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# The tobacco market in Georgia: Landscape study

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This paper is a landscape study for Georgia, including information on current levels, dynamics and structural issues of tobacco products' production, prices, sales, consumption, taxation, tax burden and budget revenues. The study has been conducted within the framework of the project Tobacco Taxation in Eastern Europe commissioned by Bloomberg Philanthropies and supported by the Vienna Institute for International Economic Studies (wiiw).

### Declaration of Conflict of Interest:

The authors declare no financial or professional affiliations with, nor support from, the tobacco industry or related entities. We confirm that there are no conflicts of interest in relation to the content of this review.



# Abstract

This landscape study maps Georgia's tobacco market in the 2006-2024 period, covering production and trade, consumption volumes, price dynamics, tax structure, affordability and fiscal outcomes. Using official series from the Ministry of Finance, the Revenue Service and the National Statistics Office of Georgia (Geostat), we reconstruct the legal market size for cigarettes, heated tobacco products (HTPs), e-liquids and roll-your-own (RYO) tobacco in addition to tracking policy shifts affecting demand.

Consumption fell from a peak of 555 million packs in 2012 to 365.8 million packs in 2023, largely following excise increases and broader tobacco-control measures (e.g. smoke-free laws, ad bans and more prominent warnings). Since 2019, however, unchanged specific and ad valorem rates have eroded in real terms amid income growth and inflation, raising affordability. Market composition in 2023 was dominated by conventional cigarettes (80%), followed by RYO tobacco (15%) and HTPs (5%), and e-cigarette use was expanding rapidly. An error correction model yields a long-run price elasticity near -0.6 and an income elasticity of 0.63-0.81, indicating that excise tax increases are an effective tool for reducing tobacco consumption, particularly when adjusted for inflation and income growth.

Policy recommendations: restore real tax effort by indexing specific rates to inflation and income growth; narrow tax differentials across cigarettes, HTPs, e-liquids and RYO tobacco to limit product switching; and strengthen monitoring (including disaggregated customs/statistical codes) for novel nicotine products.

Keywords: Excise, Taxation, Tobacco, Elasticity

JEL classification: D12, I12, I18, L66, H23



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## Executive summary

This landscape study offers an in-depth analysis of Georgia's tobacco market, covering production, pricing, consumption patterns, tax structure, affordability and fiscal outcomes. It evaluates the market dynamics in the context of evolving tobacco control policies and taxation reforms, with a particular focus on their effects on public health and state revenues. The report draws on official data from the Ministry of Finance, the Revenue Service and the National Statistics Office of Georgia (Geostat) as well as other credible sources from the 2006-2024 period.

### Market and policy context

- › In 2023, tobacco consumption in Georgia was approximately **365.8 million cigarette packs**, down from **a peak of 555 million packs in 2012**, reflecting the impact of tobacco control measures implemented since 2017.
- › Smoking prevalence declined from **33% in 2016** to **28.2% in 2020**, and the average number of cigarettes smoked daily dropped from **21.4 to 18.6**.
- › Major legislative steps were taken in the 2017-2018 period, including bans on public smoking and tobacco-product advertising as well as packaging standardisation effective 1 April 2025.
- › Georgia committed to harmonising tobacco tax policies with the **EU acquis by 2026**, as part of its Association Agreement with the European Union (EU).

### Taxation and affordability

- › Since 2019, the **specific excise tax** on cigarettes and heated tobacco products (HTPs) has remained unchanged at **1.7 Georgian lari (GEL) per pack**, while the **ad valorem tax** stands at **30%**.
- › Despite these static rates, the **real tax burden has decreased** due to inflation and rising incomes. In 2024, the **total tax burden** on a pack of Winston XS cigarettes was **67%**, compared to **73% in 2021**.
- › The **excise tax on raw tobacco** was halved in June 2024 (from **60 GEL/kg to 30 GEL/kg**), further weakening the fiscal deterrent.
- › Georgia's **tax burden (56-71%)** is higher than those of Moldova and Ukraine (55-65%) for comparable brands, but the overall **excise level (GEL 3.83)** remains **below the EU benchmark of GEL 5.4**, reaching just **70% of the target**.

### Tobacco market composition

- › The legal market is dominated by **conventional cigarettes (80%)**, followed by roll-your own (**RYO tobacco**) and **HTPs (15% and 5%, respectively)**.
- › **E-cigarette consumption** is rising sharply; between 2017 and 2023, e-liquid imports increased from **8.2 tonnes to 171.6 tonnes**, and excise stamp use rose from **36,000 to 4.5 million units**. The excise on e-liquids rose **fivefold** in 2022, to **1 GEL/ml**.

