

Landscape View of the Tobacco Market in Slovakia

Report

Martin Hudcovský and Karol Morvay

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Disclaimer

Institute of Economic Research SAS has been working in cooperation with the Tobacconomics program now at Johns Hopkins University (JHU) (previously housed at the University of Illinois Chicago, or UIC) to conduct economic research on tobacco taxation in Slovakia. JHU is a partner of the Bloomberg Initiative to Reduce Tobacco Use. The views expressed in this document cannot be attributed to, nor do they represent, the views of JHU, UIC, or Bloomberg Philanthropies.

Introduction

This report provides an overview of the size, structure, and characteristics of the tobacco products market segment in Slovakia. Both sides of the market—supply and demand—are described in detail, including a short historical overview, price trends, smoking habits of consumers, and related legislation. The report concludes with recommendations for measures to be implemented to influence development of tobacco use and respond to the changing environment of tobacco market.

Supply Side

Analysis of the Supply of Tobacco Products in the Slovak Market

This part of the analysis provides insight into the role of tobacco products in the Slovak market, a macroeconomic view of the supply and uses of tobacco products, and a description of the fiscal dimension. This study demonstrates the peculiarities of the structure of the supply and uses of tobacco products (such as the transition from production to total dependence on imports), the share of tobacco products within parameters of the economy (including the share of imported tobacco products in total imports, the share of exported tobacco products in total exports, the share of tobacco product consumption in total consumption of households, and the share of tobacco product production in total production), the position of the excise duty on tobacco products in the tax system, and the peculiarities of illegal production and distribution.

The following data sources are utilized in this study to examine the supply and use of tobacco products in Slovakia:

- 1) In terms of methodology, supply and use tables come from OECD databases. These tables report supply and use categories, but with data available only up to 2019. The supply and use categories used are shown in Box 1 for a better grasp of the terminology.
- 2) Data from the PRODCOM statistical survey provide information on sold production, imports, and exports (tobacco product data broken down into more detail). In this case, data up to 2022 were available.
- 3) The previous two dominant approaches are further extended with additional views on tobacco cultivation, illicit production and imports of tobacco products, and the fiscal role of tobacco taxation (the latter relies on the State Final Account of the Slovak Republic).

Box 1. Arrangement of the categories used in the supply and use assessment

For an accurate understanding of the terminology, the categories of supply and use are illustrated in Box 1. They are consistent with the terminology applied in the OECD supply and use tables. For each category, the figures for 2019 are given in brackets, in millions of euros.

Supply categories:

Total supply at purchasers' prices (1,453) (million EUR)			
Total supply at basic prices (302)		Trade and transport margins (217)	Taxes less subsidies on products (934)
Output at basic prices <i>(domestic production)</i> (2)	Imports (300)		

Use categories:

Total use (= Total supply at purchasers' prices) (1,453) (million EUR)			
Intermediate consumption (108)	Final consumption <i>(by households, by nonprofit institutions serving households, by government)</i> (1,341)	Gross capital formation <i>(fixed capital, inventories, valuables)</i> (-1)	Exports (6)

Source: Authors' elaboration based on OECD databases

Full Dependence on Imports

The following sections demonstrate that the supply of tobacco products is almost entirely covered by imports, with domestic production playing a rather insignificant role. In prior decades (until the 1990s), Slovakia produced its own tobacco products. It was provided by a state-owned enterprise (market dominant), and domestic brands were very popular. However, these were subsequently replaced by foreign, globally distributed brands. Currently, domestic production has almost completely disappeared.

The former dominant domestic producer no longer exists and was privatized. The winner of the international privatization tender was Reemtsma, so the original state enterprise Slovak Tobacco Industry (under the new business name Slovak International Tabak a.s.) became a subsidiary of the German tobacco company Reemtsma. In 2002, the British company Imperial Tobacco bought Reemtsma, including its Slovak subsidiary. The Slovak subsidiary was renamed Imperial Tobacco Slovakia a.s.; this subsidiary ceased the production of cigarettes (2004) and cigars and smoking tobacco (2008) and operates on the Slovak market as a sales and marketing company.

Table 1. Structure of tobacco product supply (supply = output + import) in basic prices

	Total supply of tobacco products	Output (produced in domestic economy)	Imports
<i>Tobacco product supply at basic prices (million EUR)</i>			
2015	135	6	129
2016	137	4	133
2017	192	3	188
2018	266	2	263
2019	302	2	300
<i>Percentage of tobacco product supply at basic prices</i>			
2015	100	4.4	95.6
2016	100	3.1	96.9
2017	100	1.8	98.2
2018	100	0.8	99.2
2019	100	0.8	99.2

Note: Basic prices do not include taxes on products or margins (transport and trade margins).

Source: OECD, Authors' calculations

The total annual value of the supply (and the use) of tobacco products at purchasers' prices amounts to EUR 1.453 billion (see Box 1 for the composition of this volume). The vast majority of this value corresponds to taxes on products (as will be shown more precisely later, in Figure 1 and Scheme 1). If taxes and margins are separated from the value of tobacco product supply, total tobacco product supply in Slovakia amounts to only approximately EUR 302 million (2019, in basic prices). In the period 2015–2019, up to 95–99 percent of the total supply of tobacco products came from abroad (Table 1). The value of imports had an increasing trend, and the values of domestic production (output) were negligible and even further decreasing.

As the supply and use tables only show trends up to 2019, the picture is further complemented by PRODCOM data from 2022 (allowing not only an aggregated view of tobacco products but also a more detailed view). A common important feature across all commodity groups is import dependence (Table 2). Exports, if any, are in the form of re-exports.

Table 2. Static (more detailed) look at import, export, and sold domestic production of selected types of tobacco products

	Variable	2022
Cigars, cheroots, and cigarillos containing tobacco or mixtures of tobacco and tobacco substitutes (excluding tobacco duty)		
	Import (EUR, IMPVAL)	28,795,114
	Export (EUR, EXPVAL)	11,123,397
	<i>Sold production (EUR, PRODVAL)</i>	0
Cigarettes containing tobacco or mixtures of tobacco and tobacco substitutes (excluding tobacco duty)		
	Import (EUR, IMPVAL)	170,104,107
	Export (EUR, EXPVAL)	58,361
	<i>Sold production (EUR, PRODVAL)</i>	0
Smoking tobacco (excluding tobacco duty)		
	Import (EUR, IMPVAL)	6,694,446
	Export (EUR, EXPVAL)	70,311
	<i>Sold production (EUR, PRODVAL)</i>	0
Manufactured tobacco, extracts and essences, other homogenized or reconstituted tobacco, n.e.c.		
	Import (EUR, IMPVAL)	92,371,333 (2021)
	Export (EUR, EXPVAL)	1,285,905 (2021)
	<i>Sold production (EUR, PRODVAL)</i>	0
Cured stemmed/stripped tobacco leaves		
	Import (EUR, IMPVAL)	50,057 (2021)
	Export (EUR, EXPVAL)	41,029 (2021)
	<i>Sold production (EUR, PRODVAL)</i>	0

Note: Standard PRODCOM system variables are used¹: EXPVAL: value of exports in euros, derived from the External Trade statistics; IMPVAL: value of imports in euros, derived from the External Trade statistics; PRODVAL: value of production in euros
Source: PRODCOM, Eurostat (2023)

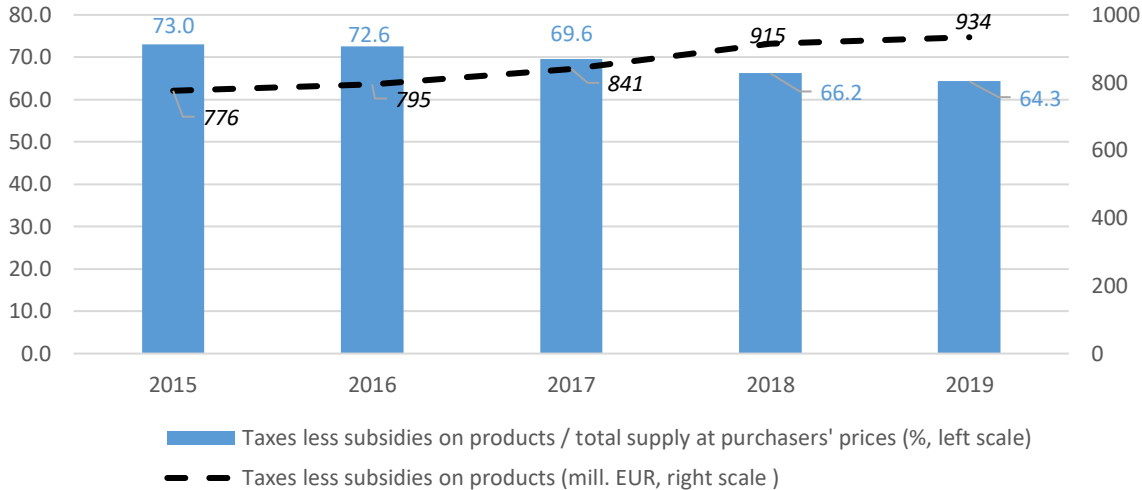
¹ More on these variables and the PRODCOM methodology can be found:
<https://ec.europa.eu/eurostat/documents/3859598/14358654/KS-GQ-21-024-EN-N.pdf/f6533c1c-d95a-4e65-6c43-9aad5f72187d?t=1645786507249>

Value Structure of Supply and Use

The previous section showed the dependence of the tobacco product supply on imports. However, this is not the only notable peculiarity in the structure of supply and use:

- 1) Tobacco is a commodity with an extraordinarily high, yet slightly declining, product tax burden. Taxes on products account for more than two-thirds of the total value of tobacco products in the Slovak market. However, their share has been declining over time (Figure 1).
- 2) Given the nature of the commodity, it is understandable that the structure of use is clearly dominated by household final consumption (Table 3). Approximately 5–8 percent of tobacco products are used for intermediate consumption (input for the activity of different sectors).
- 3) An insignificant amount is exported. In the absence of relevant domestic production, exports are determined by re-exports.

Figure 1. Share of taxes on products in the value of total tobacco product supply in purchasers' prices



Note: Strictly expressed, these are taxes less subsidies on products. These taxes are part of the difference between supply in purchasers' prices and supply in basic prices, as shown in Box 1 and Scheme 1.
 Source: OECD (2023), Authors' calculations and design

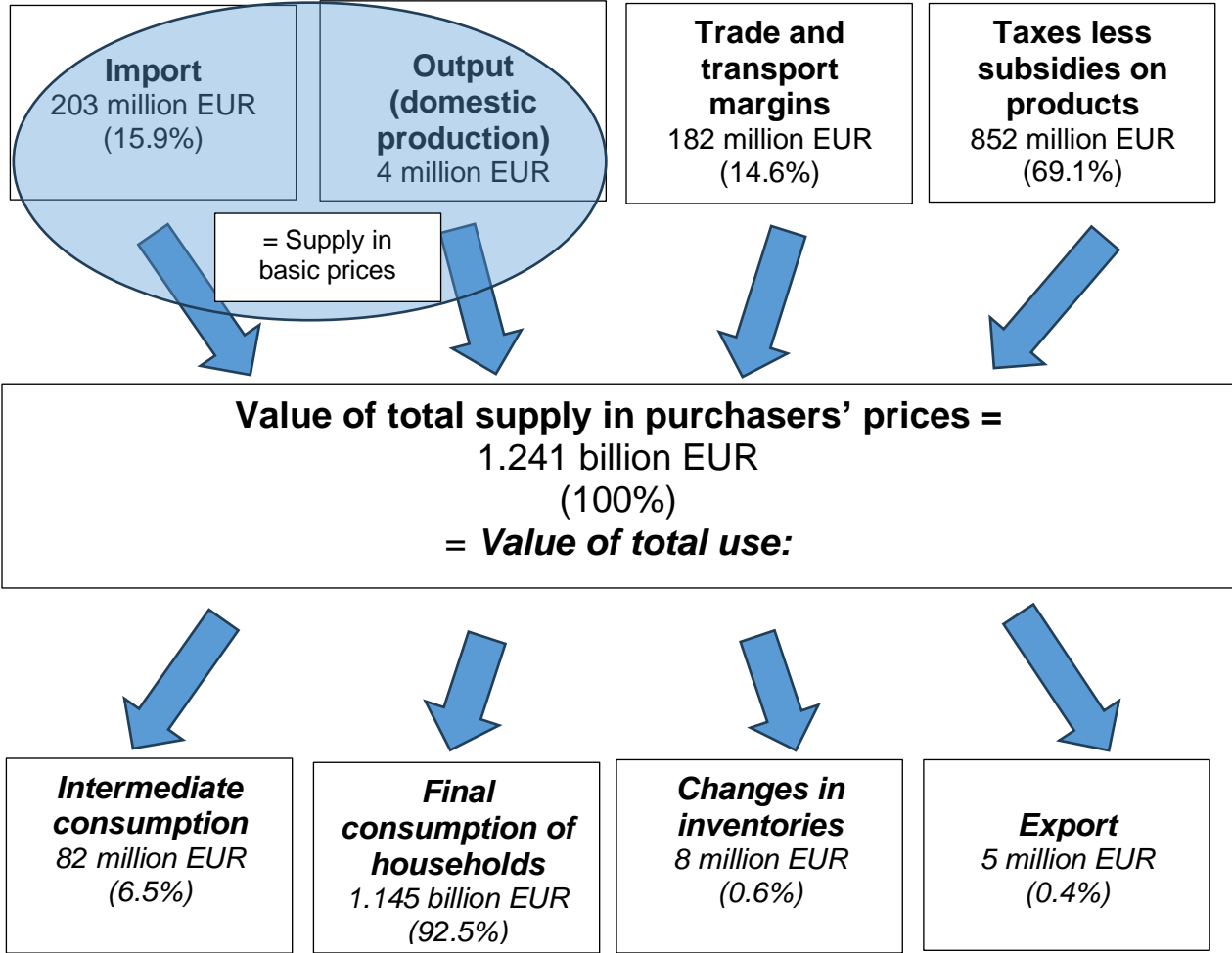
Thus, the model of supply and uses of tobacco products shows that the vast majority of (almost entirely imported) tobacco products are used in household final consumption, with marginal quantities going for re-export or intermediate consumption (Scheme 1).

