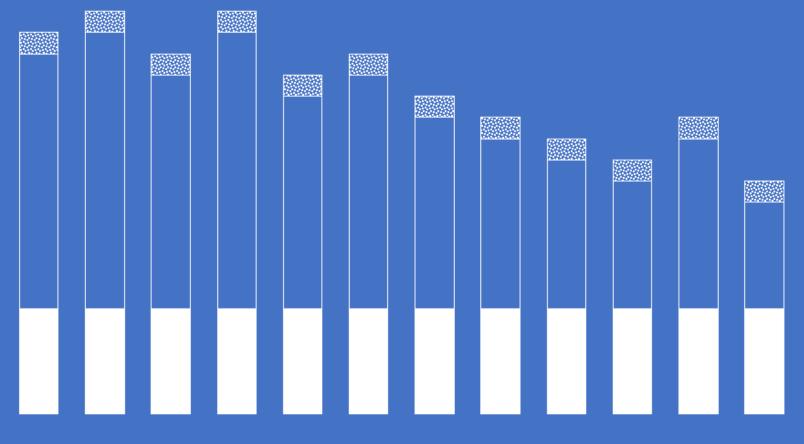




# Country Report Romania



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## Disclaimer

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# **Executive Summary**

Tobacco use is recognized as the most preventable cause of death worldwide. A leading cause of death, disease and poverty, the tobacco epidemic is one of the greatest public health threats the world has faced, killing more than 8 million people a year. More than 7 million deaths are the direct result of tobacco use, while approximately 1.2 million are the result of exposure of non-smokers to second-hand smoke. However, tobacco use is common worldwide due to relatively low prices, aggressive and widespread marketing, lack of awareness of its dangers, and diverse and inconsistent tobacco control policies (3). **The total cost of smoking (health costs and lost productivity) is more than \$1.4 trillion, equivalent to 1.8% of the world's annual gross domestic product<sup>1</sup>. Almost 40% of these costs occur in developing countries, amplifying the substantial burden these states feel.** 

Romania is part of the Central and East European region, has a total residential population of 19.2 million, of which 16.1 million is 15 years old and above, a total surface of 238,397 square kilometres. In the last 15 years, Romania has registered high economic growth rate, characteristic for emerging economies engaged in a catching-up process and from July 2022 has moved into the high-income countries group according to the World Bank.

The minimum legal smoking age in Romania is 18 years old and the sale of tobacco products is prohibited to those under this age. Romania has taken important steps in implementing tobacco regulation, under the need to comply with European Union regulation. Most important steps were those of implementing the Tobacco Product Directive and implementing the ban on smoking in closed public places, including bars, restaurants, official buildings, cabs.

Raw tobacco production in Romania has become more and more irrelevant, with currently only 573 hectares are cultivated with tobacco, a massive decrease in comparison with early 2000 levels, when more than 11,000 hectares were cultivated with tobacco. On the other hand, after the change of regime and transition to a market economy, substantial investment in cigarettes manufacturing occurred and as a consequence Romania is now a net importer of raw tobacco but a large exporter of manufactured cigarettes. **Currently Romania is the second largest cigarette producer from within the EU** and almost 66% of cigarette production is destined for exports. Production of cigarettes is a highly capital-intensive activity and thus a relatively low number of employees are directly involved in tobacco products manufacturing - around 2,500 employees in 2021.

From a taxation and consumption of tobacco products point of view, Romania adopted an Excise Calendar, which is stipulated in the Fiscal Code and provides the minimum total excise. Even though, excise duties and consequently the price of cigarettes pack have increases constantly over the years, in the last 10 years per capita **cigarettes consumption has also increased**. The main reason for this trend is that the per capita income increased faster than the price of cigarettes and so, **cigarettes became more affordable**.

<sup>&</sup>lt;sup>1</sup> GATS Romania 2018

Price elasticity of demand and income elasticity of demand were estimated using macroeconomic data. As expected with "vice" goods, price elasticity of demand is inelastic, meaning that an increase in price will determine a lower decrease in consumption. The elasticities estimated were -0.7033 for price and 0.7435 for income. Three scenarios were designed to forecast both consumption and cigarette tax revenues. A baseline scenario in which the excise increases are those provisioned in the Current Fiscal Code up until 2026, a second scenario in which the Excise grows 50% more than what is provisioned in the Fiscal code, and a third scenario in which the Excise increase is double the one provisioned in the Fiscal Code.

In the baseline scenario at the end of the forecast period (2026) **per capita cigarettes consumption will be actually higher than what it is today.** One of the main reasons, besides the fact that overall year on year excise increases is relatively low (especially in a high inflationary context as exists today) is the fact that from 2023 to 2024 no excise increase is provisioned. In the third scenario, where a doubling of the excise increase is proposed, the per capita cigarette consumption will decrease by 12% by the end of 2026. From a tax revenue perspective, given the fact that demand for cigarettes is inelastic, higher increase of the excise will generate more revenue than what is estimated to be collected under the current Fiscal Code provisions. Implementing a higher increase of cigarettes excise duties as proposed in the third scenario will generate additional tax revenues of 1.1 billion Lei in the forecasted period.

Both from a tax revenue and a per capita cigarette consumption perspective, a higher increase in excise duties is justified. It was out of the scope of this study, but one of the most important secondary effects of reducing cigarettes consumption is that this will **lead to increased savings on tobacco-related reimbursed medical expenses and gains of economic productivity at the national level because of the healthier population**.

# 1. General Overview: Romania

According to the World Bank recent studies<sup>2</sup>, Romania just moved to higher income group and as July 2022 is ranked as a high-income country. Romania is geographically situated in Central and Eastern Europe, being the 8th EU country ranked by surface (238.397 km2) and the sixth in terms of population size. (INSE 2019)

Romania became a communist country after the end of the Second World War, when, after manipulated elections by the Romanian Communist Party, King Michael was forced to abdicate and the Popular Republic of Romania was proclaimed, at 30 of December 1947. In 1965 Romania became The Socialist Republic of Romania, under the rule of Ceausescu Nicolae. The communist dictatorship in Romania, mostly after 80s, under Ceausescu's leadership, was one of the hardest among communist countries, mostly because of material shortages for population and the lack of civil liberties.

In December 1989, Romania had the only bloody anti-communist revolution among the former communist countries. Over 1000 persons have died in the confrontations between the protesters (mostly from Timisoara, where the manifestations start, and from Bucharest, the capital city of Romania) and the Army and the Secret Police (Securitate).

After 1989, Romania went through fundamental transformation, in all areas. However, reforms where slower than in other former communist countries (mostly, comparing to those that joined EU in 2004), and the modernization of Romania lagged behind public expectations.

Indicator	Value
Population (2021)	19.201.662
Population over 15 years old (2021)	16.174.719
Gross domestic product, (2021 in Billions EUR)	240,15
Gross domestic product, per capita, (2021)	12.440 €
Gross domestic product, real growth, (2021 in %)	5,1%
Inflation (2021)	4,1%
Unemployment according to LFS (2021 in %)	5,6%
Average net wage (2021)	716 €
Employed population (2021)	7.755.487
Wage earners (2021)	5.094.288

# Table 1 Romania - General information

Source: Eurostat 2021, National Institute of Statistics 2021

Romania had a high economic growth rate in the last 15 years, characteristic for emerging economies engaged in catching up process. Other specificities of the Romanian economy that are worth mentioning in the context of this study are constituted by the major difference between employed population and wage earners. More than one and a half million persons are self-employed (a considerable percentage of

<sup>&</sup>lt;sup>2</sup> https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2022-2023

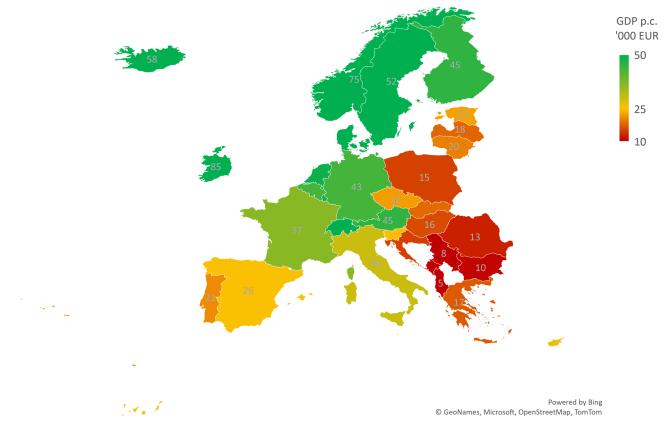
total employed population). A substantial part of them is engaged in agricultural activities and subsistence farming (especially in rural areas). Romania even though is in a process of urbanization, still has a very high percentage of the population living in rural areas, the last population statistics data showing that 46% of the population lives in rural areas. Because of the high difference between employed population and wage earners, in our modelling we took into account as a proxy for income the Gross National Disposable Income instead of wages. Another reason why we used Gross National Disposable Income in our model for estimating elasticities is that Romania has a consistent diaspora. Approximately 4.6 million Romanians live outside the country's borders, which represents a quarter of the total population. The consequence of this is best reflected in the transfers and remittances sent by the diaspora into the country. According to Eurostat<sup>3</sup>, the latest data available, being those from 2020, show that their level was the highest in the EU and stood at 3.4 billion euros out of a total of 23.3 billion at EU level.