- › **RYO usage surged** during the 2021-2022 period, accounting for **21%** of total consumption before falling to **15% in 2023**, mainly due to tax policy changes.
- › **HTP consumption quadrupled**, from 4.5 million packs in 2020 to **18.5 million packs in 2023**, and it remains entirely import-based.

#### **Tax revenue trends**

- › In 2023, budget revenue from excise taxes on cigarettes, HTPs, RYO tobacco and e-liquids totalled **over GEL 1 billion**, with cigarettes accounting for the majority.
- › Revenue from e-cigarettes rose significantly following the 2022 excise tax hike, while revenue from RYO products is expected to decline following the 2024 tax reduction.

#### **Elasticity and consumer behaviour**

- › Econometric analysis using an error correction model shows that:
  - **Long-run price elasticity** is approximately **-0.6**, meaning a 10% price increase leads to a 6% reduction in consumption.
  - **Income elasticity** ranges between **0.63 and 0.81**, indicating that higher income correlates with increased cigarette consumption.
  - These findings affirm that excise tax hikes are an effective tool for reducing consumption, particularly if adjusted for inflation and income growth.

#### **Policy recommendations**

1. **Increase excise taxes** across all tobacco product categories, aligning with EU standards and adjusting for inflation.
2. **Equalise tax rates** for conventional, novel and RYO products to prevent product switching.
3. **Enhance data systems** to monitor novel products, especially disposable e-cigarettes and e-liquids, by introducing more precise customs codes and tracking mechanisms.

# 1. Introduction

The primary aim of this report is to assess the size and changes in Georgia's tobacco market in the context of evolving tobacco tax policies and to estimate the demand elasticities related to price changes. As in other countries, the overarching goal of tobacco control policy in Georgia is to reduce tobacco use prevalence as well as to prevent avoidable deaths and diseases caused by its consumption. To achieve this, measures are actively implemented to reduce both the demand for and supply of tobacco.

In 2017, Georgia adopted significant amendments to the Law on Tobacco Control, the Law on Advertising, the Law on Broadcasting, and the Code of Administrative Offenses to mitigate the health impacts and economic costs of tobacco use. These legislative changes introduced key measures: smoking in public places was banned; all forms of tobacco-product advertising, including for tobacco accessories and devices, were prohibited; tobacco manufacturers were restricted from sponsoring activities; and the size of pictorial health warnings on cigarette packs was increased from 30% to 65% of the total area of a side (Government of Georgia 2017). Although the laws were enacted in 2017, most measures came into force in 2018.

Starting 1 October 2024, the regulation on the Standardisation of Tobacco Products and Their Packaging took effect. However, the tobacco industry was permitted to distribute old-design packs until 1 March 2025 and sell them until 1 April 2025. Since 1 April 2025, all cigarette packs sold in Georgia have had to comply with standardised technical specifications, including packaging colour, box size, weight and labels.

In January 2019, the tax on filtered and unfiltered cigarettes was equalised and, in November 2019, the tax on all types of raw tobacco materials was doubled. However, in June 2024, the raw tobacco tax was reduced to pre-November 2019 levels (Government of Georgia 2024).

On an international level, Georgia has taken a major step towards compliance with the Framework Convention on Tobacco Control (FCTC) of the World Health Organization (WHO), which the country signed in 2004. Georgia also ratified the 2014 association agreement with the EU, according to which Georgia is obliged to harmonise its tax policy – including its tobacco tax policy – by 2026.

Comprehensive tobacco control measures have contributed to a decline in smoking rates. Between 2016 and 2020, smoking prevalence dropped from 31%, to 28.2%, and the average number of cigarettes smoked daily decreased from 21.4 to 18.6 (NCDC 2021).

The outline of this report is as follows: the first section is devoted to the tobacco tax structure in Georgia, based on the Georgia Tax Code and commodity classifications. Then we discuss the evolution of tobacco taxes in Georgia. In the next section, we analyse the tobacco tax burden and affordability of the most popular tobacco products in Georgia. We then examine trends on the supply side of tobacco products. After that, we estimate the size of the tobacco consumption market in Georgia based on secondary data, which includes the consumption of cigarettes, HTPs, RYO tobacco and e-liquids before comparing trends in tax revenues and tobacco consumption. In the last section, the estimation of price and income elasticities of cigarettes is presented.