Table 3. Structure of tobacco product use

	Total use of tobacco products	Intermediate consumption	Final consumption of households	Changes in inventories	Export
<i>Tobacco products use (million EUR)</i>					
2015	1,063	49	1,013	-1	2
2016	1,094	54	1,042	-5	4
2017	1,209	81	1,089	32	6
2018	1,383	120	1,240	14	9
2019	1,453	108	1,341	-1	6
<i>Percentage of tobacco product use</i>					
2015	100	4.6	95.3	-0.1	0.2
2016	100	4.9	95.2	-0.5	0.4
2017	100	6.7	90.1	2.7	0.5
2018	100	8.7	89.7	1.0	0.6
2019	100	7.4	92.3	-0.1	0.4

Source: OECD (2023), Authors' calculations

Scheme 1. Mapping of supply and use of tobacco products

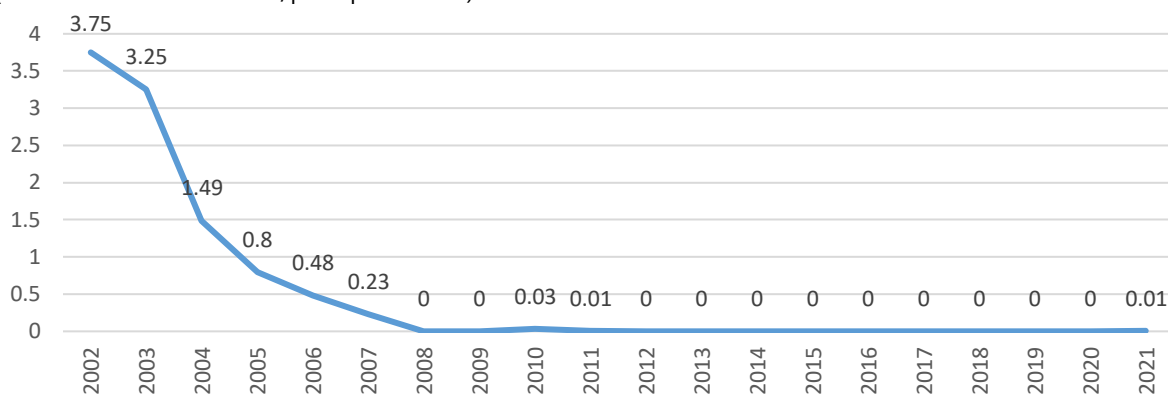


Notes: The values for the categories shown correspond to the average for the period 2015–2019. The categories shown correspond to the methodology of the national accounts (specifically, the goods and services account) and the supply and use tables. It should be kept in mind that the scheme yields average values over the medium term. However, the values fluctuate. It is, therefore, useful to compare these average values with the data in Table 3. Source: OECD (2023), Author design

As the domestic production of tobacco products has declined, so has agricultural production of tobacco itself (Figure 2). Even 20 years ago (2002), tobacco cultivation in Slovakia was already relatively insignificant. Since then, it has declined sharply, and since 2008, the statistics on crop revenue no longer show any revenue for farmers from tobacco cultivation. This is in line with the overall trend of declining diversity in crop production in Slovak agriculture over the last three decades and the total absence of local production of tobacco products.

Figure 2. Plant production of tobacco commodity (million EUR)

(revenue from raw tobacco/plant production)



Source: SO SR (2023), Authors' elaboration

A review of the supply and uses of tobacco products leads to the following conclusion for the topic of taxation: given the negligible quantities of domestic production, there is no argument about the possible undermining of domestic production with an increased tax burden on tobacco. There can also be no question of the impact on employment, value added, or exports. Taxing tobacco products affects only consumption (or importer and distributor activity) and does not directly affect any domestic production or employment linked to production. Thus, a contraction in the consumption of tobacco products (as a result of an increased tax burden on tobacco products) can undermine only part of the output or employment in the trade and distribution of tobacco products. However, substitution is likely to occur: reduced household demand for tobacco products may be replaced by demand for other goods and services.

Shares in Macroeconomic Indicators

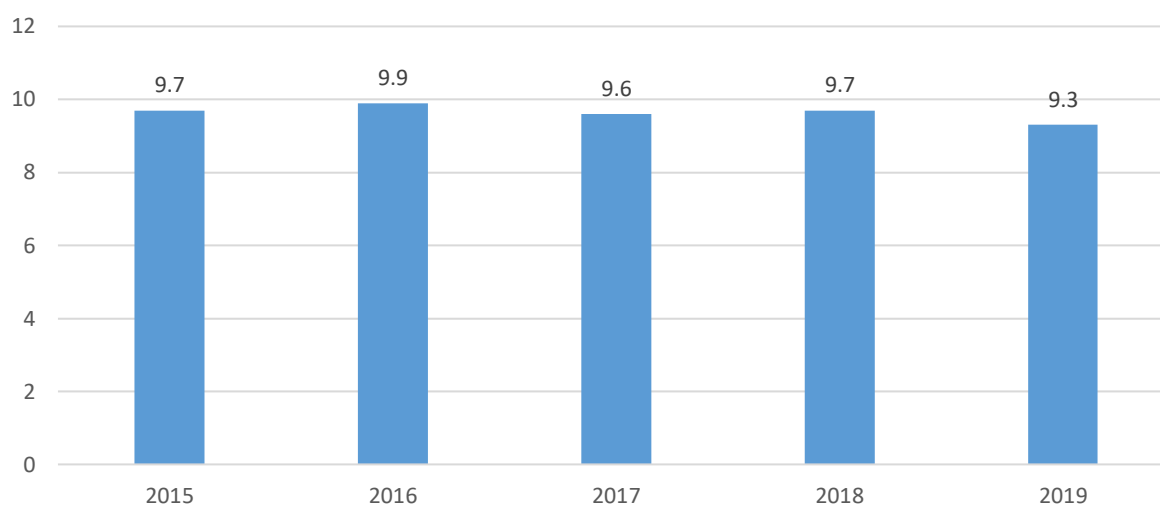
Tobacco products have very low shares of total production, total imports, and total supply of goods and services (Table 4). These shares are approximately 0.1 to 0.5 percent of the specific economic parameters. Only taxes on tobacco products play a more significant macroeconomic role. Taxes on tobacco products account for approximately 9–10 percent of the total taxes on products in Slovakia (Figure 3).

Table 4. Share of tobacco products in supply of goods and services, in domestic output and imports (%)

	Share of tobacco products supply in total supply of goods and services (in purchasers' prices)	Share of tobacco products production in total output of the economy (= share in domestic production) (in basic prices)	Share of tobacco products import in total import
2015	0.4	0.3	0.2
2016	0.4	0.2	0.2
2017	0.4	0.2	0.2
2018	0.5	0.1	0.3
2019	0.5	0.1	0.4

Source: OECD (2023), Authors' calculations

Figure 3. Share of taxes (less subsidies) on tobacco products in the total value of taxes (less subsidies) on products (in %)



Note: Taxes on products are taxes that are payable per unit of some good or service produced or transacted. Taxes on products include value-added tax, taxes and duties on imports and exports, and other taxes on products (examples include excise duties; excise taxes on the sale of specific products, such as alcoholic beverages or tobacco; car registration taxes; taxes on lotteries; and taxes on insurance premiums) (Source: Eurostat).

Source: OECD (2023), Authors' calculations

Due to the imposition of excise duties on tobacco products, this commodity has a specific fiscal role. In the Slovak tax system, eight types of commodities are subject to excise duty (mineral oils, alcohol, wine, beer, coal, tobacco products, natural gas, and electricity). The excise duty revenue from tobacco products is the second-highest among these eight commodities (only

mineral oils have a higher excise duty revenue). The main pillars of the framework of this excise duty are presented in Box 2.

Box 2. Tobacco excise duty regulations (valid as of 12/2023)

Legislation

Act No. 106/2004 Coll. - The Act on Excise Duty on Tobacco Products

Authority

Financial Administration of the Slovak Republic (Finančná správa Slovenskej republiky)



**Financial
Administration**
Slovak Republic

Tax Base

The excise duty on raw tobacco shall be based on the quantity of raw tobacco expressed in kilograms.

The excise duty on tobacco products shall be based on the quantity of tobacco products expressed in kilograms, excluding cigarettes.

The excise duty on cigarettes shall be based on the number of cigarettes in a consumer package of cigarettes and the price of cigarettes as shown on the control stamp.

The excise duty on smokeless tobacco products shall be based on the weight of the tobacco in the smokeless tobacco product expressed in kilograms.

Tax rate and taxation modalities

The tax rate on raw tobacco is determined in the amount of EUR 101.30/kg.

The tax rate on tobacco products, except of cigarettes is determined as follows:

- on cigars, cigarillos EUR 89.30/kg
- on tobacco EUR 101.30/kg.

The rate of excise duty on smokeless tobacco product is EUR 187.80/kg.

The rate of excise duty on cigarettes shall be as follows:

- combined rate:
specific part EUR 84.60/1 000 pcs + ad valorem part 23% of the price of cigarettes

Minimum tax rate on cigarettes is EUR 132.10/1 000 pcs.

The minimum rate of excise duty on cigarettes shall apply if the amount of tax per cigarette, calculated on the basis of the abovementioned combined rate, does not reach the minimum rate of excise duty.

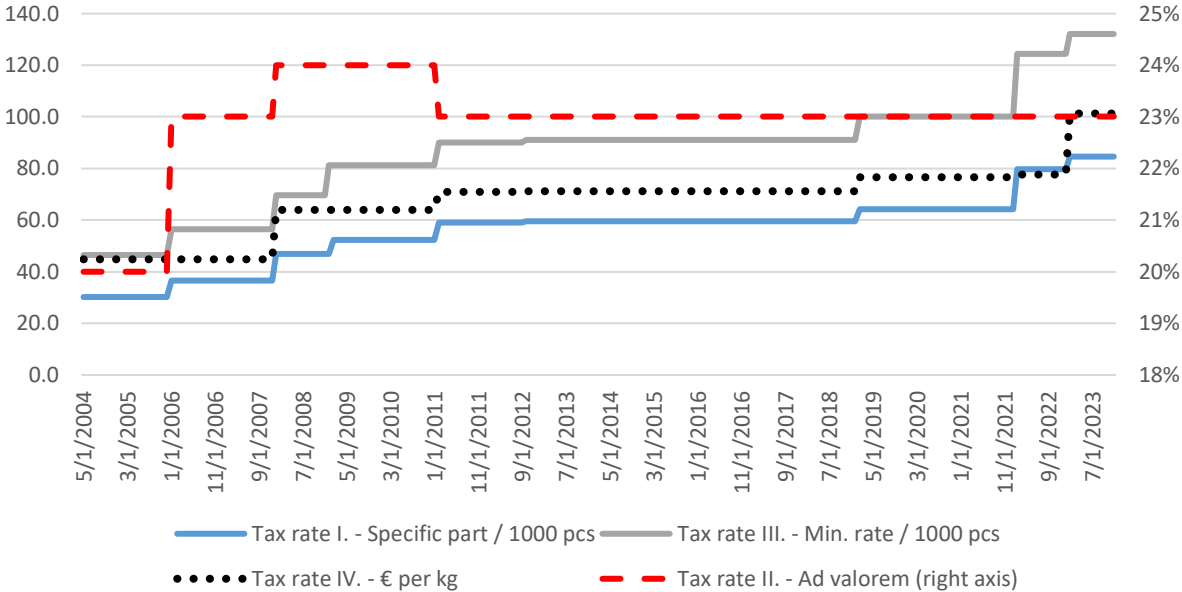
Source: Financial Administration of the Slovak republic

As **Figure 4** shows, for a long period of time, excise duty rates on tobacco products have not been adjusted which has led to a relative decline in the tax share of the total price of tobacco

products. Thus, taxation on tobacco product consumption has lagged behind the recommendations of the OECD and other institutions (IFP, 2016).

Although the protection of health and compensation for increased health care expenditure are formally the primary reasons for the introduction of the tobacco excise tax, in the past, this tax has rather fulfilled a fiscal function as a revenue source for the state budget.

