applied in the Polish tax system is 1.48 p.p. higher than the arithmetic mean of all EU Member States, which constitutes a small difference. For transactions between Member States, the rates applied in other countries are not relevant, as such transactions are classified as intra-Community supplies of goods in the case of exports, or intra-Community acquisitions of goods in the case of imports. In such cases, they are tax-neutral for the parties involved in terms of value-added tax (Table 2).

3. Comparison of Reduced VAT rates

In addition to the standard VAT rate, which applies to the broadest category of goods and services, EU Member States also apply reduced rates. These reduced rates have a more limited scope, as they apply only to selected goods and services. The number, amount, and scope of these rates are determined individually by each state through national legislation, in accordance with EU law (Table 3).

Reduced VAT rates result in lower revenue for the state budget from the sale of goods or services subject to the reduced rate, which may affect the price of these goods and their accessibility to the poorest citizens. Reduced VAT rates are often applied to goods that meet basic living needs, as discussed in Chapter Two, where VAT regulations in selected countries are presented (Table 3).

Table 3.
Amount and quantity of reduced VAT rates in EU countries

EU Member State	Reduced VAT rates	Number of reduced VAT rates	Difference between rates (if two)
Austria	13%, 10%	2	3 p.p.
Belgium	12%, 6%	2	6 p.p.
Bulgaria	9%	1	-
Cyprus	9%, 5%	2	4 p.p.
Czech Republic	15%, 10%	2	5 p.p.
Germany	7%	1	-
Denmark	-	0	-
Estonia	9%	1	-
Greece	13%, 6%	2	7 p.p.
Spain	10%	1	-
Finland	14%, 10%	2	4 p.p.
France	10%, 5.5%	2	4.5 p.p.
Croatia	13%, 5%	2	8 p.p.
Hungary	18%, 5%	2	13 p.p.
Ireland	13,5%, 9%	2	4.5 p.p.
Italy	10%, 5%	2	5 p.p.
Lithuania	9%, 5%	2	4 p.p.
Luxembourg	8%	1	-
Latvia	12%, 5%	2	7 p.p.
Malta	7%, 5%	2	2 p.p.
Netherlands	9%	1	-
Poland	8%, 5%	2	3 p.p.
Portugal	13%, 6%	2	7 p.p.
Romania	9%, 5%	2	4 p.p.
Sweden	12%, 6%	2	6 p.p.
Slovenia	9.5%, 5%	2	4.5 p.p.
Slovakia	10%	1	-

Source: own study based on the Official Website of the European Union, https://europa.eu/youreurope/business/taxation/vat/vat-rules-rates/index_pl.htm, 10 March 2023.

The majority of EU Member States implement reduced VAT rates in their tax systems. The only exception is Denmark, which applies a standard rate of 25% (see Table 3), relatively high compared to the rates in other countries. The remaining countries apply either one or two reduced rates, with a clear predominance of those applying two rates (Table 3).

Only one reduced VAT rate is applied in seven Member States, with rates ranging from 7% to 10% in these countries. The lowest of these reduced rates is applied in Germany, while the highest, 10%, is applied in Slovakia. The remaining countries, with the exception of Denmark, which does not apply any reduced rate, have introduced two reduced rates (Table 3).

The highest reduced rate, as well as the highest standard VAT rate, is set by the Hungarian tax system at 18%. This makes Hungary's first reduced rate higher than the standard rate applied in Luxembourg. Conversely, the lowest reduced rate in the European Union is 5%, which is applied in ten countries. It is important to note that the 5% rate is only used in countries with two reduced VAT rates, where it is the lower of the two. This differs from Hungary, which has both a reduced and a standard VAT rate, and from Luxembourg, which, although it has the lowest standard rate, does not have the lowest reduced rate. Luxembourg's single reduced rate is 8%, which is 3 p.p. lower than the lowest reduced rate currently in use (Table 3).

The largest difference, 13 p.p., can be observed in the reduced VAT rates applied in Hungary, where the second reduced rate is 5%, which is the same as the second reduced rate in Poland. However, in Poland, the spread between the reduced VAT rates is among the smallest in the European Union, amounting to just 3 p.p., just as in Austria. In contrast, the smallest rate difference is found in Malta, where the rates are 7% and 5%, respectively. These rates are only 2 p.p. apart, indicating a much smaller gap compared to the spread in Hungary (Table 3).

The countries whose VAT systems have been compared and analysed in detail differ in their approach. Germany, Slovakia, and Spain apply only one reduced VAT rate, while France and Poland have two reduced VAT rates (Figure 3).