One of the most crucial moments in the recent history of Romania is the accession to the EU as a member country, in 2007.

The largest challenges for Romania, even after joining in the EU consisted in lowering the corruption level, improving rule of law and increasing the socio-economic welfare and standard of living. Many achievements have been accomplished and many steps forwards have been taken. Despite undeniable successes, Romania still ranks in the lowest part of many hierarchies in terms of economic, social and environmental performances among EU countries. Some of the most stringent issues Romania is confronting with are related to its social aspects, in terms of health and educational systems Romania, also faces demographic problems, a decrease of the population from almost 23 million of inhabitants in 1992 to a little bit over 19 million and one of the most sever out-migration processes in the EU. (According to the estimations of National Institute for Statistics, after the 2022 census). The aging population phenomenon is also present in Romania.

<sup>&</sup>lt;sup>3</sup> Secondary income: Personal transfers (Current transfers between resident and non-resident households) <u>https://ec.europa.eu/eurostat/databrowser/view/BOP\_REM6\_custom\_3823903/default/table?lang=en</u>

# Figure 1 GDP/capita (current EUR, 2021)



# Source: Eurostat, 2021

# 2. Romania and the research on Tobacco: a brief literature review

Currently, there is relatively scarce literature (mostly after 2018) on **tobacco's direct and indirect effects** (taxation, health costs, elasticity, etc.) in Romania. Ciobanu et al. (2018)<sup>4</sup> analyzed the health impact of tobacco use and the taxation of smoking. The authors conclude that there is a reassuring decline in hospitalizations for smoking-related diseases associated with the tax increases, and no sub-national association with smuggling risk measured by the variation in the size of this effect and regions that border other countries. However, more comprehensive, and progressive tobacco control in Romania should be implemented in line with the WHO Framework Convention for Tobacco Control.

A study from 2015 realized by Kaleta et al. (2015)<sup>5</sup> regarding the **socio-economic disparities** in starting smoking investigates the association of socio-demographic variables initiation of ever regular smoking among Romanians. Also, the authors show that the percentage of smokers in Romania is higher than the EU average and Romania belongs to ten EU countries with the highest prevalence of daily smoking.

Moreover, some studies conducted in Romania showed a low exposure of Romanian adolescents to antismoking school education and usually, there is a poor quality of lessons among teenagers. Nădășan et a. (2016)<sup>6</sup> assess socio-demographic and smoking-related characteristics in relation to e-cigarettes and alternative tobacco products (ATPs) use in a multi-ethnic group of adolescents in Tîrgu Mures, Romania. The study shows that the prevalence of e-cigarettes and ATP use in the sample (of 38.5 %) was higher than in other studies reported in other European countries (23.5 % in Poland, 23.8 % in Ireland, 17.4 % in Finland, 12.3 % in Wales and 11.8 % in France. The authors consider that might be explained by the higher prevalence of conventional cigarette use in Eastern European countries (citing Bogdanovica et al. 2011) or due to ineffective tobacco control programs implemented by authorities (Kuipers et al. 2015).

In terms of **tobacco control** (taxation, illegal market, regulations), Loubeau, P. R. (2013)<sup>7</sup> analyze the challenges of tobacco control in Romania. His main finding is that, in 2010, the price per pack of cigarettes in Romania almost doubled due to higher taxes and fees imposed by the state. The target goal is to reach the taxation and pricing levels seen in the European Union to discourage illegal trade from Romania to

<sup>&</sup>lt;sup>4</sup> Ciobanu, M., Iosif, I., Calomfirescu, C., Brinduse, L., Stuckler, D., Reeves, A., ... & Cucu, A. (2018). Variation across Romania in the health impact of increasing tobacco taxation. European Journal of Public Health, 28(suppl\_2), 10-13.

<sup>&</sup>lt;sup>5</sup> Kaleta, D., Usidame, B., Dziankowska-Zaborszczyk, E., & Makowiec-Dabrowska, T. (2015). Socioeconomic disparities in age of initiation and ever tobacco smoking: Findings from Romania. Central European Journal of Public Health, 23(4), 299.

<sup>&</sup>lt;sup>6</sup> Nădăşan, V., Foley, K. L., Pénzes, M., Paulik, E., Mihăicuță, Ş., Ábrám, Z., ... & Urbán, R. (2016). Use of electronic cigarettes and alternative tobacco products among Romanian adolescents. International journal of public health, 61(2), 199-207.

<sup>&</sup>lt;sup>7</sup> Loubeau, P. R. (2013). The challenges of tobacco control in Romania. Policy review. Cent Eur J Public Health, 21, 98-103.

the other EU Member States. Despite all tax increases, the price stayed at one-half to two-thirds of the average price per pack in Europe.

Eremia et al (2018)<sup>8</sup>, analyzing the role of non-governmental organizations in tobacco control in Romania, affirms that the strengths of tobacco control in Romania include several aspects of the legislation which limit: (i) the exposure to tobacco control advertisement; (ii) exposure to passive smoking in public places; (iii) the presence of pictogram on tobacco packages; (iv) increasing prices for tobacco products; (v) development of some educational programs, including a smoking cessation program using the information technology. Additionally, the weaknesses include the limited funding for educational activities for tobacco prevention and support for quitting smoking, and also the poor enforcement of legislation that prohibits the access of adolescents to tobacco products.

In a more detailed study, Szabo et al (2016)<sup>9</sup> analysed the **economics of tobacco** and **tobacco taxation** in Romania. The authors find that higher tobacco taxes will lead to both a reduction in tobacco consumption as well as higher government revenues, given the inelastic demand of tobacco products. Another interesting finding of this study is that the reductions in smoking among the poor that result from higher tobacco taxes will be larger than those that occur among rich so that the health benefits that result from a tax increase will be progressive. The authors affirm that the smoke-free policy implemented in March 2016 is relatively comprehensive and covers health care and educational facilities but compliance with the policy is uncertain. Tobacco advertising is banned on national and international television and radio, in local magazines and newspapers, on billboards and outdoors, and on the Internet, but allowed in international magazines and newspapers and at the point of sale.

However, tobacco companies' sponsorships of public events are allowed, as are promotional discounts and the distribution of free samples. Graphic health warnings are required on cigarette packages, and the use of misleading terms and descriptors, such as 'low tar,' 'light' and 'mild,' is banned. There is a national, free-of-charge telephone line available for individuals that want to quit smoking so that smokers can discuss cessation with trained counsellors, and a variety of pharmaceutical cessation products are available, some fully covered under the national health insurance program. Smoking cessation support is available from many health care providers and is also fully covered under the national health insurance program.

A comprehensive study of the University of Medicine and Pharmacy from Târgu Mures in 2018<sup>10</sup> shows that an inflation-adjusted 10% increase in the price of cigarettes would lead to a reduction of almost 6% (5.8%) in cigarette consumption. They conclude that it seems that smoking in Romania is more receptive

<sup>&</sup>lt;sup>8</sup> Eremia, M., Radu-Loghin, C., & Lotrean, L. M. (2018). The role of non-governmental organizations in tobacco control in Romania. Tobacco Induced Diseases,

<sup>&</sup>lt;sup>9</sup> Szabó, A., Lázár, E., Burián, H., Rogers, T., Foley, K., Ábrám, Z., ... & Chaloupka, F. J. (2016). The economics of tobacco and tobacco taxation in Romania. Tîrgu Mureş, Romania: University of Medicine and Pharmacy of Tîrgu Mureş, 1-56.

<sup>&</sup>lt;sup>10</sup> Zoltán Ábrám, Valentin Nădăşan (Eds). (2018)."Building Capacity for Tobacco Research in Romania", University Press, Tg Mures https://tobacconomics.org/uploads/misc/2018/05/Cercetare-fumat-Romania-combined.pdf

to price than smoking in other low- and middle-income countries (based on data from GATS), while Lotrean (2018)<sup>11</sup> emphasizes the role of projects developed for tobacco control.