Figure 4. Excise duty rates on tobacco and cigarettes in Slovakia (2004–2023)



Note: As mentioned in Box 2, the rate of tax on tobacco products is set in a different way depending on the nature of the commodity (as a percentage of the price, as a fixed amount per weight or per piece, or in combination). In the case of cigarettes (tax rates I, II, and III in the chart), the tax has both a specific part (per number of pieces) and a percentage part (ad valorem tax, percent of the price), and there is also a minimum rate (which is applied if the sum of the specific and percentage parts is less than the minimum rate). The category Tax rate IV in the chart corresponds to raw tobacco.

Source: The Act on Excise Duty on Tobacco Products (No. 106/2004 Coll.)

The role of this excise duty in tobacco products is shown in the sequence of figures 5a to 5f:

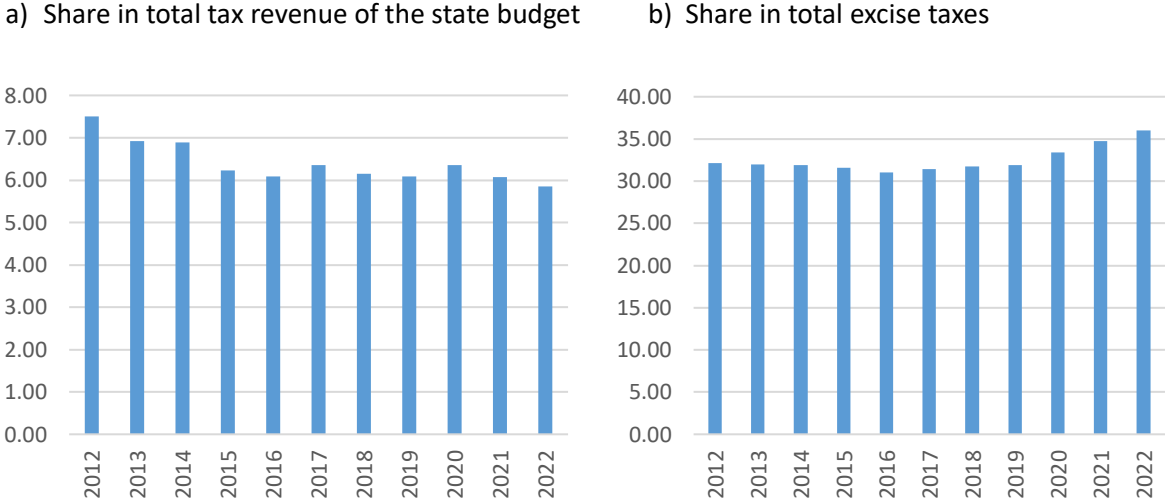
- 1) Excise duty on tobacco products accounts for approximately six percent of the total tax revenue of the state budget, with a slightly declining proportion (Figure 5a).
- 2) Excise tax revenue from tobacco products accounts for approximately one-third of total revenue from all excise taxes, with a slight increase in the share in the recent period (Figure 5b). The high share is consistent with the claim made above that the tobacco excise yield is the second-highest among excise taxes.

- 3) The share of total taxes on goods and services has been declining over the last decade (Figure 5c).
- 4) The ratio of tobacco excise tax revenue to the macroeconomic aggregates of GDP, total public revenues or household consumption, has been declining slightly (Figure 5d, 5e, 5f).

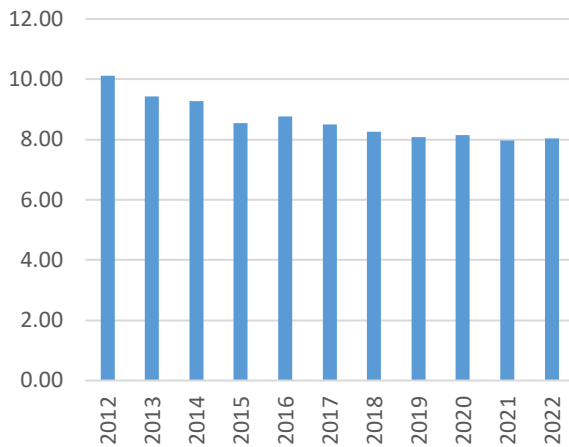
A seeming paradox emerges from the above statements: the ratio of excise taxes on tobacco is declining relative to almost all the variables used. However, at the same time, their ratio to total excise taxes is rising. This is possible because the share of total excise duties in the national tax system has been decreasing. The weight of other excise duties has decreased faster than the weight of excise duties on tobacco products. Thus, the share of tobacco excise duties among excise duties has increased while the weight of this tax in the total tax system has been declining slightly.

This development provides room for consideration of an increase in the tobacco tax in the current situation, where it is necessary to mitigate the significant fiscal imbalance. The government, which took office in late 2023, is also counting on higher taxation of tobacco products to mitigate the negative public revenue and expenditure balance. Public spending has far exceeded revenues, especially since the recession caused by the COVID-19 pandemic (2020), with an unfavorable outlook for the future.

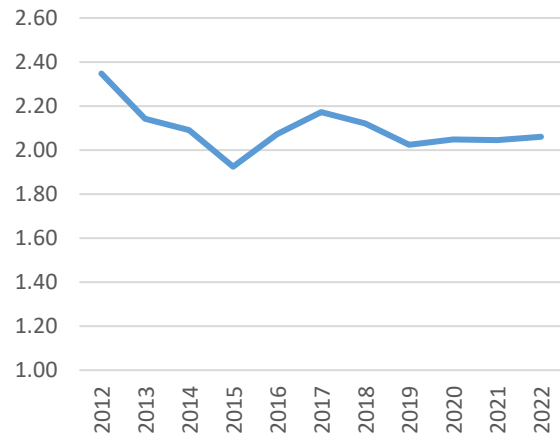
Figure 5. Excise tax on tobacco products relative to other parameters of the economy (in %)



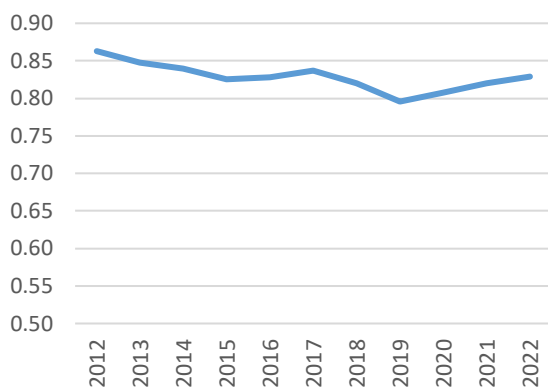
c) Share in total taxes on goods and services



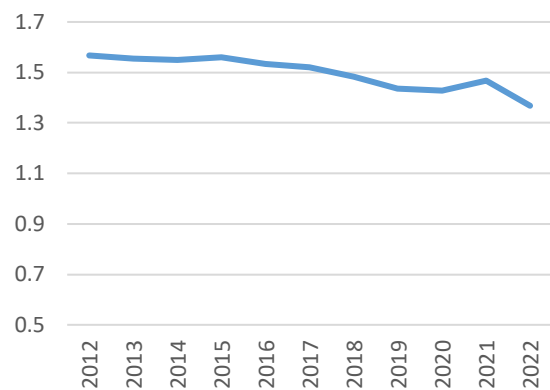
d) Share in total public revenues



e) Ratio to nominal GDP



f) Ratio to final consumption of households



Note: The shares of taxes on tobacco products in other tax categories are shown as columns. Proportions of other macroeconomic variables are shown as lines.

Source: Authors' calculations based on data from the State's final accounts (for the period 2013–2022, published by the Ministry of Finance of the Slovak Republic) and from Eurostat National Accounts.

Low shares of tobacco products were also measured in the goods and services use categories. The only slightly significant share appears in the household final consumption category: the share of tobacco products in household consumption expenditure was approximately 2.5 percent in the period 2015–2019 (Table 5).

Table 5. Share of tobacco products in relevant categories of use of goods and services (in %)

	Share of total use of goods and services (in purchasers' prices)	Share of total intermediate consumption	Share of total final consumption of households
2015	0.4	0.1	2.4
2016	0.4	0.1	2.4
2017	0.4	0.1	2.3
2018	0.5	0.1	2.5
2019	0.5	0.1	2.5

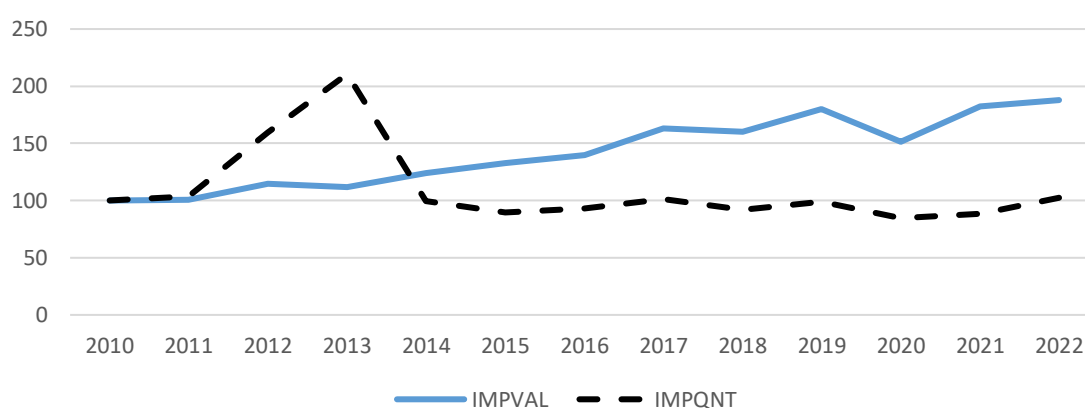
Note: Relevant categories are those in which a proportion of at least 0.1% has been measured.

Source: OECD, Authors' calculations

Growth in Value, Not in Volume

An assessment of trends leads to different conclusions depending on the units in which the quantity of tobacco products is expressed. The features of the PRODCOM system, which displays data on industrial commodities in physical terms (such as units, m², or kilograms) as well as in value terms (in euros), can be exploited here.

Figure 6. Index of changes in cigarette imports (both value and physical volume) (index 2010 = 100)



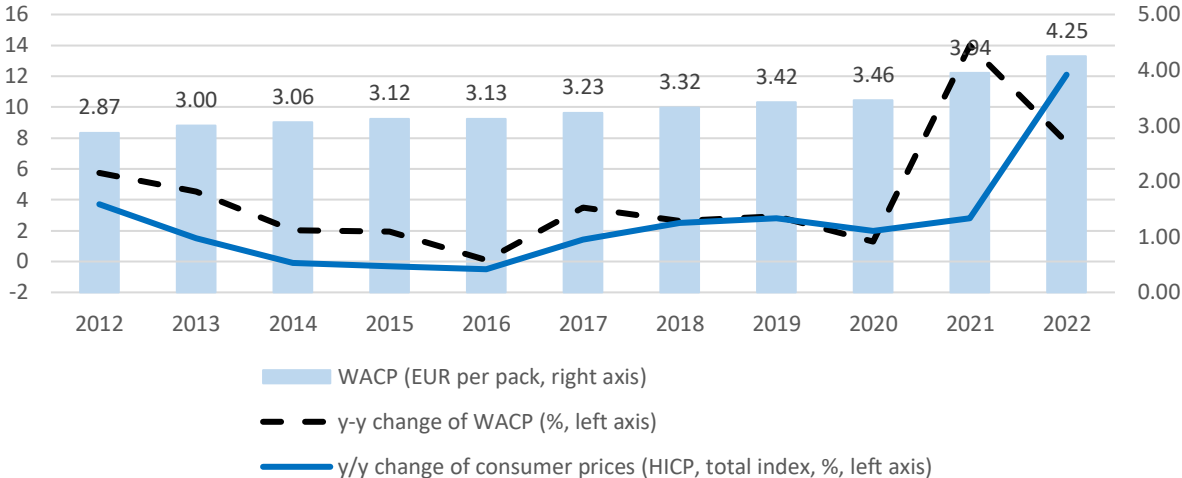
Note: IMPQNT: The volume of imports derived from the External Trade statistics; IMPVAL: The value of imports in euros, derived from the External Trade statistics.

Source: PRODCOM, Eurostat, Authors' calculations

There was a significant difference between the development of values (influenced by prices) and the development of volumes (in physical units, Figure 6). Thus, the driver of growth in the

value of imports is the growth in prices, not the growth in physical volume (volumes have fluctuated, stagnating in the longer term). The significant increase in cigarette prices can also be confirmed using the weighted average price of cigarettes (Figure 7). Cigarette price growth has been significantly stronger than growth in the overall level of consumer prices. Between the years 2012–2022, the overall consumer price level rose by 26.3 percent, while the weighted average price of cigarettes rose by 47.9 percent.