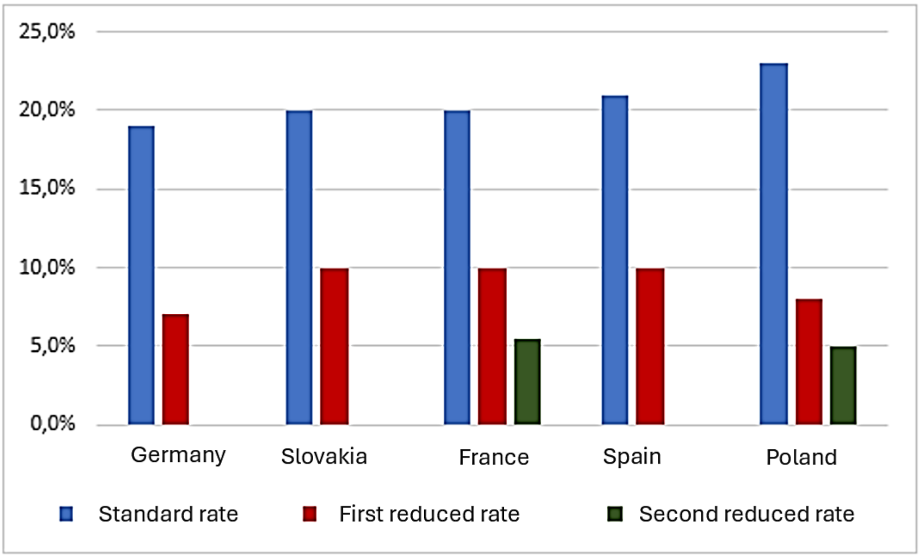

Figure 3. Comparison of standard VAT rates with reduced rates in selected countries.

Source: Own study based on the Official Website of the European Union, https://europa.eu/youreurope/business/taxation/vat/vat-rules-rates/index_pl.htm, 10 March 2023.

The highest reduced VAT rate is 10%, which applies in Slovakia, France, and Spain. This rate is 11 p.p. lower than the standard rate in Spain, representing the largest difference among the three countries. By contrast, the difference in France and Slovakia is 10 p.p., as Spain's standard VAT rate is 1 p.p. higher than that of France and Slovakia (Table 4).

The lower reduced VAT rates are found in Poland and Germany, where they are 8% and 7%, respectively. The Polish reduced rate is 2 p.p. lower than those applied in countries with a 10% rate, while the German rate is 3 p.p. lower. The gap between the standard VAT rate and the reduced rate in Poland is 15 p.p., which is the highest in the entire comparison. In Germany, the difference is similar, amounting to 12 p.p. These differences are greater than in the other countries, with the Polish case specifically reflecting the fact that the basic rate is relatively high, while the reduced rate is low (Table 4).

Only France and Poland have a second reduced VAT rate. These rates in both countries are at a similar level, with the French rate set at 5.5% and the Polish rate at 5%, resulting in a 0.5 p.p. difference between the two. The second reduced VAT rate differs from the first reduced rate by 4.5 p.p. in France, where the rates are more spread out compared to the Polish system. In Poland, the spread is 3 p.p. The lower of the reduced rates in France is 14.5 p.p. lower than the standard VAT rate in that country. In Poland, on the other hand, the difference is 18 p.p., which is greater than the French difference. This disparity directly reflects the difference in the standard VAT rates between Poland and France, which amounts to 3 p.p. (see Table 4).

Table 4.
Comparison of differences between VAT rates

State	Basic rate	First reduced rate	Second reduced rate	Difference between standard and first reduced rate	Difference between the first reduced and second reduced rate
Germany	19.0%	7.0%		12 p.p.	
Slovakia	20.0%	10.0%		10 p.p.	
France	20.0%	10.0%	5.5%	10 p.p.	4.5 p.p.
Spain	21.0%	10.0%		11 p.p.	
Poland	23.0%	8.0%	5.0%	15 p.p.	3 p.p.

Source: own study based on the Official Website of the European Union, https://europa.eu/youreurope/business/taxation/vat/vat-rules-rates/index_pl.htm, 10 March 2023.

4. Conclusions

According to the literature, the tax arrangements applied to value-added tax vary between EU Member States. This variation arises because EU regulations permit a degree of discretion, establishing only a minimum threshold for the standard rate. Each country can then apply a rate that suits its specific needs, provided it complies with the EU requirements.

Thanks to a comparative analysis of the basic VAT rate on goods and services in Poland, with the amount of this rate in the European Union countries, it can be seen that this rate in Poland is higher than the EU average, which means that in most Member States the basic VAT rate is lower than 23%. Poland has the fourth highest basic VAT rate in the EU, tied with Ireland and Portugal. This rate is 6 percentage points higher than the lowest applied in the EU. This can be seen positively from the perspective of generating greater tax revenues for the state budget or negatively from the perspective of the taxpayer who pays such tax, which has a direct impact on the prices of goods and services covered by this rate.

Poland applies two reduced VAT rates, a practice common among European Union countries. These rates are designated for a specific group of goods and services, aiming to support their acquisition by citizens. In the Polish tax system, there is a 3 p.p. difference between the two rates, which can be described as a relatively small range of reduced rates compared to other EU Member States.

Taxes paid by society are the foundation and key element of the economy. The need to harmonise taxes in the European Union emerged with the desire to unify tax systems and establish common standards. This process began in 1967 and was continued through subsequent regulations. The European Commission has developed numerous proposals for VAT harmonisation, including the definition of rate ranges, the selection of products covered by a reduced rate and the rules for applying the zero rate. Tax harmonisation supports the functioning of the EU single market, based on the free movement of goods, capital, services and people.

It should be emphasized that non-compliance with the regulations still remains a problem for VAT collection. Noticed issue of consumers not having the incentive to ask for an invoice because they prefer to buy products and services without additional VAT included in the purchase price. The above-mentioned carousel and missing trader frauds also pose a significant threat to VAT harmonization.

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