The correlation of the price of tobacco products with inflation rate seems to be of an increasing importance, especially for 2022, within the high inflationary economic context. Even though tobacco inflation, measured as increases in weighted average price per cigarettes pack (WAP), outpaces the CPI rate, starting with 2014 net average wage have considerable higher growth rates than WAP, making cigarettes more affordable, a more detailed analysis will be presented in chapter 6.

Year	Inflation Rate (%)	Growth Rate of Average Net Wage %	Growth Rate of Weighted Average Price per cig. pack %
2012	3,3	4,0	6,7
2013	4,0	4,0	8,5
2014	1,1	7,0	7,3
2015	-0,6	9,0	4,2
2016	-1,5	10,0	4,9
2017	1,3	14,0	4,4
2018	4,6	13,0	5,9
2019	3,8	13,0	8,4
2020	2,6	7,7	6,2
2021	5,1	6	7,9

# Table 2 Inflation, Tobacco Inflation and wages

Source: National Institute of Statistics, Ministry of Finance

<sup>&</sup>lt;sup>11</sup> Lotrean, L. (2018). Research in the field of tobacco control in Central and Eastern Europe: case studies from Romania. Tobacco Prevention & Cessation, 4(Supplement

# 3. Legislation on Tobacco in Romania

The national legislation on tobacco has been increasingly improved over the past years. Starting with the banning of smoking in public places since the adoption of the Law 15/2016, up to the recent draft amendment to banning of smoking in public space by underaged persons, or improvements in the taxation framework of tobacco products as well as the heated tobacco products (HTPs) and liquid nicotine products, Romania is among countries with a quite strong legal frame trying to reduce the tobacco consumption. Also, within the new Fiscal Code from 2022, there is a comprehensive approach to tobacco taxation, including heated tobacco products and liquid tobacco.

The Legislative frame on Tobacco in Romania has two major groups. The first groups of legislative body regulate the *cultivation raw tobacco and the processing of tobacco products*. The second body of the legislative frame is directed to *consuming tobacco products* (mostly on selling tobacco products, advertising tobacco products, and smoking tobacco products). These two groups of legislation bodies have a sort of perverse effect: on one hand, the first level of legislation body support raw tobacco cultivation (mostly by subsidies and other incentives for raw tobacco products, to reduce the smoking incidence and to protect population from the illness provoked by the active and passive smoking.

# 3.1. Legal frame for cultivating raw tobacco and on producing tobacco products

The first level of legislative frame is in the area of cultivating raw tobacco and on producing tobacco products. The legislation is both national and EU and it is mostly under the guidance of Ministry of Agriculture and Rural Development (MADR). In 2022, according to the official sources, the legislation governing this layer regulates the organization of the raw tobacco market, and to the payment schemes for raw tobacco production.

At national level, the law with the most significant impact is law no 236/2003. This law identifies the types of tobacco cultivated and establishes their minimum quality characteristics, the participants in the raw tobacco market and their roles, the legal agreements (contracts) between parties and who elaborates the template of the contracts, how the production incentives will be established, and the types of controls specific to the raw tobacco market. Different other regulations (Orders, Emergency Ordinances, Government Decisions) and laws, thorough their provisions, complement or support the dispositions of the law 236/2003. Payments schemes, framed under the Government Decision no. 1174/2014 regarding the establishment of a state aid scheme for the reduction of excise duty on diesel fuel used in agriculture and Orders are annually released to establish the level of these payments.

A more detailed enumeration of the legislation that governs the production of raw tobacco, both at national and EU level, can be found in Appendix 1.

# The *financial support for farmers growing raw tobacco* includes<sup>12</sup>:

From the EU budget<sup>13</sup>:

1. Direct payment schemes:

a) single payment scheme per area: 95.4751 euro/ha<sup>14</sup> in 2022;

*b)* redistributive payment (in 2022): the first interval 1-5 ha: 5 euros/ha, the second interval over 5 ha and up to 30 ha: 48.14 euros/ha<sup>14</sup>

c) payment for agricultural practices beneficial for the climate and environment: (2022) 57.8931 euro/ha<sup>14</sup>

d) payment for young farmers: (2022) 40.4514 euro/ha<sup>14</sup>

f) simplified scheme for small farmers. – max 1250 euro (according to other direct payments, the area cultivated, according to the Agency for Payments and Intervention in Agriculture (APIA) <sup>14</sup>

From national Budget:

2. Transitory national aid for arable land (ANT1) – in 2022 it was 11.94 euro/ha<sup>14</sup>

3. Transitory national aid for tobacco growing (ANT 4) – in 2022 it is 2584.54 euro/ha<sup>14</sup> (this is by far the largest per hectare subsidy)

4. State aid for diesel used in agriculture. (in 2022 was approx. 0.33euro/liter)<sup>15</sup>

<sup>&</sup>lt;sup>12</sup> https://www.madr.ro/culturi-de-camp/plante-tehnice/tutun-si-hamei.html

<sup>&</sup>lt;sup>13</sup> https://agrointel.ro/212711/document-oficial-apia-subventiile-pe-suprafata-si-cap-de-animal-care-se-platesc-in-acestan/

<sup>&</sup>lt;sup>14</sup> <u>https://agrointel.ro/217278/subventii-apia-2022-lista-cu-schemele-care-intra-acum-in-conturile-fermierilor/</u>

<sup>&</sup>lt;sup>15</sup> https://www.agerpres.ro/economic-intern/2022/07/18/apia-plateste-ajutorul-de-stat-pentru-motorina-utilizata-in-agricultura-in-primul-trimestru-din-2022-951011

# 3.2. Legal frame for tobacco products production, selling and consumption

The second group of legislative body looked at producing tobacco products, selling these products and consumption of tobacco. In this area, we can speak about **fiscal legislation**, that establish the taxation on tobacco products and the **legislation against smoking**, that establish rules for selling, advertising and consuming tobacco products.

# 3.2.1. The fiscal legislation on tobacco

In Romania, **fiscal legislation** views taxation on three layers: a specific tax, an ad valorem tax and VAT. Only cigarettes have this structure of three level of taxation. For cigars and leaf cigarettes, roll on cigars and other tobacco products, there is no ad valorem tax.

# Table 3 The new fiscal code valid in Romania starting with August 2022

	Product or group name product	Measurement unit (U.M.)	August 1 – 31 December 2022, inclusive The level of excise duties (lei/U.M.)
1	Cigarettes	1000 pieces	594.97 (≈120 Euros)
2	Cigars and Leaf Cigarettes	1000 pieces	
3	Fine-cut smoking tobacco, intended	kg	548.61 (≈110 Euros)
	for roll on cigarettes		
4	Other smoking tobaccos	kg	548,61(≈110 Euros)
5	Liquid containing nicotine	ml	0.64 (≈0.13 Euros)
6	Tobacco contained in products from heated tobacco	kg	594.97 (≈120 Euros)

Source: Ministry of Finance (2022)

The changes brought to the fiscal code for tobacco, started with 1<sup>st</sup> of August 2022 are summarized, as following (according to National Agency of Fiscal Administration, ANAF<sup>16</sup>)

Article 342, paragraph (2) is amended and will have the following content:

(2) By way of exception from para. (1) for cigarettes, fine tobacco cut, intended for rolling into cigarettes, cigars and cigarette rolls and others smoking tobacco, the excise duty level applies from 1 April of each year and is the one provided in annex no. 1.

In article 343, paragraphs (4) — (6) are amended and will have the following content:

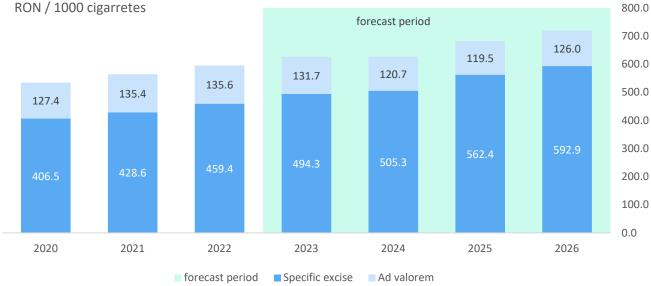
The *ad valorem excise duty* is calculated by applying the percentage legal on the retail price of cigarettes released for consumption. This legal percentage applies after as follows:

• 13% on the retail price of cigarettes issued for consumption, for the period August 1, 2022-31 March 2023 inclusive;

<sup>&</sup>lt;sup>16</sup> https://static.anaf.ro/static/10/Brasov/Brasov/accize.pdf

- 12% on the retail price of cigarettes issued for consumption, for the period April 1, 2023-31, March 2024 inclusive;
- 11% on the retail price of cigarettes issued for consumption, for the period April 1, 2024-31, March 2025 inclusive;
- 10% on the retail price of cigarettes released for consumption, starting from April 1, 2025.