Figure 7. Parameters of price-level dynamics (cigarette prices and overall consumer prices)

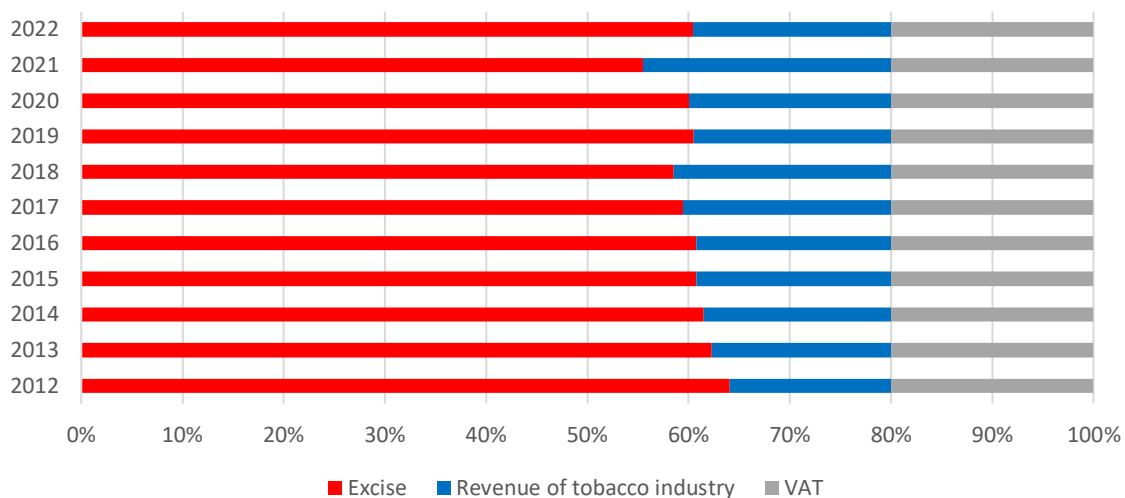


Note: The Financial Administration of the Slovak Republic has the obligation to publish the weighted average price of cigarettes in the tax territory for the relevant calendar year. These data are shown in the graph. HICP - Harmonized index of consumer prices.

Source: Financial Administration of the Slovak Republic and Eurostat

A decomposition of the price of a pack of cigarettes shows that 60 percent of the price of a pack (as valued by the WAPC) is made up of excise duty as of 2022. Figure 8 shows a downwards trend in this share over the period 2012–2018, with a further significant decline in 2021. This trend was reversed in 2022 by excise duty adjustments, and further adjustments adopted in 2023 (or others proposed but not yet adopted) are likely to lead to a further increase in this share.

Figure 8. Decomposition of the price of a pack of cigarettes (share on WAPC, in %)



Note: The European Commission (EC Taxes in Europe Database v3) or the Tax Foundation (2023) have quantified some parameters with slight deviations from those shown in Figure 8. This is because they quantify them for the specific date. As tax rates sometimes change during the year, these parameters shown at a given date may be slightly different from the annual values shown here. The EC quantifies for 2023, the excise on the price of a pack of cigarettes was 62.82% (as of 1 July 2023), but the 2022 WAPC was used in the calculation.

Source: Authors' calculations based on Financial Administration of the Slovak Republic data

The Problem of Illegal Production and Imports

This section is based solely on information published by the Financial Administration of the Slovak Republic or the Police of the Slovak Republic. There are no accurate estimations of the size of the illicit cigarette market in Slovakia at this time. It is not possible to use appropriate time series here, but it is possible to rely on the analysis of cases published by the relevant state authorities. Based on an analysis of approximately three dozen recently published cases from the archives of the mentioned authorities, several typical features of illegal imports and production activities can be extracted:

- 1) The geographical location of Slovakia plays a very important role. Illicit tobacco activities are often linked to Ukraine and southeastern Europe (mainly Romania). The activity of foreign nationals in Slovakia is typical in this area. Among the cases examined, the vast majority involved foreign nationals from Eastern European countries.
- 2) In the past, there have been frequent reports of illegal imports (primarily across the eastern border between Slovakia and Ukraine and, to a lesser extent, the southern border with Hungary). In addition to the common practice of smuggling by means of land transport (larger quantities were, for example, moved by rail from Ukraine under cargoes of iron ore), more sophisticated methods, such as underground tunnels in the border area and

clandestine border crossings by airplanes, have also emerged. Later (in the period 2019–2022), strict laws were implemented to prevent illegal domestic production from camouflaged factories that are supposedly producing other non-tobacco products.

- 3) In Slovakia, in 2019, the largest illicit tobacco production facility in Central Europe up to that time was found near the town of Piešťany. It included three complete production and packaging lines. The police operation found 22 tons of tobacco and 13 million finished cigarettes, arresting 47 foreign citizens from Ukraine, Romania, and Moldova who were operating the factory. The products were supposed to be shipped to other European Union (EU) countries, such as Germany.

It is important to consider that Slovakia, due to its location on the border between east and west, will always be a tempting area for illegal activities in the distribution and production of tobacco products. Slovakia does not have to be a destination for such products, but can be a gateway to markets in other EU countries.

Box 3. Tobacco control and taxing legislative framework (valid as of 12/2023)

- **WHO Framework Convention on Tobacco Control (FCTC)** was ratified in Slovakia in 2004
- **377/2004 Coll. Act on Protection of Non-Smokers** (abbreviated name)

This act determines:

- a) the conditions for protecting people from developing addiction to nicotine from the harmful effects of smoking and other uses of tobacco products, which damage the health of smokers and nonsmokers directly exposed to the effects of smoking,
- b) the conditions for protecting people from tobacco-free products intended to be smoked,
- c) the conditions for the sale, manufacture, labelling and market introduction of tobacco products.

- **89/2016 Coll. Act on the Manufacture and Labelling of Tobacco Products and Related Products** (abbreviated name)

This Act regulates

- a) the requirements for the ingredients and emissions of tobacco products and related reporting obligations, including maximum emission levels of tar, nicotine and carbon monoxide in cigarettes.
- b) conditions for the labelling and packaging of tobacco products, including health warnings to be placed on the consumer packs of tobacco products
- c) the prohibition on the placing on the market of tobacco for oral use,
- d) cross-border distance sales of tobacco products,
- e) conditions for the placing on the market of new categories of tobacco product
- f) conditions for the placing on the market products related to tobacco products, their labelling, including health warnings.

- **147/2001 Coll. Act on Advertising** (abbreviated name)

This act stipulates the general requirements for advertising, advertising requirements for certain products, consumer and entrepreneur's protection against the effects of misleading advertising and unacceptable comparative advertising and competencies of state administration authorities in supervision over observance of this Act. According to this act, advertising of tobacco products is outlawed:

- a) On all types of information carriers;
- b) By distribution of tobacco product samples to the public;
- c) On advertising articles that are not related to smoking and that are distributed to the public, excluding advertising articles that are distributed at the place of products sale.

- **308/2000 Coll. Act on Broadcasting and Retransmission** (abbreviated name)

This act declares that all forms of television advertising and teleshopping for tobacco products shall be prohibited. Avoidance of this prohibition by using brand names, trademarks, emblems or other marked signs of these products shall be during broadcasting time reserved for advertising and teleshopping prohibited.

- **106/2004 Act on the Excise Duty on Tobacco Products**

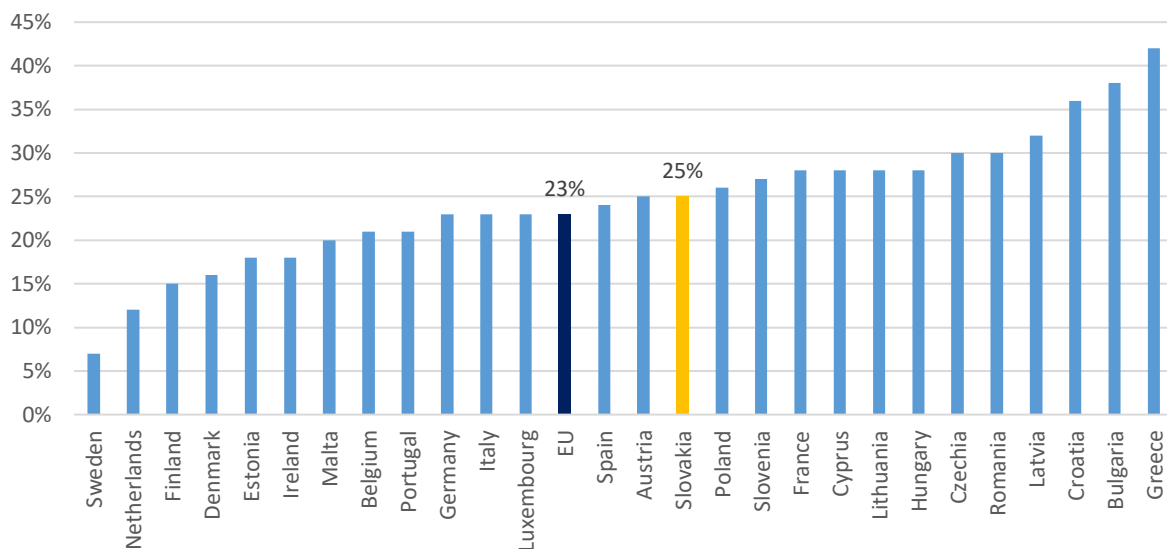
This act regulates the taxing of tobacco products by an excise duty

Demand Side

Position of Slovakia among EU Member States

Slovakia (a high-income country) ranks among the most developed countries in the world, as evidenced by its membership in the OECD and the EU. In the area of tobacco prevalence, it ranks at the median value within EU countries, with approximately half of the Member States having a lower tobacco prevalence than Slovakia. In the 2020 Eurobarometer survey, a quarter of the respondents (25 percent) reported being smokers, while the European average was 23 percent (Figure 9). The survey was administered to a national sample of 1,046 respondents via a Eurobarometer survey.

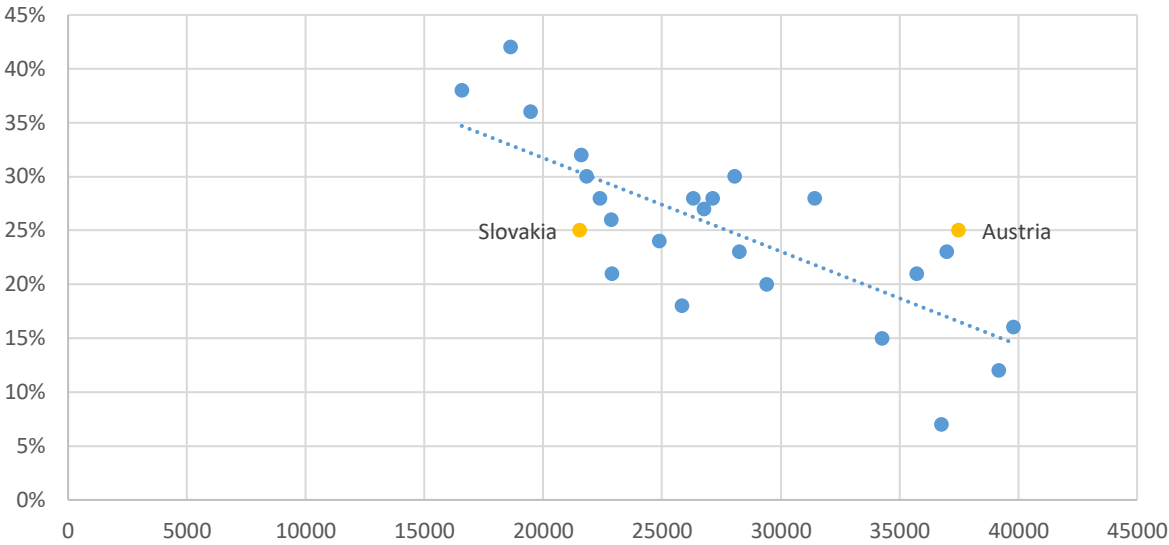
Figure 9. Tobacco prevalence in EU member states in 2020



Source: Eurobarometer (2020)

Empirical observations indicate that an important factor influencing the proportion of smokers in society is the economic development of a country. As economic development increases, prevalence of tobacco use gradually decreases. This rule applies not only when comparing high- and low-income economies, but also when comparing levels within different stages of development. An example of this is the EU, where the more advanced the economy is within a group, the lower the prevalence, even though all EU countries can be considered high-income economies with a high degree of economic development (see **Figure 10**).

Figure 10. Link between tobacco prevalence and GDP per capita in PPP in the EU (2020)

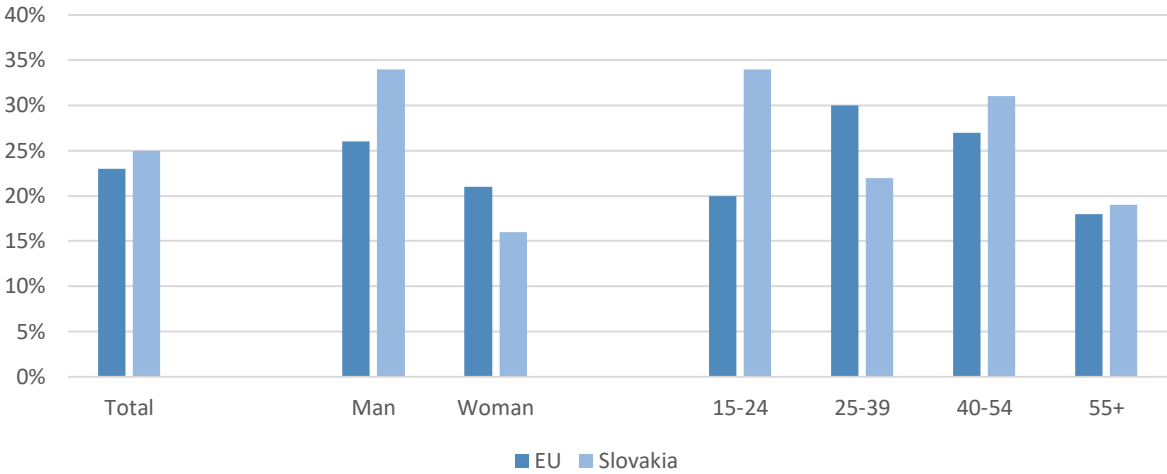


Source: Eurobarometer (2021), Eurostat (2023), Authors' elaboration; PPP (purchasing power parity)

Slovakia's position on tobacco prevalence combined with GDP per capita is relatively favorable. This figure is below the trend line of the estimate, suggesting that if economic development was the only factor determining prevalence, the country would have a tobacco prevalence five percentage points higher than that of the survey. A confirming factor is the position of Austria, which—despite having a GDP per capita almost 75-percent higher than that of Slovakia—shares the same smoking prevalence as Slovakia (see **Figure 10**). The comparison of Austria and Slovakia demonstrates that smoking prevalence is a much more complex issue, determined not only by economic factors but also by sociological and cultural factors.

