

THE INFLUENCE OF TAX RATES ON THE LEVEL AND DYNAMICS OF VALUE ADDED TAX IN ROMANIA DURING THE PERIOD 2016–2024

POPEANGĂ VASILE NICOLAE

UNIVERSITY LECTURER DOCTOR, UNIVERSITY „CONSTANTIN BRÂNCUȘI” TG-JIU

e-mail: alyn77ro@yahoo.com

Abstract

Value Added Tax (VAT) represents, due to its financial role, the most important indirect tax. Owing to its implementation method and common regulation, it has become the main vector for the defrauding of public financial resources at the European level. The gap between the expected revenue—based on the value added generated in the economy—and the actual amount collected serves as a significant barometer, both at the EU and national level, for assessing the performance of this fiscal instrument as well as the efficiency of its administration. In this analysis, we aim to present the evolution of VAT rates in Romania, highlight the dynamics of actual collections, the trends in revenue 'losses', and evaluate the efficiency of tax administration in our country compared to other member states.

Keywords: Value Added Tax (VAT), tax rates, tax loss/ VAT gap, tax administration efficiency

1. Introduction

Value Added Tax (VAT) was first introduced into fiscal practice in Côte d'Ivoire, a French colony, on April 10, 1954, by Maurice Lauré, one of the heads of the French tax administration. After analyzing its effects, it was concluded that the tax had a positive impact, which led to the decision to implement this fiscal instrument throughout France in 1958. Initially, it was applied only to large enterprises, but it was later extended across the entire economy. A significant milestone in the evolution of VAT was the establishment of the European Economic Community, which led to the transfer of this type of tax to other national fiscal systems. Fritz Neumark emphasized that, in order to ensure a fair competitive environment free from fiscal distortions, the French model of indirect taxation should be adopted across the European bloc. Consequently, in April 1967, two directives concerning VAT were adopted, forming the foundation of today's common European VAT system.[1]

2. Paper body

At present, the Value Added Tax (VAT) system is regulated at the level of the European Union; however, there is a distribution of responsibilities between the EU institutions and the member states. One of the most important aspects of VAT over which member states retain significant decision-making autonomy is the tax rate. European legislation mandates the application of a standard rate and allows for a maximum of two reduced rates, setting only a minimum threshold (5%) below which these rates may not fall, while also predefining the goods and services to which they may apply. Additionally, it provides the possibility for a reduced rate lower than the 5% minimum to be applied to a maximum of seven types of goods and/or services [2].

Thus, the level of the standard rate is entirely at the discretion of the member states. Regarding reduced rates, except for the minimum threshold, both the rate level and the inclusion or exclusion of certain predefined goods and/or services are matters of national sovereignty. In this context, between 2016 and 2024, Romania had the freedom to set the levels of both standard and reduced VAT rates, as well as to determine the goods and services eligible for reduced rates. The evolution of these fiscal decisions is presented below.

Law No. 227 on the Fiscal Code, published in the Official Gazette No. 688 of September 10, 2015, stipulated the following in Article 291:

“(1) The standard rate shall apply to the taxable base for taxable operations that are not exempt from tax or not subject to reduced rates, and its level is:

- a) 20% starting from January 1, 2016, until December 31, 2016;
- b) 19% starting from January 1, 2017.

(2) The reduced rate of 9% shall apply to the taxable base for the following services and/or supplies of goods:

a) the supply of prostheses and their accessories, as defined by the methodological norms in accordance with specific legislation, except for dental prostheses exempt from tax under Article 292 paragraph (1) letter b);

b) the supply of orthopedic products;

c) the supply of human and veterinary medicines;

d) accommodation provided in the hotel sector or in similar sectors, including the rental of land arranged for camping;

e) the supply of the following goods: food products, including beverages (excluding alcoholic beverages) intended for human and animal consumption; live domestic animals and birds; seeds, plants, and ingredients used in the preparation of food; products used to supplement or replace food. The corresponding CN codes for these goods are established through methodological norms;

f) restaurant and catering services, excluding alcoholic beverages, other than beer classified under CN code 22 03 00 10."