## 2. Tobacco taxation

### 2.1. CURRENT TAX STRUCTURE OF TOBACCO TAXATION IN GEORGIA

The Tax Code of Georgia (Article 188) and the National Commodity Nomenclature of Foreign Economic Activity define the types of tobacco products listed in Table 1.

**Table 1 / National commodity nomenclature on tobacco products and excise tax**

Code	Product	Unit	Specific excise		Ad valorem excise
			GEL	EUR	
2401	Raw tobacco; tobacco waste	1 kg	30	10.2	
2402 10 000 01	Cigars, cigars with the cut ends	1 stick	1.9	0.6	
2402 10 000 02	Cigarillos (thin cigars) containing tobacco	20 sticks	2.2	0.7	30%
2402 20	Cigarettes containing tobacco	20 sticks	1.7	0.6	30%
2403 11 000 00	Hookah/waterpipe tobacco	1 kg	30	10.2	
2403 91 000 00	'Homogenised' or 'reconstituted' tobacco	1 kg	30	10.2	
2403 99 100 00	Chewing or snuffing tobacco	1 kg	30	10.2	
2404 11 000 00	Tobacco products consumed using electrical equipment	20 sticks	1.7	0.6	30%
2404 12 000 00	Liquids, with or without nicotine, for use with electronic cigarettes	1 ml	1	0.3	

Source: Tax Code of Georgia, last updated on 29 May 2024 (Government of Georgia 2024)

The taxation structure for tobacco products in Georgia has been simplified in recent years. Currently, four types of tax apply: a value-added tax (VAT), a specific excise duty, an ad valorem excise duty and an import tax. All taxes and their rates are specified in the Tax Code of Georgia.

- › VAT – Value-added tax, which applies to all goods that are sold to end users. It is calculated based on the retail price (excluding VAT) and set at 18%.
- › Import tax – It is calculated based on the customs value of the good (Government of Georgia 2024) and set at 12% for all tobacco products.<sup>1</sup>
- › Excise duty – Specific excise and ad valorem excise. The rates of specific excise are shown in Table 1. As for the ad valorem tax, it applies to conventional cigarettes, HTPs and cigarillos (codes: 2402 20, 2404 11 000 00, and 2402 10 000 02) and is set at 30% of the retail price.

<sup>1</sup> There are exemptions from import taxes due to trade agreements with countries that have free trade agreements with Georgia, including EU member states, CIS countries (e.g. Ukraine, the largest exporter of tobacco products to Georgia), China, the UK and others.

## 2.2. THE EVOLUTION OF TOBACCO TAXATION IN GEORGIA

**Cigarettes:** Between 1991 and 1997, there was no tax on either locally produced or imported cigarettes in Georgia. This changed in 1997, when imported cigarettes were subjected to a specific excise tax and an import tax of GEL 0.25 (approximately EUR 0.17 in 1997) per pack of filtered cigarettes and GEL 0.19 (approximately EUR 0.13 in 1997) per pack of unfiltered cigarettes. Meanwhile, locally produced cigarettes were taxed at 100% of their production costs (Shalutashvili et al. 2007). In 1998, both imported and domestic cigarettes were subjected to a specific excise tax, though the rates for domestic cigarettes were substantially lower than those for imported ones.

**Table 2 / Tobacco excise tax evolution in Georgia on filtered and unfiltered cigarettes (per pack of cigarettes)**

	1991-1997	1997	1998	2001	2005	May 2006	2010	Sept 2013	2014	2015	2016	2017	2018	2019 -2024
Imported with filter (GEL)	No tax	0.25	0.25	0.4	0.9	0.6	0.6	0.75	0.75	0.9	1.1	1.7	1.7	1.7
Imported without filter (GEL)		0.19	0.19	0.2	0.25	0.15	0.15	0.2	0.2	0.25	0.3	0.6	0.6	1.7
Locally produced with filter (GEL)		100% of production cost	0.15	0.2	0.7	0.4	0.6	0.75	0.75	0.9	1.1	1.7	1.7	1.7
Local without filter (GEL)		100% of production cost	0.05	0.07	0.15	0.1	0.15	0.2	0.2	0.25	0.3	0.6	0.6	1.7
Ad valorem rate (%)											5%	10%	10%	10%

Source: Tax Code of Georgia, last updated on 29 May 2024 (Government of Georgia 2024)

In subsequent years, the excise tax rate gradually increased, as shown in Table 2. In 2015, Georgia introduced a mixed tobacco tax system by adding an ad valorem component to the excise duty. The base for calculating the ad valorem tax is the retail prices set annually by the Ministry of Finance (Government of Georgia 2024).