While there are countries in the EU that are significantly worse off in terms of tobacco prevalence, Slovakia still has a higher-than-average rate according to the Eurobarometer survey. Moreover, all countries should focus on limiting tobacco prevalence to a minimum, as the adverse effects of tobacco use—measured by premature deaths or increased health care expenses—are completely preventable. Although the Slovak position is close to the European average, the structure of smokers differs considerably, both in terms of the proportion of smokers by sex and age (Figure 11).

Figure 11. Tobacco prevalence by sex and age cohort in the EU and Slovakia (2020)



Source: Eurobarometer (2021)

Tobacco Prevalence in Slovakia

There are different sources for determining tobacco prevalence in Slovakia. While the Eurobarometer Survey (2021)² allows for international comparison under the same methodology in every country, domestic surveys are more reliable and have better coverage and sample sizes. For this reason, we rely on the survey conducted by the Public Health Authority of the Slovak Republic (PHA SR) as the main source of information about tobacco prevalence in Slovakia.

The PHA SR is responsible for monitoring tobacco prevalence development utilizing targeted and regular surveys with the use of 36 regional public health authority subsidiaries in all regions of Slovakia. The Department of Health Promotion and Health Education executes the *Health Awareness and Behaviour of the Slovak Population Survey*, in which one section is dedicated to the use of legal and illegal drugs (including tobacco). The survey started in 2013 and provides detailed estimates of tobacco prevalence over three-year periods, allowing for trend development. The sample size is larger than that of the Eurobarometer (2021) and consists of 3764 respondents aged 15 years and older.

Although the estimates from the PHA SR are the most up-to-date information available, some tobacco use prevalence data are missing from the survey. In such cases, we refer back to the Eurobarometer (2021) estimates, which provide detailed information and aspects of tobacco

² While the survey took place in August and September 2020; the results were published in 2021. Hence, the difference between years used when referring to the same survey.

use prevalence. Nevertheless, the survey is already outdated, so it is used mainly as a supplementary survey.

The data present the prevalence of tobacco use across four different years: 2013, 2016, 2019, and 2022. The participants were categorized into three groups: non-smokers/non-users, quitters (former smokers or users), and tobacco users. While the methodologies used in the 2013, 2016, and 2019 surveys were completely consistent, the most recent survey from 2022 slightly expanded the definition of who constitutes a tobacco user. Since 2022, the users of alternative products (electronic cigarettes and smokeless tobacco products) have been included in the group of tobacco users.

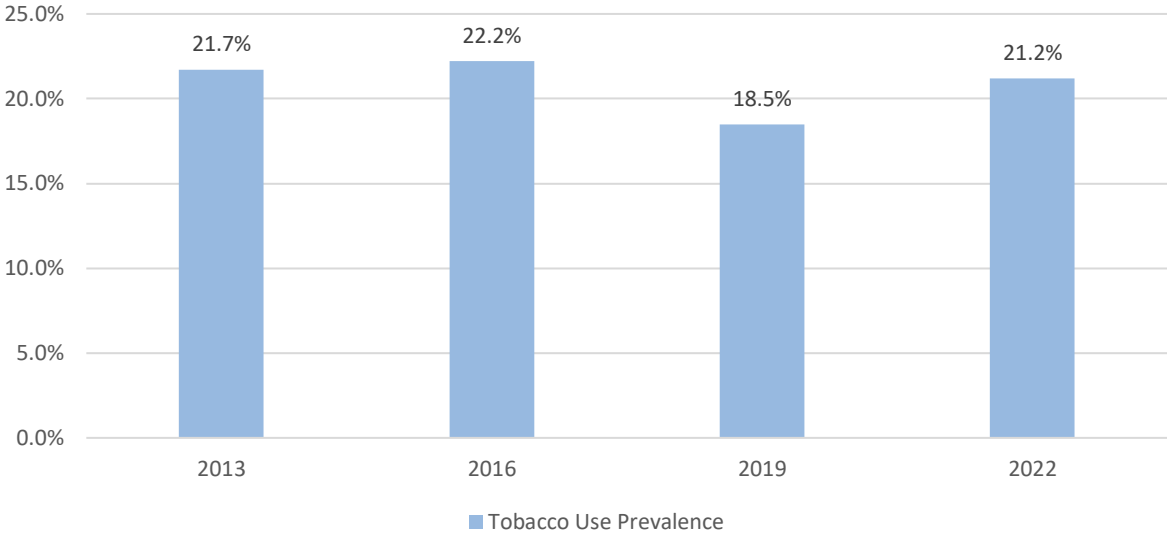
The prevalence of non-smokers has shown a relatively stable trend with a gradual increase over the years, with the percentage starting at 66.3 percent in 2013 and increasing to 70.7 percent in 2019. However, there was a slight decrease in the prevalence of non-smokers from 70.7 percent in 2019 to 67.1 percent in 2022. Factors including alternative product adoption and the spread of COVID-19 might have influenced the recent decline.

The share of quitters fluctuated during the observed period. In 2013, the percentage of quitters was 12.0 percent, which dropped to 7.5 percent in 2016, showing a significant decrease. Positively, there was an increase in the number of quitters in the following years, reaching 10.8 percent in 2019 and then slightly rising to 11.7 percent in 2022.

Similarly, the prevalence of tobacco users has also fluctuated over the years. In 2013, 21.7 percent of the population were smokers, and this percentage remained relatively stable at 22.2 percent in 2016. However, there was a noticeable decrease in prevalence to 18.5 percent in 2019, followed by a rebound to 21.2 percent in 2022. This rebound is not caused by an uptick in the use of conventional tobacco cigarettes, but rather the inclusion of alternative products in tobacco use prevalence.

Overall, the data suggest that there have been positive developments in reducing tobacco use prevalence rates and encouraging non-smoking behaviours, as evidenced by the increase in non-smokers/non-users and the decrease in tobacco use up to 2019. However, the results from 2022 still indicate that efforts to combat tobacco use and promote a healthier population need continuous attention and reinforcement (Figure 12).

Figure 12. Development of tobacco prevalence in Slovakia (2013–2022)



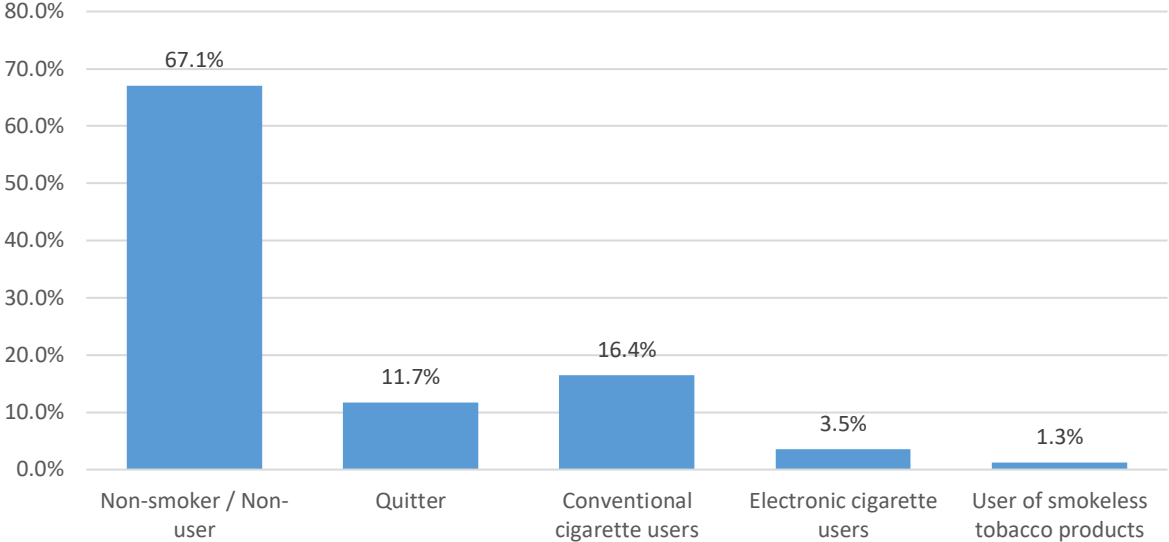
Note: Tobacco prevalence in 2022 consists of manufactured cigarette users as well as alternative product users.
Source: Health Awareness and Behavior of the Slovak Population (2013–2022).

Results of the 2022 survey

The results of the latest 2022 survey produce several findings. It is still estimated that more than two-thirds of the population over the age of 15 do not smoke or use any alternative nicotine-containing products. Similarly, the proportion of the population that has quit smoking or using alternative products is above 10 percent. Although the overall smoking prevalence saw an increase compared to that in 2019, conventional cigarette users also declined in proportion to total tobacco use in 2022. Their share of the population is 16.4 percent (see Figure 13). The increase in the proportion of smokers in the population can be attributed to the inclusion of alternative products such as electronic cigarettes and smokeless tobacco products. The proportion of electronic cigarette users is 3.5 percent, and the number of users of smokeless tobacco products exceeds one percent of the population.³ This is confirmed by the gradual increase in the popularity of alternative products, with the ratio of approximately one alternative product user for every four conventional cigarette smokers.

³ If the respondent has utilized more than one type of product, the category assignment is based on the product that was used most frequently.

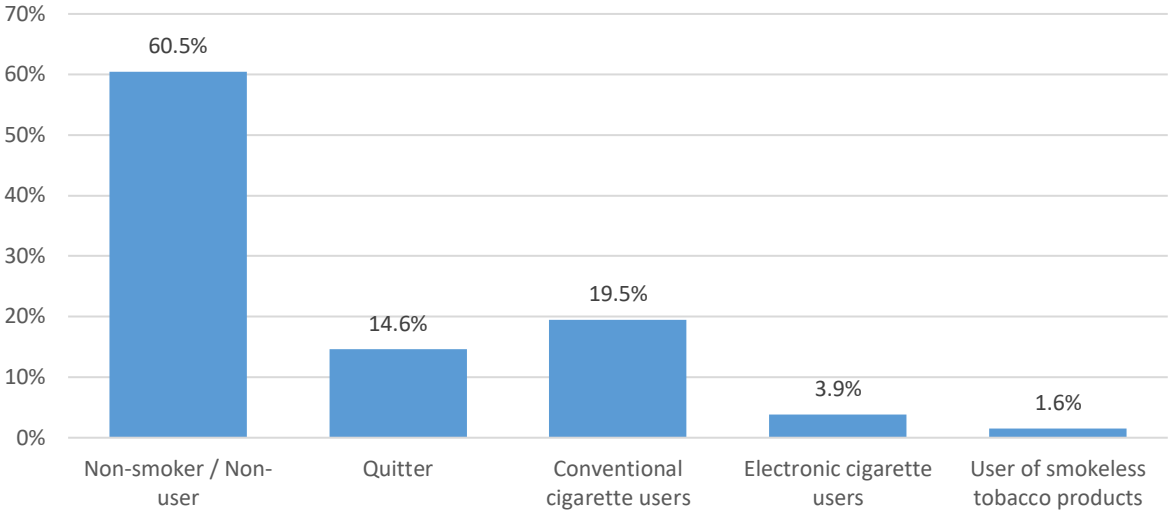
Figure 13. Tobacco prevalence in Slovakia overall, 2022 (%)



Source: Health Awareness and Behavior of the Slovak Population (2022)

According to the trend in tobacco prevalence by sex, men outnumber women in tobacco use. This has already been indicated in the Eurobarometer survey and confirmed by the national survey. However, the differences are not as large as those indicated on a European scale. For men, the proportion of non-smokers is very close to 60 percent, and the proportion of quitters is close to 15 percent. Three-quarters of the male population are thus either non-users or quitters. Nevertheless, almost one in five men aged 15 and older is a conventional cigarette user. The higher percentage of male smokers is also confirmed for alternative products. Together, these individuals make up more than five percent of the total male population, with electronic cigarettes users accounting for almost four percent of the population, and a smaller proportion of the population using smokeless tobacco products (Figure 14).