Figure 2 Excise Structure and forecast according to current Fiscal Code



# Source: 2022 Applicable Fiscal Code

# 3.2.2. The legislation against smoking (B2)

One of the main concerns for which countries around the world are concerned about smoking consequences and the need to regulate it in order to diminish the negative effects of this habit is related to the spendings related to the diseases associated with smoking of the health system. For Romania, in 2020, the healthcare system's expenses for diseases associated with smoking amounted to 1.631 billion euros<sup>17</sup>.

The minimum legal smoking age in Romania is 18 years old, the sale of tobacco products is prohibited to those under the age of 18 and failure to comply with the regulation banning the sale of tobacco products to minors is punishable by a fine of 250-1,000 RON <sup>18</sup>.

The major step in diminishing smoking in Romania was made in 2016, together with the adopting the Law no. 15/2016 for preventing and combating the consumption of tobacco products. The provisions of

<sup>&</sup>lt;sup>17</sup> https://www.mediafax.ro/social/institutul-eurispes-record-negativ-romania-topul-fumatorilor-ue-32-2-populatiefumeaza-contrast-puternic-procentul-utilizatori-tigari-electronice-1-5-21092372)

<sup>&</sup>lt;sup>18</sup> <u>https://www.euromonitor.com/tobacco-in-romania/report</u>, p.4

the law ban the smoking in closed public places, including bars, restaurants, official buildings, cabs. The law completely prohibits smoking in health and education facilities, as well as in those intended for the protection and assistance of children (public or private)<sup>19</sup>. From March 17, 2016, when the anti-smoking law came into force, until September 2019, almost 5,500 people were fined for being caught smoking in closed spaces, according to the data provided by the Romanian Police. In total, the police fined private and legal persons who defied the anti-smoking law with 1.63 million lei during the three and a half years of law enforcement.

Law no. 201/ 2016 transposing the Tobacco Products Directive (2014/40/EU) entered into force on December 10, 2016. It establishes conditions for the manufacture, presentation and sale of tobacco products and related products and amending Law no. 349/2002 for prevention and combat the effects of the consumption of tobacco products. The law defines the term of "new tobacco product", as a " a tobacco product which is placed on the European Union market after 19 May 2014 and which does not fall into any of the following categories: cigarettes, rolling tobacco, pipe tobacco, hookah tobacco, cigarette (cigar), leaf cigarettes, cigarillos, chewing tobacco, snuff or oral tobacco".<sup>20</sup> The law mentions, also, that the advertising for electronic cigarettes and refill bottles is prohibited.

Law 210/2016, which came into effect in May 2017, also brought changes with regard to the health warnings on tobacco products. Health warnings, both written and graphic, must cover around 65% of a pack's surface. Examples of written warnings include "smoking kills your unborn child", "smoking increases the risk of blindness", and "smoking chokes your arteries". This clearly positioned Romania under a much stronger legislative framework, compared with previous years.

There was a legislation initiative started in September 2022, to prevent or restrict smoking among people below 18 years of age in public spaces. According to the law project, "the consumption of tobacco is prohibited for people who have not reached the age of 18 in the following public places: public roads, parks, stadiums and sports fields, cultural institutions, performance halls, institutions or economic units, means of transport, bus stations, railway stations and airports state and private and in public or private education units, as well as within a radius of 200 m around them. Non-compliance with these provisions will be sanctioned with a contravention fine from 100 lei to 500 lei". Thus, the draft law would have supplemented the current provisions by additionally prohibiting smoking on public roads, in parks and especially around educational institutions for young people under the age of 18.

<sup>&</sup>lt;sup>19</sup> https://www.gov.ro/ro/stiri/ghid-privind-implementarea-legii-nr-15-2016-pentru-prevenirea-i-combaterea-consumului-produselor-din-tutun1458135786

<sup>&</sup>lt;sup>20</sup> <u>https://static.anaf.ro/static/10/Anaf/legislatie/L 201 2016.pdf</u>, Article 2, paragraph n

# Important moments for tobacco industry regulations

- Limiting smoking in public spaces (Law no. 349/2002 for preventing and combating the effects of tobacco product consumption)
- Tobacco advertising on TV was banned in 2002 (Law 504/2002 of Audiovisual)
- Graphic health warnings on cigarette packs mandatory since 2008
- Banning e-cigarette advertisements, starting with 2012 (National Audiovisual Council Decision)
- Law no. 15/2016 for preventing and combating the consumption of tobacco products ban the smoking in closed public places, including bars, restaurants, official buildings, cabs. The law completely prohibits smoking in health and education facilities, as well as in those intended for the protection and assistance of children (public or private), at least 30 minutes a week for educational institutions, health, youth, and sports organizations, as well as NGOs, to disseminate information messages on smoking prevention and control.
- Law 201/2016 transposing the Tobacco Products Directive (2014/40/EU) regarding the establishment of the conditions for the manufacture, presentation and sale of tobacco products and related products and amending Law no. 349/2002 for prevention and combat the effects of the consumption of tobacco products
- In 2020 a project for a more restrictive law against smoking was rejected by the Romanian Parliament removing cigarettes from the common commercial flow
- NGOs in front of the fight against smoking: Pure Air Romania (Aer Pur), Romanian Smoking Prevention Network (Rețeaua Română pentru Prevenirea Fumatului (RRPF)), Coalition Romania Breathes (Romania Respiră)
- "2035 The first Romanian generation without tobacco" The campaign was launched by the Presidential Administration in 2016 - By implementing the WHO Framework Convention on Tobacco Control regarding the increasing cigarette taxes, enforcing marketing restrictions, warnings on cigarette packages, mass media campaigns and offering tobacco cessation services, smoking prevalence can be reduced by 26% within 5 years and by 34% within 15 years, from current levels.<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> https://www.euro.who.int/\_\_data/assets/pdf\_file/0007/312595/Tobacco-control-fact-sheet-Romania.pdf

# 4. Romanian Tobacco chain key players.

There are three segments throughout the tobacco chain<sup>22</sup> in Romania: raw tobacco producers, primary raw tobacco processing units and tobacco products manufacturers (companies that produce tobacco products for consumption).

# 4.1. Raw tobacco producers

The first segment is made up of raw tobacco producers, who are not allowed to do processing and production of tobacco products, but only to grow and sell the raw product to the intermediaries between the growers and the cigarette/tobacco products manufacturers. In 2021, the total production of raw tobacco was 971 tones<sup>23</sup>, more than 80% being cultivated in the Teleorman county (see figure 2)

Raw tobacco production decreased consistently and substantially since the change of the regime, (the fall of communism and the beginning of the transition to a market economy). In 1989, Romanian raw tobacco production was around 27,500 tons, cultivated on more than 35 thousand hectares. It decreased by half by 1995, and in 2000 it was around 11 thousand tons. The largest decreases were recorded in the counties of Dolj and Ialomița, which in 2000 produced 3396 and 2081 tons respectively, approximately 50% of the total amount of tobacco produced nationally. In 2021 in Ialomita there were no more tobacco plantations and in Dolj, only 90 tons of raw tobacco were produced.