(3) The reduced VAT rate of 5% applies to the taxable base for the following deliveries of goods and services:

a) school textbooks, books, newspapers, and magazines, excluding those intended exclusively or primarily for advertising purposes;

b) services consisting of granting access to castles, museums, memorial houses, historical monuments, architectural and archaeological monuments, zoos and botanical gardens, fairs, exhibitions and cultural events, sports events, cinemas, other than those exempted under Article 292, paragraph (1), letter m);

c) the delivery of housing as part of social policy, including the land on which they are built. The land on which the housing is built also includes the footprint of the house. For the purposes of this title, housing delivered as part of social policy means:

1. delivery of buildings, including the land on which they are constructed, intended to be used as nursing homes and retirement homes;
2. delivery of buildings, including the land on which they are constructed, intended to be used as children's homes and recovery and rehabilitation centers for minors with disabilities;
3. delivery of homes with a usable area of maximum 120 m², excluding household annexes, whose value, including the land, does not exceed 450,000 RON (excluding VAT), purchased by any unmarried person or family. The usable area is defined by Housing Law no. 114/1996, republished, with subsequent amendments. Household annexes are defined by Law no. 50/1991 on the authorization of construction works. The reduced rate applies only to dwellings that can be inhabited as such at the time of sale and only if the land does not exceed 250 m², including the building footprint, in the case of individual houses. For buildings with more than two units, the co-owned land area per unit must not exceed 250 m², including the footprint. Any unmarried person or family can purchase only one home with the 5% reduced rate, meaning:
 - (i) for unmarried individuals – they must not have owned or currently own a home purchased at the 5% rate;
 - (ii) for families – neither spouse must have owned or currently own, individually or jointly, a home purchased at the 5% rate;

4. delivery of buildings, including the land on which they are constructed, to municipalities for subsidized rental to individuals or families whose economic situation does not allow home ownership or renting under market conditions”.

Through Emergency Ordinance no. 50 of October 27, 2015, a new letter g) was introduced in Article 291, paragraph (2), applying a reduced VAT rate of 9% to the **“delivery of potable water and water for agricultural irrigation”**, effective January 1, 2016.

As of August 1, 2016, through Emergency Ordinance no. 32 of June 28, 2016, the list of goods and services subject to the 9% reduced rate was extended to include:

- **“delivery of fertilizers and pesticides used in agriculture, seeds and other agricultural products for sowing or planting, as well as the provision of specific services used in the agricultural sector, as regulated by joint order of the Minister of Public Finance and the Minister of Agriculture and Rural Development.”**

Emergency Ordinance no. 89/2018, effective from October 9, 2018, introduced the reduced 5% rate (instead of 9%) for:

- **“accommodation in the hotel sector or similar, including rental of campsites, as well as restaurant and catering services, excluding alcoholic beverages, other than beer under code NC 22 03 00 10.”**
- **Additionally, the 5% rate applied to “the right to use sports facilities whose activities fall under CAEN codes 9311 and 9313.”**

From January 1, 2019, Law no. 175/2018 applied the 9% reduced rate to **“sewage services”**.

From January 13, 2019, according to Law no. 13/2019, the 5% reduced rate applies to:

- **“transportation of persons using historical steam trains on narrow-gauge lines for tourism or leisure;**
- **cable transport systems (gondolas, chairlifts, ski lifts) used for tourism or leisure;**
- **animal-drawn vehicle transport for tourism or leisure;**
- **boat transport used for tourism or leisure”.**

From May 23, 2019, under Emergency Ordinance no. 31 of May 14, 2019, certain high-quality food products were taxed at 5% instead of 9%:

- **“delivery of high-quality foodstuffs, namely mountain products, organic, traditional products authorized by the Ministry of Agriculture and Rural Development.”**

This trend of expanding the list of goods and services subject to the 5% reduced rate continued with Law no. 196/2021, which, as of July 16, 2021, extended it to:

- **“thermal energy supplied to the population.”**

In the same vein, Laws no. 286 and 287 of 2021 introduced a 5% rate (effective December 1, 2021) for:

- **“delivery of firewood to individuals, in the form of logs, sticks, brushwood, branches or similar, falling under codes NC 4401 11 00 and 4401 12 00;**
- **and for deliveries of firewood to legal persons or entities, regardless of legal form, including schools, hospitals, medical dispensaries, and social assistance units.”**

From January 1, 2022, Law no. 291/2021 applies the 5% rate to:

- **“delivery of school textbooks, books, newspapers, and magazines, in physical and/or electronic form, except those predominantly or entirely containing video/audio content, or mainly intended for advertising.”**

Government Ordinance no. 16/2022 reintroduced, starting January 1, 2023, the 9% VAT rate (previously reduced to 5%) for:

- **“accommodation in the hotel sector or similar, rental of campsites, restaurant and catering services, excluding alcoholic and certain non-alcoholic beverages (codes NC 2202 10 00 and 2202 99).”**

From January 16, 2023, Law no. 39/2023 applies the 5% reduced rate to:

- **“delivery and installation of photovoltaic panels, solar thermal panels, high-efficiency low-emission heating systems, including installation kits and components, intended for residential use or public buildings (excluding commercial companies).”**

On June 11, 2023, Law no. 88/2023 entered into force, removing the reduced VAT rate for:

- **prosthetics and orthopedic products”,** which would be subject to the standard rate.

Starting January 1, 2024, under Law no. 296 and Emergency Ordinance no. 115/2023:

- **“non-alcoholic beverages (NC 2202) and sugary foods (with $\geq 10\text{g}$ sugar/100g), excluding infant formula, cake, and biscuits, no longer benefit from the reduced 9% rate and are taxed at the standard rate.”**

The reduced rate increases from 5% to 9% for:

- **“social housing deliveries;**
- **delivery and installation of photovoltaic panels, solar panels, heat pumps, and high-efficiency heating systems;**
- **access to fairs, amusement parks, recreational parks, exhibitions, cinemas, cultural events (other than tax-exempt ones), and sports events”.**

In comparison, the member states of the European Union apply the following VAT rates to consumption:

Table 1 – Value Added Tax (VAT) rates in EU Member States

Country	Standard rate (%)	Reduced rates (%)
Austria	20	10 / 13
Belgium	21	6 / 12
Bulgaria	20	9
Cyprus	19	5 / 9
Czechia	21	12 / 0
Germany	19	7
Denmark	25	0
Estonia	24	9
Greece	24	6 / 13
Spain	21	10
Finland	25,5	10 / 14
France	20	5,5 / 10
Croatia	25	5 / 13
Hungary	27	5 / 18
Ireland	23	9 / 13,5
Italy	22	5 / 10
Lithuania	21	5 / 9
Luxembourg	17	8
Latvia	21	5 / 12
Malta	18	5 / 7
Netherlands	21	9
Poland	23	5 / 8
Portugal	23	6 / 13
Sweden	25	6 / 12
Slovenia	22	5 / 9,5
Slovakia	23	10

Data source: www.europa.eu

We note that our country applied, in the year 2024, the third lowest standard rate and some of the lowest reduced rates.

In the period 2016 – 2024, the absolute level, in nominal terms, of the value-added tax, expressed in millions of lei, recorded the following values:

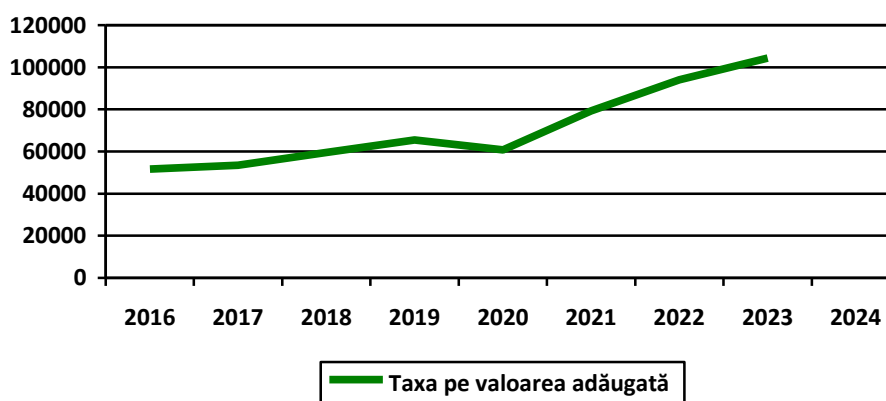
Table 2 The nominal level of value-added tax in the period 2016 – 2024

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024
Indicator	51.675,1	53.543,7	59.609	65.420,6	60.816,9	79.350,9	94.090,6	104.334,7	120.946,1