Between 2015 and 2019, significant tax increases were enacted to align excise tax levels on conventional cigarettes with the targets set in the EU association agreement. These targets correspond to EUR 90 per 1,000 sticks (EUR 1.80 per pack, or approximately GEL 6; European Union and Georgia 2014). However, since 2019, this upward trend has halted, and the specific excise tax has remained unchanged at GEL 1.7 per pack. By 2023, the average excise tax rate (including both specific and ad valorem excise) stood at GEL 3.83, while the target rate under the association agreement was approximately GEL 5.4.<sup>2</sup> This resulted in a gap of about GEL 1.5, meaning that the actual excise tax rate reached only 70% of the target level.

Since January 2019, all types of imported and domestically produced cigarettes have been subject to a specific excise tax of GEL 1.70 (EUR 0.50) per pack. Additionally, each pack incurs a 30% ad valorem excise tax (Government of Georgia 2019).

<sup>2</sup> The difference between the 2019 target and the 2023 figure is primarily due to fluctuations in the exchange rate.

**Raw tobacco products:** In the early 2000s, the excise tax on raw tobacco was set at GEL 20 per kilogram, and this remained unchanged until 2016. In the context of rising tobacco taxes, this rate was gradually increased to GEL 60 by 2019 (Government of Georgia 2019). This rate remained in effect until June 2024, when the government halved the excise tax on raw tobacco products, to GEL 30 per kilogram (Government of Georgia 2024).

Roll-your-own (RYO) tobacco can be converted into cigarette packs, assuming 0.7 grams of tobacco per cigarette. In this calculation, a 20-stick RYO pack would weigh 14 grams, resulting in an excise tax share of GEL 0.42 per RYO pack (calculated as  $14 \text{ g} \times \text{GEL } 30/1,000 \text{ g}$ ). This rate is notably lower than the excise rate on conventional cigarette packs, which is GEL 1.70 (authors' calculation).

**Novel products:** In 2017, the Tax Code of Georgia introduced an excise tax on HTPs. Since 2019, they have been subject to the same specific and ad valorem rates as all conventional cigarettes (GEL 1.7 per pack and 30%, respectively).

Since 2017, the Tax Code of Georgia has also specified excise rates for electronic liquids, both with and without nicotine. Initially, the excise tax for these substances was set at GEL 0.2 per millilitre (classified under code 3824 90 980 01). However, in 2022, the excise duty was increased fivefold, reaching 1 GEL/ml. The updated classification codes for liquids with and without nicotine content are 2404 12 000 00 and 2404 19 900 00, respectively.

### 2.3. TAX BURDEN AND COMPARISON WITH UKRAINE AND MOLDOVA

For comparative purposes, taxes on tobacco products in Georgia (including specific excise, ad valorem excise and VAT) are converted into euros and compared with similar rates in Ukraine and Moldova. It is important to note that all three countries have expressed their intention to join the European Union (EU) and have been granted EU candidate status. As a result, their primary objective is to harmonise various political and economic aspects, including tobacco-product taxation, with EU policies (Government of Georgia and the European Union 2014).

As it follows from Table 3, the VAT and specific excise tax rates are lower in Georgia than in Ukraine. However, the ad valorem excise tax in Georgia is 30% for conventional cigarettes (with and without filters), while the ad valorem excise tax is 12% and 13%, respectively, in Ukraine and Moldova. To compare how excise tax and VAT affect the tax burden, we provide the relevant data in the following table (Table 4). Cigarette prices and the tax burden in Ukraine and Moldova, which come from Yavorsky (2021), are compared to the prices of similar brands in Georgia. For this comparison, we examine mid-range Winston XS Blue, premium-class Sobranje and Heets tobacco cigarettes. In 2021, the tax burden in retail prices in Georgia varied from 67.5% to 71%, depending on the cigarette brand, and was higher for the same brands of cigarettes than in Moldova (from 55% to 64 %) and Ukraine (from 57.2% to 65.6%).<sup>3</sup>

<sup>3</sup> Note, however, that excise taxes have increased in both Moldova and Ukraine since 2021, while they have remained unchanged in Georgia.