The evolution of the cultivated area of tobacco had the same dynamics as the production of tobacco. As the European regulations against smoking advanced and became tighter, it created a disincentive for raw tobacco producers all over Europe, including Romania. Even so, the most important factor that contributed to the decrease in raw tobacco production was strong competition coming from other countries outside the EU, due to cheaper labour cost. A dramatic decrease is observed, especially between the years 2000 and 2006 (years when Romania prepared for EU accession and we had to comply with EU regulation), when the cultivated area decreased from 11,262 hectares to 1,411 hectares, respectively from a share of 0.13% in total cultivated agricultural land to only 0.018% in total cultivated agriculture. At the end of 2021, the agricultural area cultivated with tobacco was only 573 hectares and represents 0.007% of the total cultivated agricultural land, despite the massive tobacco subsidies (especially National Transitory Aid 4)

<sup>&</sup>lt;sup>22</sup> https://www.madr.ro/culturi-de-camp/plante-tehnice/tutun-si-hamei.html

<sup>&</sup>lt;sup>23</sup> National Institute of Statistics

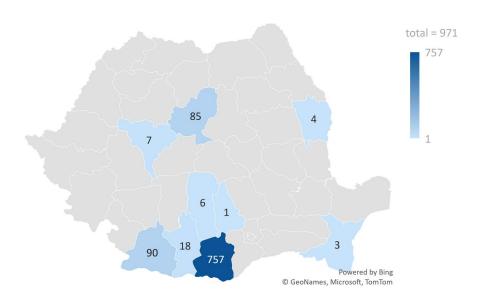
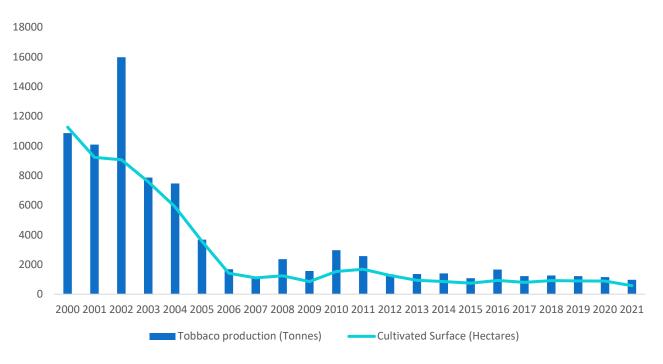


Figure 3 Tobacco Farming (tonnes) – 2021

Source: National Institute of Statistic

Figure 4 Tobacco Production and cultivate surface – 2021



Source: National Institute of Statistics

Tobacco farming in Romania is becoming more and more irrelevant, for tobacco manufacturers. As we will see below Romania, has a considerable manufactured tobacco production and a high need for raw tobacco and therefore became a net importer of unprocessed tobacco.

# 4.2. Primary raw tobacco processing units

The second segment is composed of intermediaries called **primary raw tobacco processing units** their main activity is to prepare the tobacco for manufacturing. These companies must be authorized by the Ministry of Agriculture and Rural Development (MADR). For the 2022 raw tobacco production, there were two companies as primary tobacco processing units authorized by the MADR: a Romanian company and a Hungarian company. The Romanian primary raw tobacco processing unit authorized by MADR was S.C. ROM – ITAL S.R.L, from Teleorman county. The Hungarian company as primary raw tobacco processing unit, authorized in other member state of the European Union and registered at MADR, was Universal Leaf Tobacco<sup>24</sup>. Both units are authorized to process national produced raw tobacco as well as imported raw tobacco.

# 4.3. Tobacco products manufacturers

**Tobacco manufacturers** (the third segment) are not allowed to primary process or grow tobacco. The tobacco products manufacturing market in Romania is dominated by the larger global producers:



Turnover (million RON)

# Figure 5 Tobacco Manufacturers



Source: Ministry of Finance

<sup>&</sup>lt;sup>24</sup> <u>https://www.madr.ro/culturi-de-camp/plante-tehnice/tutun-si-hamei.html</u>

The four largest tobacco manufacturers, by turnover, are JTI, Philip Morris, BAT and China Tobacco International. All four combined generate more than 95% of total tobacco manufacturing turnover. In the last 5 years both turnover and number of employees of the manufacturing segment have increased considerably. Even though cigarette production in 2021 was lower than the peak level of 2016, heated tobacco product production has increased dramatically, and shifting to novel tobacco products is the main reason for the turnover and increases in the number of employees. In 2017, Philip Morris finalised a 600 million euro investment in the Otopeni factory in order to be able to produce IQOS HTPs. Since 2016, their exports increased sevenfold. In 2021, it was the first year when the total value of heated tobacco exports (723 million euros) surpassed the total value of cigarettes exports (617 million euros).

# 5. Imports, Exports, and tobacco production in Romania

In the European Union, tobacco production has steadily declined since 1991, when around 400,000 tonnes were grown in eight EU countries, reaching 140,000 tonnes in 2018. In the same year, EU tobacco crops covered an area of 66,000 ha (half the surface covered in 2001).Tobacco is currently grown in 12 EU countries and the main producers are Italy, Spain, Poland, Greece, Croatia, France, Hungary and Bulgaria, accounting for 99% of EU tobacco production. Cultivated areas tend to shrink, mainly due competing low-cost producers in other parts of the world. Production varies between 1 and 3 tons per ha, depending on the variety. Virginia air-cured tobaccos account for 71% of production, light-air-cured Burley tobaccos 16%, sun-cured or oriental tobaccos 7% and other varieties, i.e., dark-air-cured and fire-cured brown tobacco, 6%. The EU produces less than 2% of the world's annual raw tobacco production.

Tobacco farming in Romania has decreased even more than the EU average, tobacco cultivated area in 2021 represented only 5% of the tobacco cultivated area in 2001. Consequently, Romania relies mainly on imported raw tobacco. The main trade partners from which Romania imports almost 75% of total raw tobacco are Belgium (21,4%), Germany (21,1%), Brazil (18,4%), USA (8,1%) and Croatia (5,6%). Romanian exports of raw tobacco are negligible, they represent only 4% of imports.

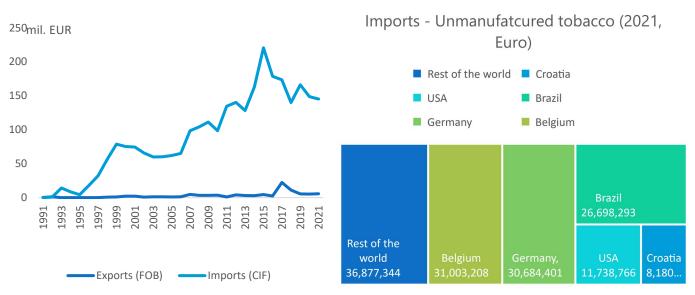


Figure 6 Romania raw tobacco foreign trade

Source: National Institute of Statistics, Eurostat

Cigarette production in Romania has gone through substantial changes, especially after the regime change and as a result of the transition to a market economy, as was to be expected. During the communist period, the cigarette manufacturing industry was under the Romanian Tobacco Monopoly being composed of 6 cigarette factories. After the fall of communism and the division of the state monopoly, privatizations began. *"By 2004, the companies that were formed during the privatization of the state monopoly left the market, selling their factories to multinational tobacco companies, and by 2011, none of these factories remained in operation. R. J. Reynolds (RJR) was the first of the multinational tobacco companies to enter the Romanian market, followed by British American Tobacco (BAT). RJR eventually sold its international operations to Japan Tobacco International (JTI), and Philip Morris International entered the market."<sup>25</sup>* 

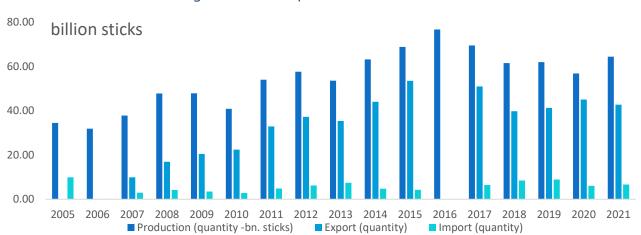


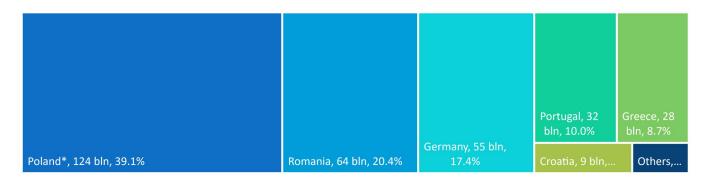
Figure 7 Tobacco production in Romania

#### Source: Eurostat

Cigarette production in Romania experienced an upward trend from 2005 to 2016, when peak production was achieved. In this period the number of cigarettes produced rose to be more than double from 34,5 billion sticks and almost non-existent exports to 76.7 billion sticks and almost 66% of total cigarettes production destined for exports (there are no data on imports and exports for 2016 on Eurostat, but we assumed similar levels of imports and exports as previous and next years). Since then, there has been a slow decline of manufactured cigarettes, however, from 2020, production is again on the rise.

<sup>&</sup>lt;sup>25</sup> Szabó A, Lázár E, Burián H, Rogers T, Foley K, Ábrám Z, Meghea C, Ciolompea T, Chaloupka FJ. The Economics of Tobacco and Tobacco Taxation in Romania. Tîrgu Mureş, Romania: University of Medicine and Pharmacy of Tîrgu Mureş, 2016.

# Figure 8 Cigarettes manufacture in Europe - 2021

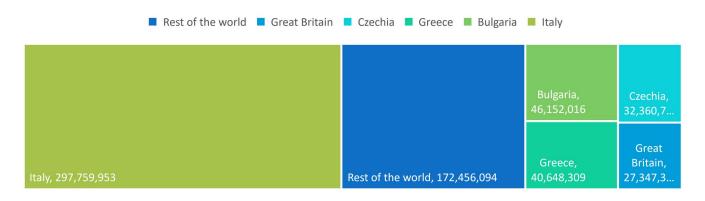


\* For Poland, data from 2020 was used, because the data for 2021 was not available.