Data source: www.mfinante.gov.ro

The dynamics recorded by the Value Added Tax are presented graphically as follows:

Chart no. 1 The nominal evolution of the value-added tax in the period 2016 – 2024



We observe an upward trend of the indicator throughout the entire period, with a single exception in 2020, when, due to the global pandemic crisis with major impacts on the economic sphere, the value volume of revenues decreased. The amplitude of the positive trend, comparing the two growth intervals, was stronger in the period 2021 – 2024. Thus, in the years 2016 – 2019, the value volume of the tax increased by +13,745.5 million lei, representing a nominal relative increase of +26.6%, while in the period 2021 – 2024 it registered a growth of +41,595.2 million lei, corresponding to a relative increase of +52.4%. At the end of the analyzed period, the absolute nominal increase of budgetary revenues was +69,271 million lei, or +134%.

Considering that inflation was present in the national economy during the analyzed interval, we aim to reflect the level and dynamics of the value-added tax also in constant prices, i.e., in real terms. For this, we will use the annual consumer price index, whose values are presented below:

Table no. 3 Annual consumer price index in the period 2016 – 2024

Year	2017/2016	2018/2016	2019/2016	2020/2016	2021/2016	2022/2016	2023/2016	2024/2016
CPI (%)	101,34	106,03	110,09	112,98	118,69	135,07	149,11	157,44

Data source: www.insse.ro

Therefore, in real terms, taking the prices of the year 2016 as the base, the values of the value-added tax are as follows:

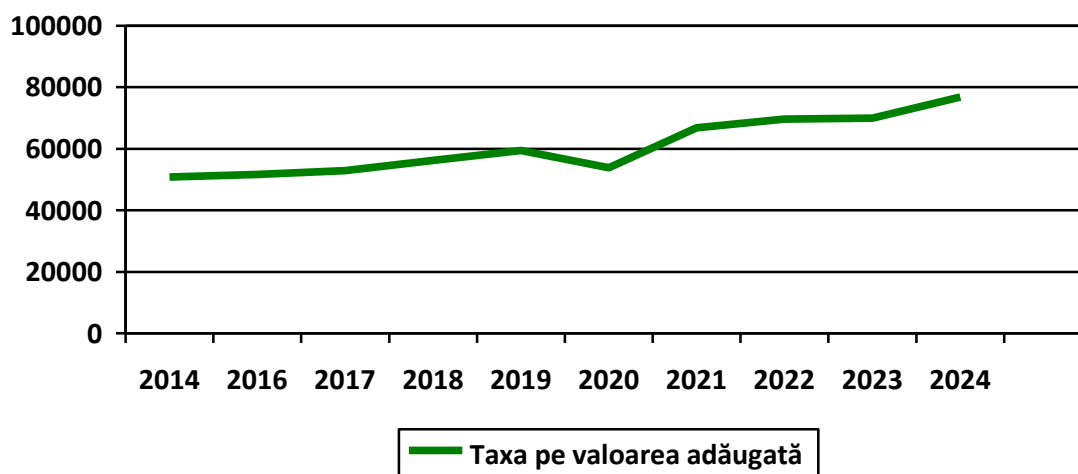
Table no. 4 The real level of the value-added tax in the period 2016 – 2024

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024
Indicator	51.675,1	52.895,7	56.219	59.424,6	53.829,8	66.855,6	69.660,6	69.971,6	76.820,4

Data source: own calculations

Graphically, the dynamics of the indicator values, in constant prices of the year 2016, are shown below:

Chart no. 2 The real-term evolution of the value-added tax in the period 2016 – 2024



The analysis of real values reveals the same evolutionary trend as in the case of nominal levels, with the difference that the intensity of the process is lower, showing smaller amplitudes. Thus, at the end of the period, the absolute increase is +25,145.3 million lei compared to the beginning of the interval, while the relative increase is +48.7%.