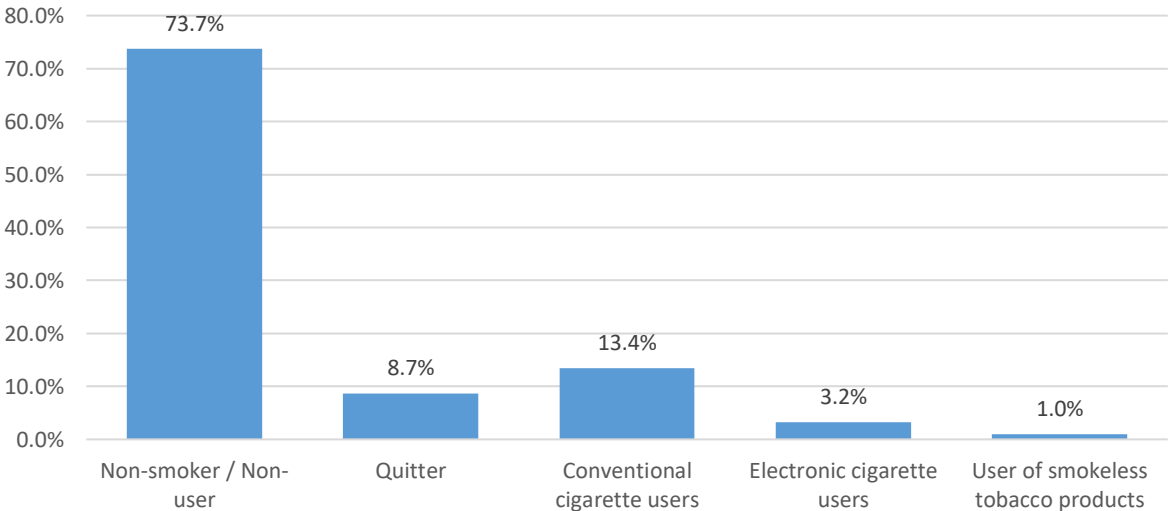
Figure 14. Tobacco prevalence in Slovakia among men, 2022 (%)



Source: Health Awareness and Behavior of the Slovak Population (2022)

Conversely, in the female subgroup there is a greater proportion of non-smokers (Figure 15). Together with women who have quit smoking, non-smokers make up more than four-fifths of the total female population. Approximately 13 percent of women are conventional cigarette users. The proportion of female users of alternative products also appears to be slightly lower than that of men, together accounting for slightly more than 4 percent of the female population. However, within the confidence interval of the survey, we cannot draw conclusions about substantial differences in the proportion of alternative product users between men and women.

Figure 15. Tobacco prevalence in Slovakia among women, 2022 (%)



Source: Health Awareness and Behavior of the Slovak Population (2022)

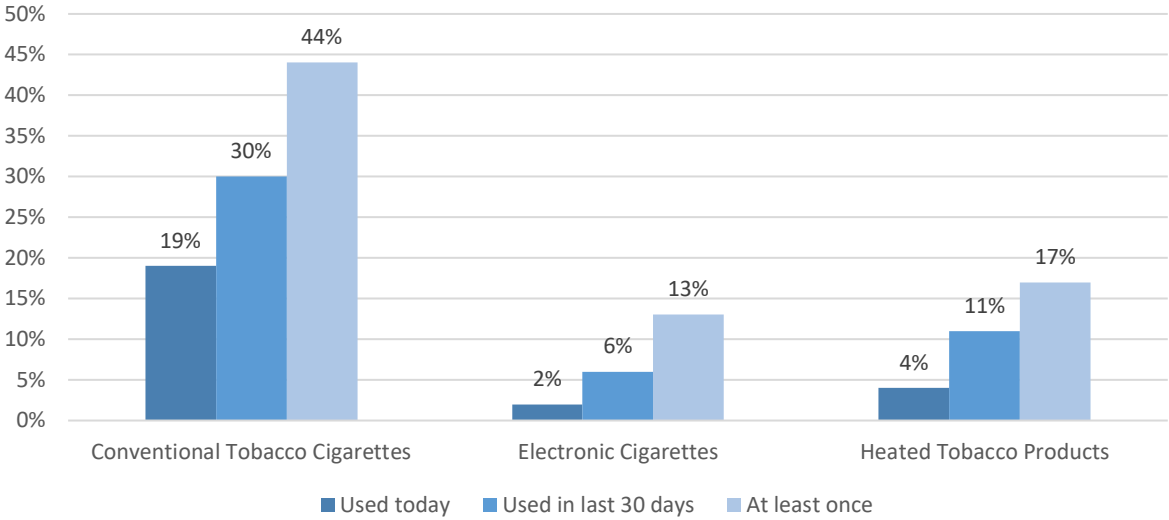
Thus, the survey showed that a reversal in the trend of tobacco prevalence is justified only if the category of smokers also includes users of alternative products. When we focus only on the evolution of smokers of conventional tobacco cigarettes, the trend continues to decline slightly. At the same time, however, a new trend is appearing with the emergence of alternative tobacco products, which already occupy a non-negligible position in society. However, as this was a survey conducted on late adolescent and adult populations, in the next section we also discuss the prevalence of tobacco use among young people. These factors will determine the future development of the proportion of smokers in society in the coming years.

Youth Tobacco Prevalence in Slovakia

We have already noted in the previous section that smoking in Slovakia differs between different age cohorts and the EU average (a comparison of Slovakia and the EU is provided in Figure 11). The most pronounced difference is found in the very first cohort of young people up to 24 years of age, where the proportion of children and adolescent tobacco users is dramatically greater than the EU average. It is necessary to further explore the evolution of tobacco use among children and adolescents and to identify the specifics of this group. Therefore, National Research on the Use of Tobacco and Nicotine Products in the Population of Children and Adolescents in the Slovak Republic was conducted in 2022. The survey was carried out by the Ministry of Education, and a sample of 3,002 respondents aged 12–21 years was surveyed on smoking or the use of nicotine products.

The percentage of young people who smoked conventional tobacco cigarettes on the day of the survey was 19 percent, almost one-fifth of the total number of young people. This figure is greater than the national average for conventional tobacco cigarette smoking (16.4 percent, see Figure 16). Also worrying, is the proportion of young people who used conventional tobacco cigarettes within 30 days of the survey date. Overall, 44 percent of the youth population (up to 21 years of age) had already tried conventional tobacco cigarette smoking. Alternative products are also growing in popularity. In particular, heated tobacco products (HTPs) are more common among young people than among the general population. More than 10 percent of young people interviewed used such products within 30 days of the survey. Surprisingly, electronic cigarettes are less popular than HTPs among young people, as electronic cigarettes are nearly twice as popular as they are among the total population.

Figure 16. Share of youths with tobacco or nicotine product experience in Slovakia

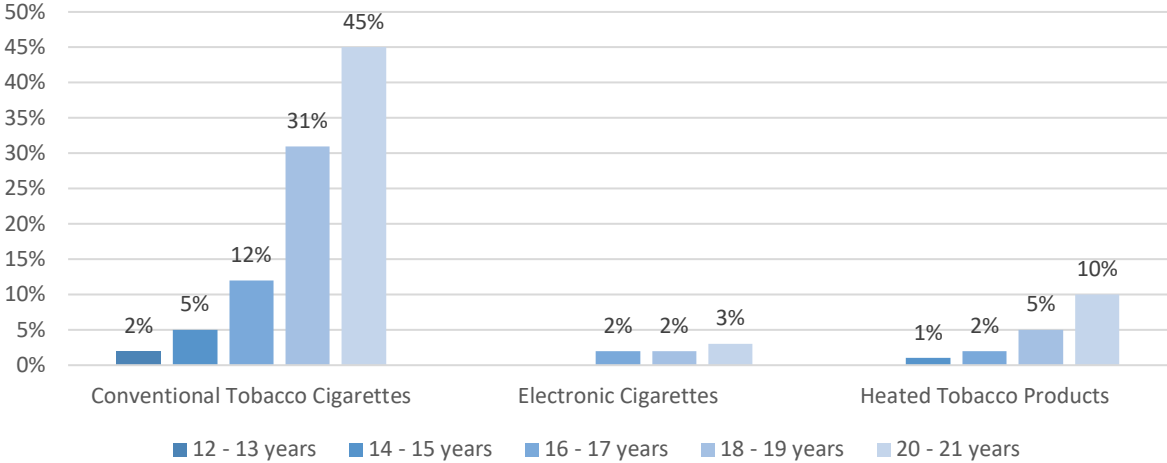


Source: National Research on the Use of Tobacco and Nicotine Products in the Population of Children and Adolescents in the SR (2022)

If we focus only on active young conventional cigarette smokers in the survey (that is, those who said they smoked on the day of the survey), the figures by age cohort are worrying. In the 14–15-year-old cohort, the proportion of active conventional cigarette users was five percent. In the following group of 16–17-year-olds, it is already 12 percent. People in these cohorts should not have access to conventional cigarettes or alternative tobacco products because users must be 18 years or older. Equally concerning is the finding that up to 45 percent of respondents within the 20–21 age group were active conventional cigarette users. These values will largely determine future trends in tobacco use prevalence in Slovakia.

Alternative products are thus far only popular with older-age cohorts in the survey. Both electronic cigarettes and HTPs show significant differences in use only from the ages of 16–17 years onwards (see Figure 17). However, for HTPs in the oldest group (aged 20–21), up to 10 percent of the young people are regular users. In addition to the emergence of conventional tobacco cigarette smokers, heated tobacco products are experiencing increased popularity.

Figure 17. Share of youths who used tobacco or nicotine products on the day of survey

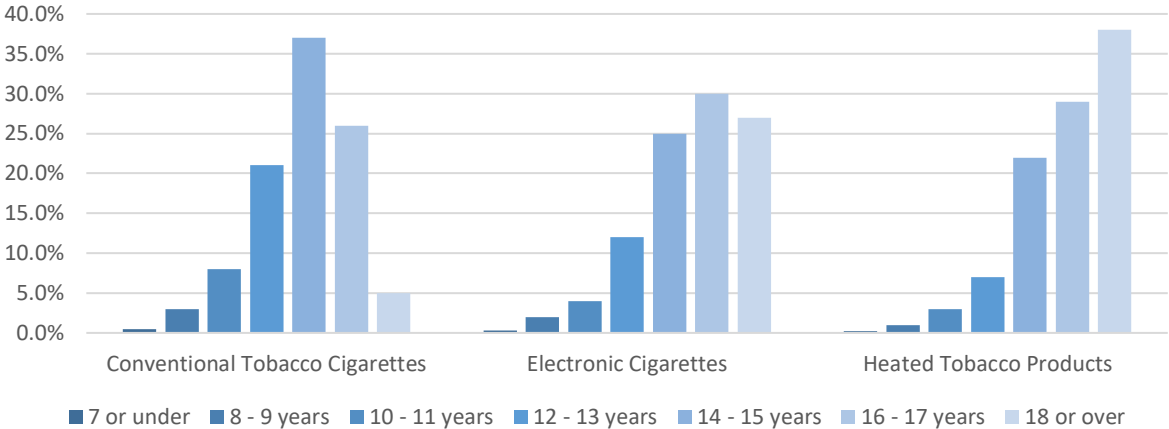


Source: National Research on the Use of Tobacco and Nicotine Products in the Population of Children and Adolescents in the SR (2022)

Regarding the age at which respondents first tried a conventional tobacco cigarette or alternative product, tobacco cigarettes were mostly tried by those aged between 14 and 15 years (more than a third). However, a third of the respondents had their first experience smoking a tobacco cigarette before this age. Almost 60 percent of the respondents tried conventional smoking between the ages of 12 and 15 (see Figure 18).

Respondents' first experience with alternative tobacco products comes later. For electronic cigarettes, the first experience is concentrated at age 14 and older (more than 80 percent of respondents). For HTPs, the cohort aged 18 and older represent the largest proportion. This delayed onset of first experience with alternative products may be due to the higher initial cost of use (purchase of equipment, which is a barrier for young people with limited financial means).

Figure 18. Distribution of youths by age that tried tobacco or nicotine products for the first time



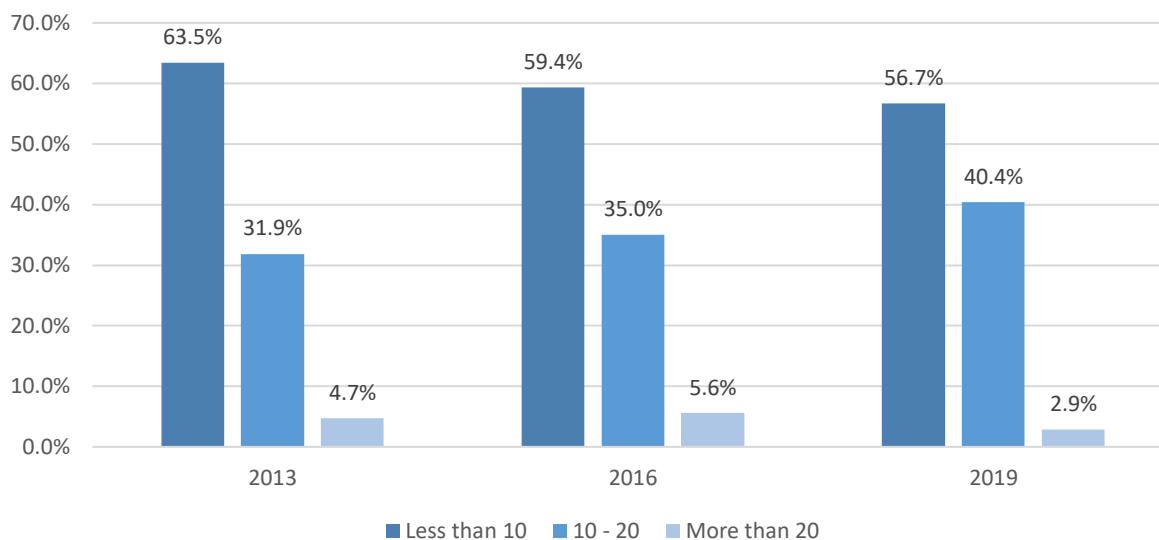
Source: National Research on the Use of Tobacco and Nicotine Products in the Population of Children and Adolescents in the SR (2022)

Consumption of Tobacco Cigarettes per Day

In the area of conventional tobacco cigarette consumption, the results from the latest survey for 2022 were not available, but we obtained results from previous surveys since 2013. Figure 19 shows not only the overall pattern of smoking intensity, but also the dynamics of smoking development. The first characteristic feature is the dominance of relatively light smokers (10-20 per day), who make up a large majority of all smokers in each of the years. The second characteristic is the gradual decline in the representation of these individuals in the smoking population. Over the observed period, there was a decline of approximately seven percentage points. Another factor is the statistically significant decrease in the proportion of heavy smokers who consume more than 20 cigarettes per day, to less than three percent.