## Source: Eurostat

After privatization, considerable investments in cigarette production were made. This, corroborated with declining cigarette production across the EU, particularly in Germany, has made Romania the second largest producer of cigarettes in the EU, after Poland. Thus, Poland, Romania and Germany, combined, produce approximately 77% of the total cigarettes produced in the EU. Although considerable investments have been made, Romania currently producing approximately 64 billion cigarettes, given the fact that cigarettes production is a very capital-intensive activity, a relatively low number of employees work in this industry, around 2500 employees, (see figure 5 -tobacco manufacturers)

# Figure 9 Romania Cigarettes Exports- total 616.7 (mil Euros)

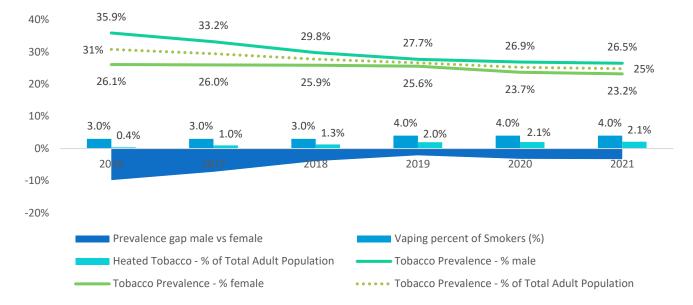


## Source: Eurostat

Total exports of manufactured cigarettes of Romania are amounting at approximatively 617 mil euros. Italy is by far the largest trade partner, almost half of total cigarettes exports are destined for Italy, followed by Bulgaria and Greece. Imports play a small role for manufactured cigarettes. In 2021, total imports stood at approximatively 82 mil Euros, representing around 13,3% of exports value. The main partners where Romania is importing cigarettes from are Turkey, Germany and Poland.

# 6. Tobacco consumption, tobacco price and tobacco affordability

Scientific literature shows that, although there are numerous methods by which cigarette consumption can be reduced (eg: regulation related to the advertising & sponsorship, bans on indoor smoking, information campaigns regarding the harmful effects of smoking and support lines for those who want to quit smoking, etc.) still, the most effective tool for smoking control is raising tobacco taxes. Although, tobacco taxes in Romania have increased significantly since the pre-accession process to the EU (the need to meet the requirements of the EU directive on tobacco taxation from 2006) and currently the requirement of the directive on tobacco taxation is fulfilled, the one regarding the fact that the total excise duty (specific and ad valorem) must be at least 90 euros per 1000 cigarettes, prevalence rates in Romania (25%) are still very high compared to the EU average (18%).



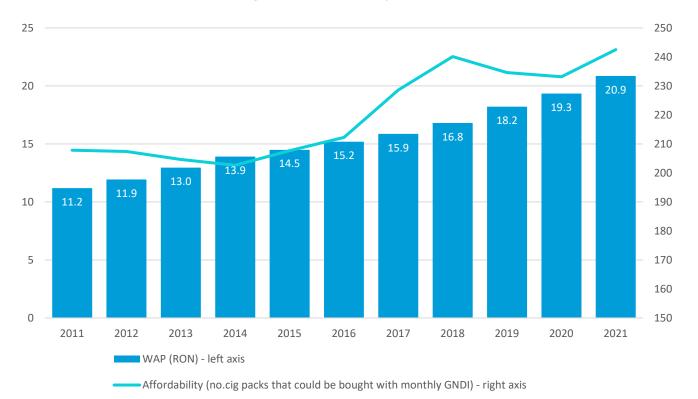
## Figure 10 Smoking Prevalence in Romania

#### Source: Euromonitor 2021

The smoking prevalence decrease is mostly driven by male prevalence decreases. From 2016 until 2021, male smoking prevalence decreases by almost 10% while female smoking prevalence decreased by only 3%. As consequence, the prevalence gap between male and female smokers reduces considerably, meaning that there are almost as many female smokers as there are male smokers (we didn't look at smoking intensity, but traditionally males tend to smoke more cigarettes per day than females). Another important aspect, worth mentioning is that novel tobacco products, such as vaping and heated tobacco, are constantly growing, becoming more and more used by smokers, and especially by youth smokers.

Despite the fact that there were substantial increases in the price of cigarettes, the per capita consumption of cigarettes increased by approximately 10% for the analysed period (2011-2021). The main reason why this happens is the fact that income level has increased at a rate that exceeds the price increases of

cigarette packs, which in relative terms means that cigarettes are becoming cheaper than they were at the beginning of the analysed period. Thus, a new concept becomes more relevant than the price of cigarettes itself, namely the concept of **affordability**. As we can see from the graph below, where for income the average monthly Gross National Disposable Income per capita was used, cigarettes are becoming more and more affordable. In relative terms, at the end of 2021, cigarettes are approximately 20% cheaper than they were in 2011. In other words, average monthly Gross National Disposable Income per capita in 2011 could buy 208 packs of cigarettes (considering the WAP reference price), while in 2021 243 cigarettes packs could be purchased.



#### Figure 11a Affordability and WAP

Source: Eurostat and EU Taxation and Customs Union.

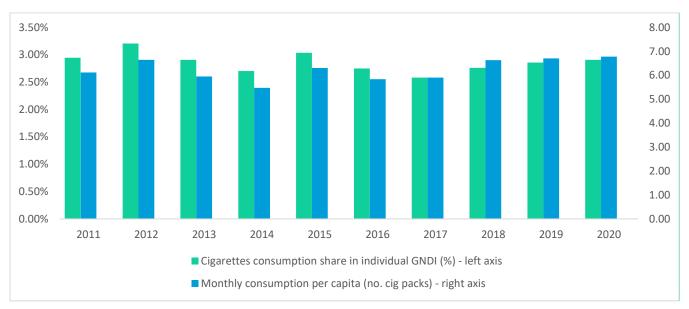


Figure 11b Cigarettes consumption

Source: Eurostat and NIS

To determine per capita consumption, only the population over 15 years of age was taken into consideration, without however dividing between smokers and non-smokers. Thus, it is possible to see an increase from 6.1 packs of cigarettes per month in 2011 to 6.8 packs of cigarettes per month in 2021 (consumption considered at the level of the entire population over 15 years old). Corroborating this increase in per capita consumption with the information from Figure 10 where it can be observed that the prevalence is decreasing, the logical conclusion that can be drawn is that the intensity of smoking has increased considerably. Even though income is constantly increasing as well, the share of monthly income spend on cigarettes consumption is quite constant (if we look at the period from 2017 and onwards is actually on the rise and is almost 3% of the total income).

# 7. Estimation of the price and income elasticity using macroeconomic data

In order to estimate the price and income elasticity of cigarette demand in Romania, we used aggregate data on cigarette consumption, cigarette prices, income and public policies from 2005 to 2020 and time series econometric methods. According to available data, we estimated cigarette demand based on three different models in linear functional form. All the models include tobacco CPI, and each of the three models include a different proxy for the income.

As proxies for income, we chose real GDP per capita, real average wage and real GNDI per capita. Additionally, other control variables were tested, however, the results demonstrated that their impact on cigarette consumption per capita is not statistically significant, so we did not include them in further analyses in this part of the study.

The shortcoming of such an aggregate approach is that in considers all the effects of preferences and behaviours of different groups, not being able to estimate a more detailed elasticity for different categories of smokers (compared to what Deaton methodology would have been able to provide using micro data). However, this approach, given a reasonable long time series can provide a useful approximation at national level, that can be a good reference from a policy perspective.

Data used in the model

- Consumption per capita expressed in cigarettes per inhabitant per year. The total sales were estimated based on emitted stamps. Consumption per capita was estimated using estimated sales and population above age of 15.
- Tobacco Consumer Price Index (TCPI) National Institute of Statistics (NIS) measures separately the evolution of prices for most consumed tobacco products as part of the overall CPI. TCPI is computed on monthly basis, reported to previous months. By using December (current year) reported to December (pervious year) is obtain year-on-year (YoY) TCPI. In the current analysis 2005 was used as the basis for the TCPI, and the following values were computed in reference to these values.
- Real GDP per capita expressed in 2021 prices GDP data was used from NIS while the GDP deflator used to transform nominal values in real values was used from World Bank. The values were computed in 2021 values as this is the latest available data and more recent data are more relatable (compared to older values).
- Real Net Average Wage expressed in 2021 prices To obtain real values, Average Net Wage from NIS was adjusted with CPI. The data were transformed in real values corresponding to 2021 for the same reason as above (relatedness).
- Real Gross National Disposable Income in 2021 prices GNDI was extracted from AMECO database. In AMECO data base, the value for 2020 was missing. To fill this gap an interpolation method was used to estimate GNDI. CPI was used to transform from nominal to real values.