An extremely important indicator, which reflects the fiscal efficiency of the value-added tax, is the "VAT gap." In the period 2016 – 2023, the values recorded for this, as a percentage of total potential revenues, at the level of Romania and at the European level, are presented below:

Table no. 5 Value-added tax gap at the EU level in the period 2016 – 2023

Statul membru	2016	2017	2018	2019	2020	2021	2022	2023 (valori estimate)
Belgium	10.9%	12.2%	11.9%	13.1%	13.5%	7.0%	11.0%	11.7%
Bulgaria	12.3%	12.2%	8.9%	9.4%	6.0%	3.7%	7.7%	-
Czech Republic	15.2%	11.9%	13.4%	13.5%	11.8%	6.7%	4.2%	3.2%
Denmark	8.7%	8.2%	8.8%	8.3%	4.3%	4.5%	8.6%	-
Germany	8.8%	8.8%	9.0%	8.5%	6.1%	4.4%	4.3%	-
Estonia	5.5%	6.0%	5.6%	5.5%	4.9%	1.5%	4.4%	5.9%
Ireland	10.2%	10.9%	6.7%	6.3%	9.0%	-1.1%	1.6%	-
Greece	30.4%	33.1%	25.4%	24.0%	21.5%	17.5%	13.7%	-
Spain	6.1%	6.4%	6.5%	7.9%	6.1%	4.1%	4.6%	7.1%
France	8.4%	6.8%	7.8%	8.2%	8.0%	6.0%	6.0%	9.7%
Croatia	6.9%	5.5%	7.4%	1.2%	10.1%	10.9%	12.0%	
Italy	27.3%	24.7%	21.6%	20.8%	20.7%	10.9%	10.6%	14.7%
Cyprus	5.5%	5.0%	12.5%	12.1%	16.2%	6.2%	-0.7%	-
Latvia	12.8%	13.9%	13.3%	10.6%	12.4%	10.2%	5.0%	8.9%
Lithuania	24.6%	25.1%	24.0%	20.9%	20.3%	15.7%	14.6%	17.8%
Luxembourg	8.4%	2.6%	8.1%	5.2%	8.5%	7.4%	3.7%	6.6%
Hungary	14.1%	13.5%	10.2%	11.1%	8.1%	4.7%	2.3%	-
Malta	23.0%	17.7%	23.4%	27.5%	26.8%	25.5%	25.9%	28.6%
the Netherlands	5.3%	4.8%	10.7%	11.1%	8.9%	5.3%	7.9%	7.8%
Austria	8.3%	8.5%	8.2%	6.7%	5.8%	2.6%	3.0%	3.9
Poland	20.4%	14.3%	14.2%	13.9%	11.6%	5.6%	8.4%	10.5%
Portugal	11.9%	10.9%	9.5%	8.6%	7.2%	4.0%	1.3%	2.4%
Romania	37.3%	34.3%	32.8%	34.7%	36.4%	34.8%	30.6%	33.7%
Slovenia	5.3%	4.4%	4.5%	5.6%	5.3%	3.6%	9.2%	7.8%

Slovakia	21.0%	19.6%	16.3%	16.4%	15.6%	13.7%	14.6%	-
Finland	4.8%	5.1%	3.8%	4.7%	3.1%	3.0%	5.2%	5.9%
Sweden	1.5%	1.9%	2.5%	3.1%	3.3%	5.4%	5.5%	
Great Britain	10.6%	11.9%	10.5%	8.9%	-	-	-	-
Total UE	12.3%	11,5%	11.1%	10.3%	9.1%	6.58%	6.99%	-

Data source: https://taxation-customs.ec.europa.eu/taxation/vat/fight-against-vat-fraud/vat-gap_en#relevance

3. Conclusion

Based on the data and analyses carried out previously, we can formulate a series of conclusions as follows:

- Romania applied, throughout the analyzed period, some of the lowest tax rates in the European Union in the field of value-added tax;
- A relatively high dynamic of regulation of this fiscal instrument is noted, however, most of the changes aimed at extending a more lenient taxation regime (although the rates remained the same, the list of goods and services benefiting from reduced rates was expanded);
- Contrary to the legislator's tendency to reduce the tax burden in the VAT area, public revenues collected showed a strong positive trend, which demonstrates, in our opinion, a certain neutrality of the tax rates on the yield of the tax, which is mainly influenced by the evolution of the economy;
- Analyzing comparatively at the European level the final budgetary outcome of the value-added tax, we notice the enormous loss of revenues recorded by Romania. Practically, the VAT gap is the largest among all member states and is 3 to 5 times above the average of the Union;
- We appreciate that the deficit is not due to the technical elements of the tax but to poor performance in the fiscal administration process, with non-declaration being the main cause.

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