Last, and least favorably, the decline in the proportion of light smokers is primarily due to the increase in moderate smokers, whose proportion has risen by almost 10 percentage points over the period and now accounts for 40 percent of all smokers. Subjectively, this trend can be considered negative, as the overall tobacco prevalence in the country is decreasing, but the overall group of smokers are becoming larger consumers of tobacco products (heavier smokers). This is related to the concept of affordability, which is discussed in a later section of this report.

Figure 19. Consumption of tobacco products per day (%)



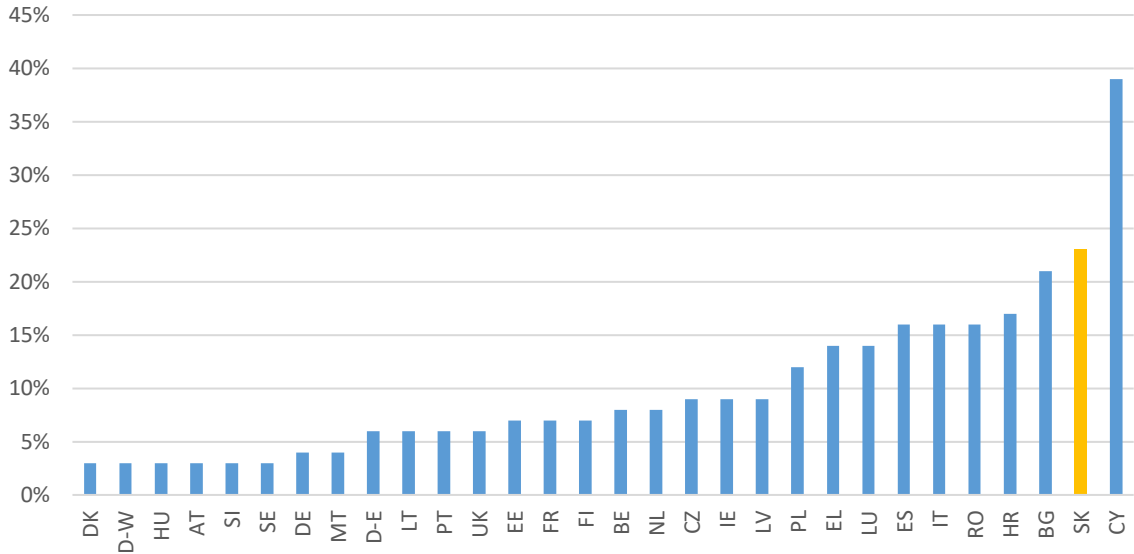
Source: Health Awareness and Behavior of the Slovak Population (2013–2019)

Smoking in Public in Slovakia

Smoking of tobacco products or other products containing nicotine is regulated in Slovakia under the Act on the Protection of Non-Smokers (No. 377/2004 Coll.). It regulates areas where smoking is prohibited, and in addition to traditional areas such as schools, health care facilities, and areas connected with public transport, it also regulates smoking in public catering establishments (restaurants). However, this is not a general ban on smoking but a specific, defined ban. It states that smoking in catering establishments is prohibited except for those in which at least 50 percent of the area is reserved for non-smokers and is structurally separated from the smoking area in such a way that harmful substances from tobacco products do not penetrate the area reserved for non-smokers. Smoking is therefore prohibited, but there are some establishments that, after modification, continue to allow smoking in the restaurant.

Smoking indoors is frequent and according to the Eurobarometer (2020) survey, Slovakia ranked second-highest within the EU when asked whether they had experienced smoking in restaurants (see Figure 20). More than a quarter of the respondents had visited a restaurant that allowed smoking on its premises in the six months prior to the survey. Among European countries, only Cyprus recorded a higher proportion. Thus, there is much room for improvement in the situation of non-smokers. Although the abovementioned Act has been amended 15 times since its adoption, stricter regulation has not been introduced (despite several attempts).

Figure 20. Share of people who experienced smoking tobacco products inside an eating establishment (restaurant) in individual countries of the EU

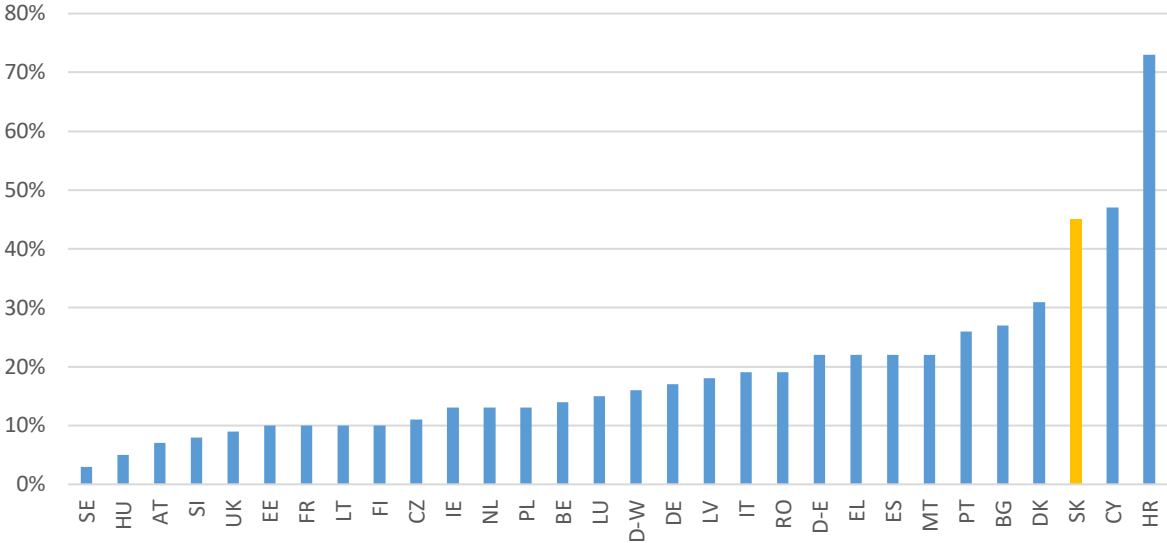


Notes: Question: The last time you visited the following places in the last six months in (COUNTRY) were people smoking tobacco products inside? (An eating establishment such as a restaurant).

Source: Eurobarometer (2021)

Smoking in establishments where food is not served is not regulated by law. It is therefore up to the discretion of bar and club owners whether they decide to allow smoking indoors. After Austria introduced a ban on smoking in bars and restaurants in November 2019, Slovakia remained the last EU country to not regulate smoking in bars and clubs. This is evidenced by the results from Eurobarometer (2020), where almost half of the respondents said they had visited a bar or club where people smoked indoors in the six months prior to the survey (see Figure 21). This is the third-highest value among EU countries, with only Cyprus and Croatia ranking worse (even though these countries regulate smoking in such premises). Legislation is one aspect of the matter, but the enforcement of these regulations is clearly an issue in some countries.

Figure 21. Share of people who experienced smoking tobacco products inside a drinking establishment (bar) in individual countries of the EU



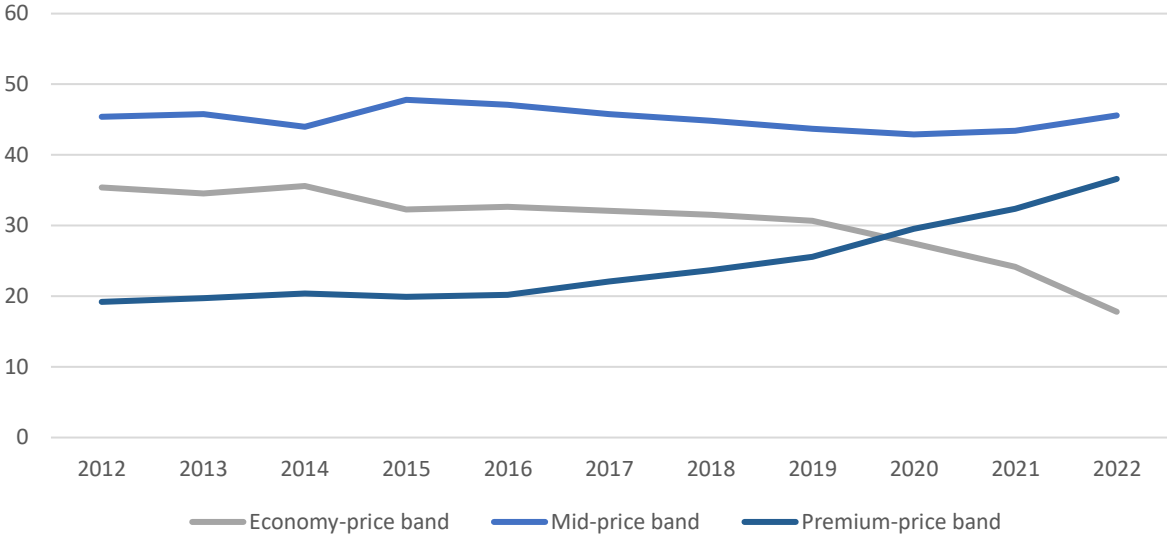
Notes: Question: The last time you visited the following places in the last six months in (COUNTRY), were people smoking tobacco products inside? (A drinking establishment such as a bar).
 Source: Eurobarometer (2021)

Thus, Slovakia is a highly smoking-tolerant country where, in addition to the lack of stricter regulation of smoking in public places (restaurants and bars), there is low enforcement of this regulation. While people are not allowed to smoke inside government and state premises, there is an exception if they have a smoking room where smoking is allowed. There is much room for improvement in local regulation.

Cigarette Market Structure

The cigarette market structure has recently undergone dynamic change. After relatively stable development until 2016, the share of brands in the economy range was replaced by premium brands in recent years. Thus, while economy brands used to account for more than a third of the total consumption, in the last available year they already accounted for less than a fifth of the total consumption. Conversely, the share of premium brands, which was less than 20 percent to start with, has recently risen to values of more than 36 percent (see Figure 22). Brands in the mid-price range have held steady at just under half the share over the long term. One of the possible reasons for such a market-share shift in premium and economy brands is the willingness of tobacco companies to keep premium brands more affordable (compared to economy brands) and subsequently shift them towards HTPs, which are priced the same as premium brands, but have higher profit margins.

Figure 22. Market structure by type of brand in Slovakia (2012–2022)



Source: Euromonitor (2023), Authors’ elaboration

Such a development can be attributed to the minimal difference in prices between economy and mid-range brands or even the decreasing price difference between premium and economy brands. This is also indicated by the evolution of prices of the brands that are included in the consumer basket for measuring inflation. This data set contains three brands, each intended to represent a category (a premium brand, a mid-range brand, or an economy brand). The percentage difference between the price of the premium brand and the economy brand has been gradually reduced, with economy brands being just under 13 percent cheaper in 2022, down from a difference of more than 21 percent in 2012 (see Figure 23).

Figure 23. Price of cigarettes per pack by brand (consumption basket representatives)

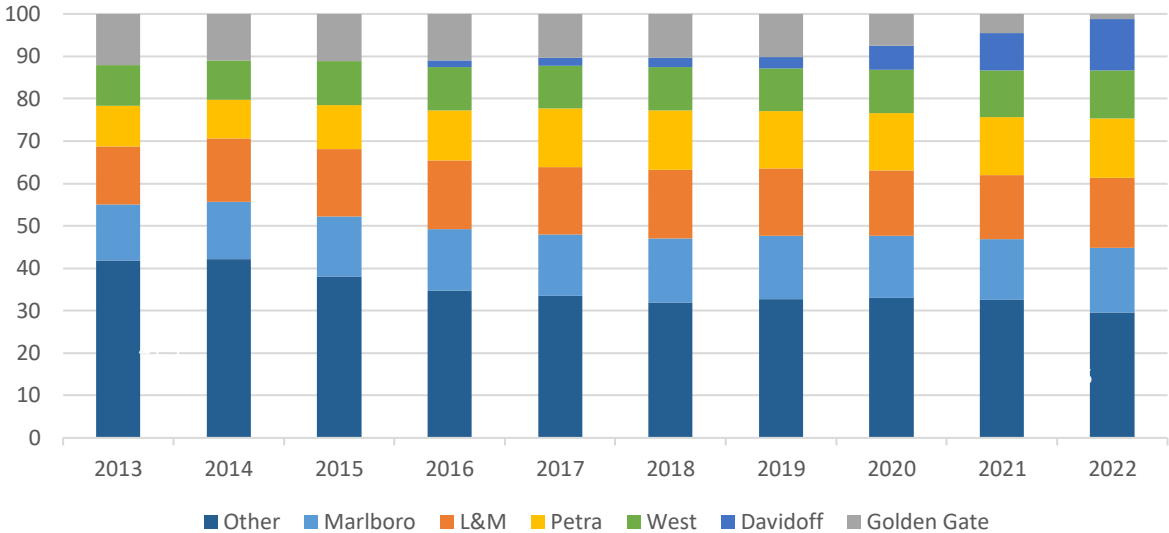


Notes: Selected brands are representatives in the consumption basket for CPI measurement in Slovakia. In 2020, Golden Gate cigarettes were replaced with Winston cigarettes as a representative. The typical premium price brands are Marlboro or Davidoff; the mid-price brands are L&M or Petra; and the low-price brands are Golden Gate and Mars.