Statistical tests were performed on data to ensure the reliability of the entire process (stationarity and cointegration tests). To estimate elasticities was used a methodology proposed by Ross & Al-Sadat. (2007)<sup>26</sup>, which implies using a well-known econometric approach (Engle-Granger approach) to estimate both long-run<sup>27</sup> and short-run<sup>28</sup> price elasticity of demand as well as income elasticity of demand.

In the model estimations it was observed that control variables such as male to female ratio or inside smoking ban<sup>29</sup> had no statistical significance in the estimation, so they were dropped from the model. In the end, the model remained a very simple macro model that considered only the evolution of price approximated by the evolution of Tobacco CPI and evolution of income approximated by three different variables (leading to three different equations): gross domestic product per capita, average net wage, gross national disposable income.

Given the fact the yearly data provide, even for a long interval, a relatively small sample (from an econometric perspective), a bootstrap procedure was used to generate a random sample of estimators based on the values of the model (mean and variance) to find a more reliable and non-parametric confidence interval. The results are presented in Table 5.

estim	Model estimations (long-run)		Bootstrapped estimations (long-run)			ons	
		Price elasticity			Income elasticity		
,	-	mean	-95%	95%	mean	-95%	95%
-0.7912	1.2569	-0.8188	-0.8346	-0.8030	1.3105	1.2735	1.3474
-0.7433	0.6999	-0.7368	-0.7471	-0.7265	0.6807	0.6664	0.6950
0 7022	0 7/25	0 7272	0 7515	0 7 2 2 9	0 8002	0 7751	0.8253
	estime (long Price elasticity -0.7912	estimations (long-run) Price Income elasticity elasticity -0.7912 1.2569 -0.7433 0.6999	estimations (long-run)   Price Income   elasticity elasticity   -0.7912 1.2569   -0.7433 0.6999	estimations (long-run)   Price Income Price elasticit   elasticity elasticity mean -95%   -0.7912 1.2569 -0.8188 -0.8346   -0.7433 0.6999 -0.7368 -0.7471	estimations (long-run) (long-run)   Price Income Price elasticity   elasticity elasticity mean   -0.7912 1.2569 -0.8188   -0.7433 0.6999 -0.7368	estimations (long-run) (long-run)   Price Income elasticity Price elasticity Income   -0.7912 1.2569 -0.8188 -0.8346 -0.8030 1.3105   -0.7433 0.6999 -0.7368 -0.7471 -0.7265 0.6807	estimations (long-run) (long-run)   Price Income Price elasticity Income elasticity   elasticity elasticity mean -95% 95% mean -95%   -0.7912 1.2569 -0.8188 -0.8346 -0.8030 1.3105 1.2735   -0.7433 0.6999 -0.7368 -0.7471 -0.7265 0.6807 0.6664

## Table 5 Estimation results

Source: own calculation based on collected data

<sup>&</sup>lt;sup>26</sup> Ross, H., & Al-Sadat, N. A. (2007). Demand analysis of tobacco consumption in Malaysia. Nicotine & tobacco research, 9(11), 1163-1169.

<sup>&</sup>lt;sup>27</sup> The intuition behind this approach is based on microeconomics principles for elasticity calculation and is straight forward: the coefficient resulted from the model (i.e., the slope of the demand) is multiplied by ratio between average price and average consumption (or fitted values for price and consumption) to estimate the value for price elasticity of demand. The income elasticity of demand is estimated analogously.

<sup>&</sup>lt;sup>28</sup> To estimate short-run elasticity data was used in first difference. By using the yearly differences, the model focuses on the changes from year to year and not on the levels of consumption in absolute terms, capturing the average short-term evolution on the analyzed period. Also, an error correction term was added to the model.

<sup>&</sup>lt;sup>29</sup> Smoking ban was quantified as a dummy variable with values of 1 in the years after smoking was prohibited in public enclosed spaces (e.g., restaurants, bars, office buildings etc.) and 0 in the prior years.

For the long run estimation, the value for price elasticity of the demand of tobacco ranges from -0.70 to -0.79, while the elasticity of income ranges from 0.69 to 1.25.

Given the specificities of the proxies used to approximate income, we consider that the best one is real GNDI because it is composed from more sources of income compared to average wage (e.g., remittances, social transfers, rents, intellectual property rights, donations, etc.) and the GDP has a strong focus on production component.

The results presented above can be considered a national mean, as the model was estimated on aggregate data about prices and consumption. For more detailed estimation about price elasticity of demand for different groups of smokers, individual consumption data would be necessary. However, those individual data need to be aggregated at some point to estimate a national price elasticity of demand as a guide for policy purposes.

# 7.1. Policy impact estimation

To estimate the impact of any fiscal modification on consumption per capita and on tax revenues were used long term elasticities estimated by the model that used GNDI as proxy (i.e., price elasticity of demand = -0.7033 and income elasticity of demand = 0.7434).

The forecast covers 2023 to 2026, though also 2022 values were estimated (and for some intermediary data, even 2021 had to be estimated as there were no publicly available data at the moment of the report).

To perform such forecasts, a series of hypothesis were used. For robustness, there were also considered some variations from the baseline scenario, which will be presented further in the report. The following hypothesis represent the baseline scenario:

- Base rate for excise yield is the one presented in the currently applicable Fiscal Code (published by the Ministry of Finance).
- Producer's share of WAP is constant for the entire period, set at 26.98% of Weighted Average Price (WAP), based on the most recent value (estimation for 2022).
- Population above 15 years old maintain its current trend (i.e., an annual decrease of 86.594 inhabitants). This is a more conservative approach compared to a constant population hypothesis.
- Income growth rate is equal to computed CAGR of GNDI (i.e., 5,08%).
- VAT is constant for the entire period, set at 19% (current rate).
- Based on the above assumptions, resulted that overall excise duty (as % of WAP excluding VAT) is 57.05% (the same as in 2022), constant for the entire period.

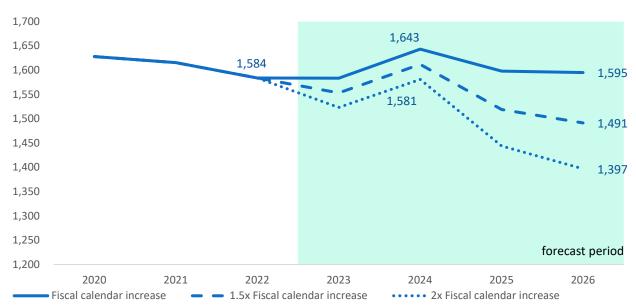
For illustrative purposes, there were considered several alternative scenarios:

- Two more scenarios for the modification of excises:
  - An increase of excises 1,5 times higher than the one presented in the Fiscal Code.
  - An increase of excises 2 times higher than the one presented in the Fiscal Code.
- One alternative branch of scenarios for a slower annual increase of the income, of only 3%, for the next 4 years (2023-2026)

The approach used to perform forecasts consists of the following steps:

- WAP (per 1000 cigarettes) was estimated based on the level of excises.
- The excise presented in the fiscal calendar is the total excise yield (specific excise + ad valorem excise). As an additional step, the excise was split in specific excise and ad valorem excise using estimated WAP as a reference for ad-valorem component.
- Using the values for elasticities from the econometric model, computed changes of forecasted WAP and hypothesized values of income growth were used to estimate the evolution of per capita consumption.
- Based on forecasted per capita consumption and hypothesized population evolution, total volume of sales was estimated.
- Based on total sales, total tax revenues were computed, considering only excised yield (VAT was not considered in tax revenues estimations).