Source: SO SR (2023), Authors’ elaboration

The cigarette market has a limited competitive environment, with the top five brands accounting for more than 70 percent of total sales. However, these sales accounted for less than 60 percent 10 years ago, which means that the market has become even more concentrated and that the share of top-selling brands has increased by more than 12 percentage points (Figure 24). The market is typically oligopolistic, with only two main companies, Philip Morris International, Inc., and Imperial Brands Plc., producing and distributing these top brands.

Figure 24. Market structure by main brands in Slovakia

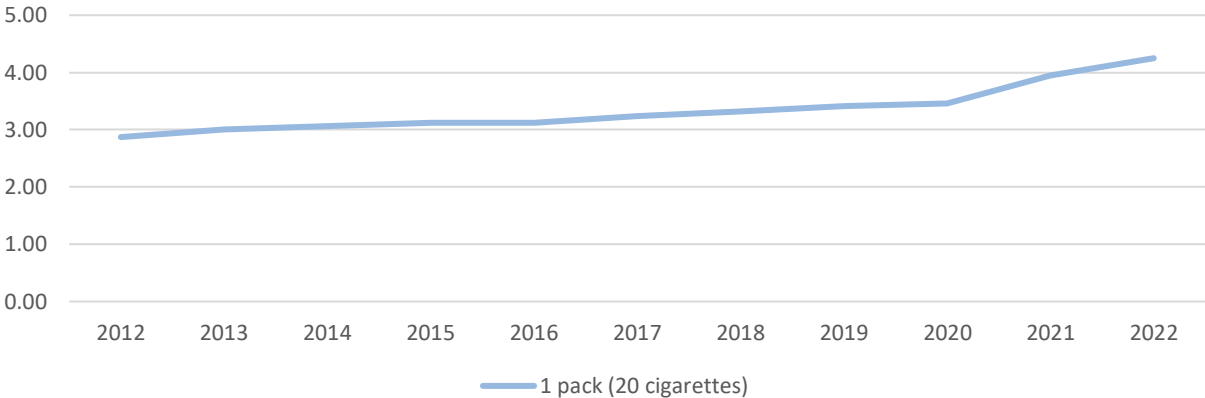


Source: Euromonitor (2023), Authors' elaboration

Affordability

The evolution of tobacco prevalence is largely determined by its affordability. Low prices of tobacco and alternative products, compared to the overall economic development in the country, result in higher tobacco prevalence rates; conversely, relatively high prices have an impact on lower use of tobacco products or their alternatives.

Figure 25. Weighted average price of tobacco cigarettes per 20-stick pack (€)



Source: Financial Administration of the Slovak Republic (2023), Authors' elaboration

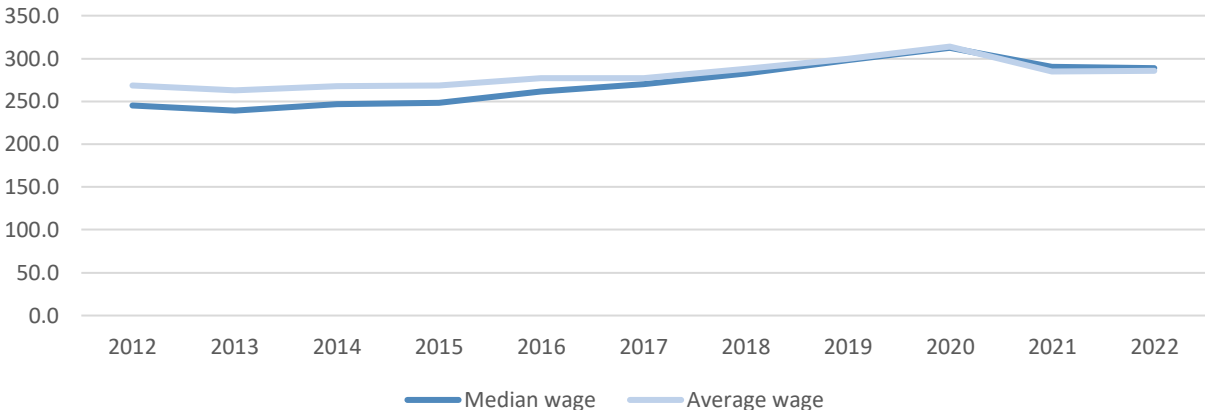
The weighted average price of tobacco cigarettes increased slightly over the period, especially with increased dynamics in the last two years of the analysis (Figure 25). The data on the weighted average price of tobacco cigarettes are published by the Financial Administration of the Slovak Republic as an obligation under the law.

However, the given increase does not say anything about their relative price when it is necessary to compare its evolution with household income. The income distribution in society also changed gradually over the period of analysis. Therefore, to counter the problem of income inequality, we compare the increase in the price of tobacco cigarettes both with the average gross wage in Slovakia and with its median level. Thus, we obtain the concept of affordability.

Affordability has evolved unfavourably, with rising incomes in the country making it possible to afford more tobacco cigarettes on both average and median wages than at the beginning of the period under review. This trend was only slightly reversed in 2021 and 2022, which were marked by an economic recession and stagnation in incomes as well as an increase in tobacco excise duty rates (Figure 26).

While in 2012, a person earning the average monthly wage could afford to buy 268 packs of cigarettes (the price of cigarettes was determined by the weighted average price) per month, at the peak in 2020, the figure was as high as 313 for the average monthly wage. Later, there was a correction, and a person earning an average monthly wage could afford to buy 285 packs of tobacco cigarettes per month. In median terms, there was an even greater increase in affordability from the original 244 packs per monthly median wage to 313 in 2020. Again, there was a correction to 288 packs, but this still confirms the relatively unfavourable development of tobacco cigarette prices relative to income.

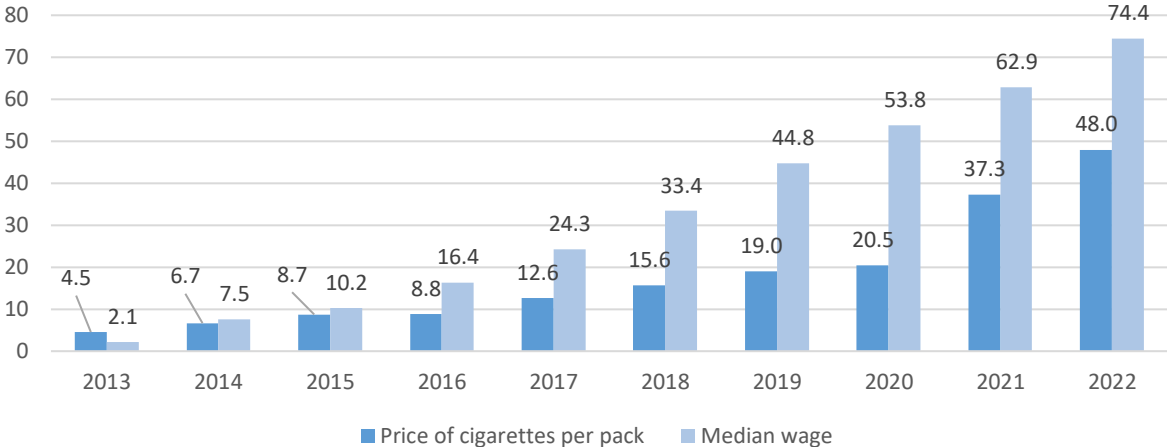
Figure 26. Affordability of tobacco cigarettes in Slovakia by median and average monthly wage



Source: Financial Administration of the Slovak Republic (2023), Authors' elaboration

The growth development for all variables examined tells us that the increase in affordability over the whole period is mainly driven by the absence of more substantial price increases (excise duty) on tobacco, with conventional cigarette prices rising by only 20 percent over the period between 2012 and 2020. Over the same period, the average wage in Slovakia increased by 41 percent, and the median wage increased by more than 53 percent (change by individual year in Figure 27). The reverse mentioned in the previous figure was mainly driven by dynamic increases in excise duty and final consumer prices in 2021 and 2022, but also by similar growth rates for average and median wages. Thus, the overall increase in tobacco cigarette prices lagged behind the average wage by almost 10 percentage points and even more than the median wage, by more than 26 percentage points.

Figure 27. Cumulative growth of tobacco cigarette price and median wage growth development in Slovakia (base = 2012)

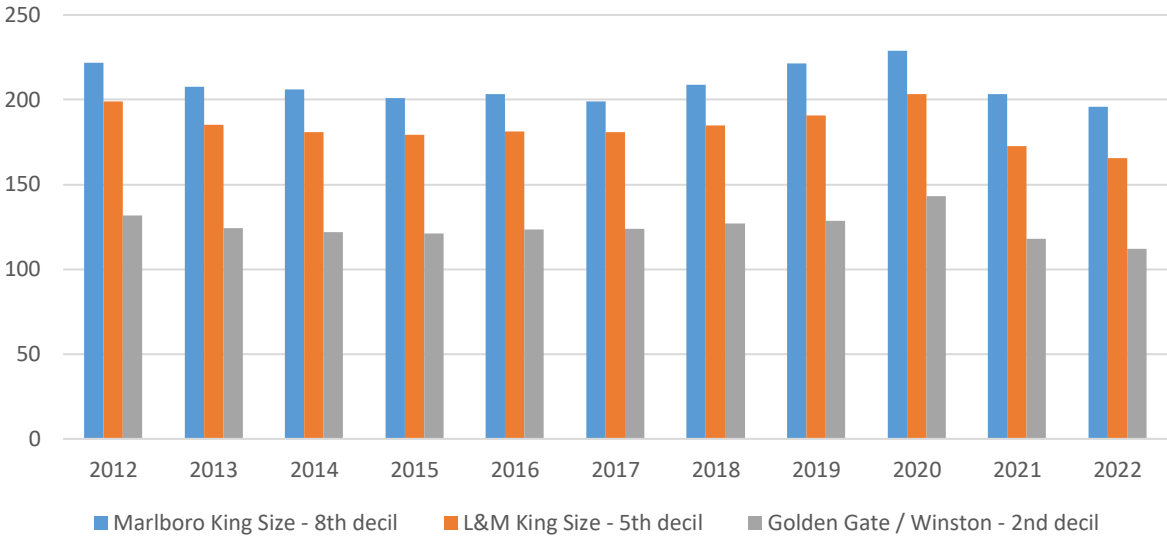


Source: Financial Administration of the Slovak Republic (2023), Authors' elaboration

Since the consumer basket for measuring inflation contains representatives for each price band, we compare the affordability of each brand to the estimated income decile. For the premium brand, we consider affordability within the eighth decile, the mid-range brand within the fifth decile, and the economy brand within the second decile.

Affordability measured by the number of cigarette packs by corresponding income decile replicates the national average, where it increases for each band until 2020. But after the change in excise duty in 2021 and 2022, all values fall below their starting value (documented in Figure 28). Thus, for each income decile, the affordability of the corresponding brand decreases, but only towards the end of the study period.

Figure 28. Affordability of selected brands by their corresponding income decile



Source: Euromonitor (2023), SO SR (2023) Authors' elaboration

Recommendations

Based on the presented landscape view of the tobacco and cigarette market in Slovakia, the following measures are recommended for implementation:

- Based on the decline of tobacco excise duty share under various macroeconomic parameters, the government should increase excise taxes to decrease tobacco use and affordability. Such increases would also benefit the government from a fiscal point of view, providing much-needed additional resources for the state budget.
- The government should introduce automatic indexation of tobacco excise duty according to a predefined algorithm that also considers economic development (including income, inflation, and tax yield).
- The excise duty should also apply to alternative tobacco products. The only alternative products currently included in taxation are heated tobacco products. Not levying excise on these products promotes these alternatives through their affordability (especially among youth).
- The government should ban smoking or the use of alternative products inside restaurants—with no exceptions for separate smoking areas—as well as in bars, by introducing amendments to the smoke-free law.

- Enforcement of restrictions on the sale of tobacco and alternative products to minors should be strengthened.
- The government should focus on education and health awareness campaigns in mass media.
- Education efforts should be focused on minors who view the use of alternative tobacco products as less harmful, to inform them about the true harms of these products.
- Mass media campaigns should be focused on youth, females, or parents and promote health awareness and education.

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