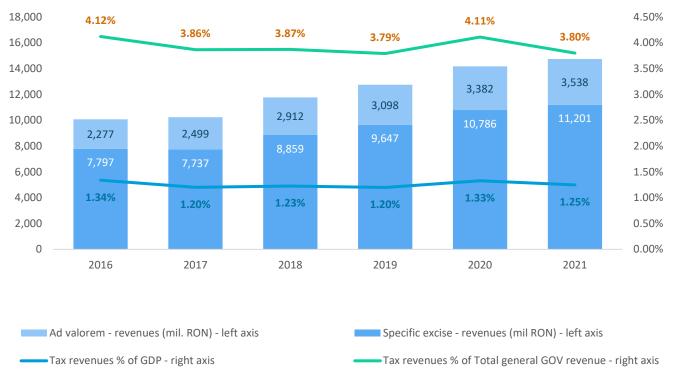
Figure 13 presents the evolution of historical and forecasted consumption per capita. It consists of the baseline scenario with two alternative increases in excise duty (higher than the values provided in current Fiscal Code). The increase from 2024 is generated by the fact that announced excises will not increase in 2024, while the model assumed (very conservatively) that the incomes will continue to increase in real terms with 5.08% yearly. In the baseline scenario, at the end of the forecast period, the per capita consumption is estimated to be slightly higher than in 2022. This result is due to the fact that the values for price and income elasticities used in forecast are very close to each other in absolute terms. This means that an increase in price is compensated by a similar increase in income (the model suggests that the excise and consequently the increase in cigarettes pack must be higher than the increase income in order to achieve a per capita cigarettes consumption.



## Figure 12 Evolution of per capita consumption (per year)

## Source: own calculation based on collected data

Besides the impact on individual consumption, it is important to also consider the evolution of tax revenues associated with the modification of excise, and the consumption. Before moving to a projection on future tax revenues from cigarettes duties, an analysis of the current situation and past evolution is welcomed. As we can observe cigarettes related tax revenue play a disproportionally important role in total general government revenues. Revenues from excise only amount to 3.8% of total general government revenues. The main reason for this high share in total general government revenues is the low capacity of the government to collect taxes, total general government revenues has very low ratio in GDP compared to EU average (32.8% vs 46.8%).

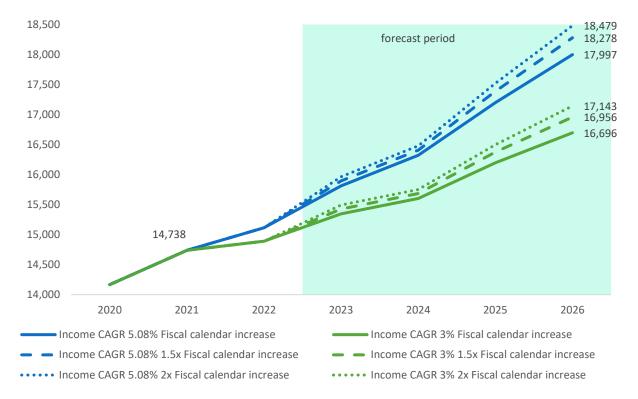


## Figure 13 Evolution of excise revenues

## Source: EU Taxation and Customs Union, Fiscal Code

For performing the tobacco tax revenue estimation, we maintained all the aforementioned hypotheses. Also, in the estimation of tax revenues, only the excise yield was considered (the VAT was excluded from these forecasts).

The two clusters of scenarios consider the baseline evolution (blue lines) and a situation where the income increases at a slower rate than the one observed historically (i.e., 3% annually). The dotted lines represent higher modifications of excise compared to the ones published by the Ministry of Finance. As it can be observed from Figure 14, in all the six situations, the tax revenues follow an upward trend (even in 2024 when there is no modification of excises, as provided in the Fiscal Code). In the baseline scenario, the tax revenues increase from 14.7 billion RON in 2021 to approximately 18 billion in 2026, while in the more conservative scenario, the revenues increase to 16.7 billion RON.



## Figure 14 Estimated tax revenues

## Source: own calculation based on collected data

Given the fact that the elasticity of demand for cigarettes is subunit, in other words cigarettes have an inelastic demand, an increase in taxation will lead to an increase in revenues to the state budget. In the scenario in which a doubling of the increase of the total excise on cigarettes would be applied, compared to the one proposed now in the Fiscal Code, for the entire period 2023-2026, the cumulative value of the collected taxes would be higher by 1.1 billion RON than that estimated to be collected according to the current provisions of the Fiscal Code

# 8. Policy recommendations

- To maintain the effects on consumption from tobacco tax increases, in years with high inflation such as 2022, when inflation has been 15.88% and food inflation even higher as of 19.12% as of September, a tobacco excise tax increase should be at least indexed to inflation. The 2022 cigarettes excise increase from 2021 level was only 5.5% (three times lower than inflation).
- 2. A steeper increase in tobacco excise duties would reduce consumption and consequently will reduce government health expenditure on tobacco related diseases at the same time as generating a higher level of economic productivity at the national level.
- 3. Romania currently meets the requirement to have the specific excise duty level of 90 euros and its level to be at least 60% of the total taxes, but barely (the specific excise duty is 92.8 Euros and the specific excise duty level is 60.33% of total taxes). The specific excise duty at 60.33% of retail price is quite far from the international best practice of 70 percent. At the end of this year, a new Directive on Tobacco Products and Taxation is expected to be issued by the European Commission. It is anticipated that this Directive will stipulate an increase in the minimum specific excise duty for 1000 cigarettes to 180 Euros, practically doubling the minimum threshold compared to the current value, which will put Romania in a situation where it will have to increase very much and very suddenly excise duties in order to transpose the directive.
- 4. For the year 2024, an increase in the excise duty should be foreseen (in the current Fiscal Code, the excise duty is foreseen to remain at the same level as the previous year) especially in an inflationary context such as the current one. For 2023, an increase of 5.2% of cigarettes excise is the provision in the current Fiscal Code, while the National Bank of Romania forecasts an inflation of approximatively 11% for the year.

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# Statistic databases

- 1. Euromonitor
- 2. European Commission, Taxation and Customs Union
- 3. Eurostat
- 4. Ministry of Agriculture and Rural Development
- 5. Ministry of Finance
- 6. Romanian National Institute of Statistics

# Appendix no.1. Legislation governing the raw tobacco market in Romania

National legislation:

- Law no. 236/2003 regarding the organization of the raw tobacco market in Romania;
- Order no. 74/2012 regarding the authorization of primary raw tobacco processing units with subsequent amendments and additions;
- Order no. 268/2012 regarding the approval of the contract-type of cultivation of raw tobacco;
- Emergency Ordinance no. 11/2021 for the approval of payment schemes and guarantee instruments that apply in agriculture in 2021 and 2022;
- Order no. 45/2021 for the approval of the eligibility criteria, the specific conditions and the way of implementing the payment schemes provided for in art. 1 paragraph (2) and (3) and art. 35 para. (3) from Government Emergency Ordinance no. 11/2021 for the approval of payment schemes and guarantee instruments that apply in agriculture in 2021 and 2022;
- Order no. 46/2021 regarding the approval of the standard form of the single payment request for the year 2021;
- Government Decision no. 1174/2014 regarding the establishment of a state aid scheme for the reduction of excise duty on diesel fuel used in agriculture, with subsequent amendments and additions;
- Emergency Ordinance no. 12/2006 for the establishment of market regulation measures in the cereal and processed cereal products sector, with subsequent amendments and additions;
- Law no. 145/2014 for the establishment of measures to regulate the market of products from the agricultural sector, with subsequent amendments and additions;
- Order no. 1846/2014 regarding the implementation of the provisions of art. 5 paragraph (1) of Law no. 145/2014 for the establishment of measures to regulate the market of products from the agricultural sector, with subsequent amendments and additions;
- Order no. 20/2015 regarding the implementation of the provisions of art. 9 para. (1) from Law no. 145/2014 for the establishment of measures to regulate the market of products from the agricultural sector, with subsequent amendments and additions;

# EU legislation:

- Regulation (EC) no. 1307 /2013 of the European Parliament and of the Council of 17 December 2013 establishing rules regarding direct payments granted to farmers through support schemes within the framework of the common agricultural policy and repealing Regulation (EC) no. 637/2008 of the Council and Regulation (EC) no. 73/2009 of the Council
- Regulation (EC) no. 1308/2013 of the European Parliament and of the Council of December 17, 2013 establishing a common organization of agricultural products markets and repealing Regulations (EEC) no. 922/72, (EEC) no. 234/79, (EC) no. 1037/2001 and (EC) no. 1234/2007 of the Council;
- Regulation (EU) 2020/2220 of the European Parliament and of the Council of 23 December 2020 establishing certain transitional provisions regarding the support granted from the European Agricultural Fund for Rural Development (EAFRD) and from the European Agricultural Guarantee

Fund (EAGF) in the years 2021 and 2022 and amending Regulations (EU) no. 1305/2013, (EU) no. 1306/2013 and (EU) no. 1307/2013 in terms of resources and the application of the respective regulations in the years 2021 and 2022 and Regulation (EU) no. 1308/2013 regarding the resources and distribution of such support for the years 2021 and 2022.