**Table 3 / Tax rates on tobacco products in Georgia, Ukraine and Moldova in 2021**

Tax	Tobacco products			Tax rate		
	GEO	UKR	MDA	GEO	UKR	MDA
VAT	Applied to all tobacco products			18%	20%	20%
Specific excise	2401* – raw tobacco, tobacco waste			EUR 17.00 per kg	EUR 43.00 per kg	-
	2402 10 000 01 – cigars or cheroots containing tobacco			EUR 0.50 per cigar	EUR 43.00 per kg	-
	2402 10 000 02 Cigarillos containing tobacco	2402100090 Cigarillos containing tobacco	-	EUR 30.0 per 1,000 pcs	EUR 34.22 per 1,000 pcs	-
	2402 20* – cigarettes containing tobacco			EUR 22.5 per 1,000 pcs	EUR 34.2 per 1,000 pcs	EUR 29.7 per 1,000 pcs
	2403* (except 2403 99 9*) – pipe tobacco, homogenised or recovered tobacco, chewing tobacco and snuff			EUR 17.0 per kg	EUR 43 per kg	EUR 7.54 per kg
	2403 99 9* – HTP			EUR 22.5 per 1,000 pcs	EUR 45.8 per 1,000 pcs	EUR 39.9 per 1,000 pcs
	2404 12 000 00 2404 19 900 00 liquids with or without nicotine content, intended for use in electronic cigarettes	3824909720 liquids with or without nicotine content, intended for use in electronic cigarettes	-	EUR 52.94 per 1,000 ml	EUR 94.31 per 1,000 ml	-
	Ad valorem	2402 20* – cigarettes containing tobacco			30%	12%
-		2402100090 cigarillos containing tobacco	240210000 cigarillos containing tobacco	30%	12%	41%
-		-	2402 10 000 00 cigars or cheroots containing tobacco	-	-	41%
2403 99 9* – HTP			30%	-	-	
Minimum excise	2402 20* – cigarettes containing tobacco			-	EUR 45.78 per 1,000 pcs	EUR 39.87 per 1,000 pcs

Source: Yavorsky (2021)

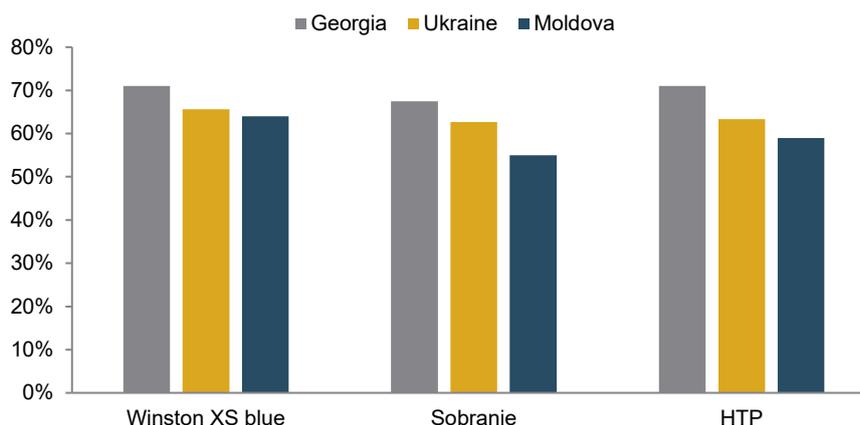
**Table 4 / Retail prices, tax components and tax burden in Georgia, Ukraine and Moldova**

Countries	Retail price and tax ingredients	Tobacco brands		
		Winston XS blue	Sobranie	HTP
<b>Georgia</b>	Specific excise	0.45	0.45	0.45
	Ad valorem	0.52	0.6	0.52
	VAT	0.26	0.3	0.26
	Final retail price	1.73	2	1.73
	Excise tax share	$(0.45+0.52)/1.73=56\%$	$(0.45+0.6)/2=52.5\%$	$(0.45+0.52)/1.73=56\%$
	<b>Total Tax burden</b>	<b><math>(0.45+0.52+0.26)/1.73=71\%</math></b>	<b><math>(0.45+0.6+0.3)/2=67.5\%</math></b>	<b><math>(0.45+0.52+0.26)/1.73=71\%</math></b>
<b>Ukraine</b>	Common excise tax*	0.92	0.95	0.92
	Retail excise tax	0.09	0.11	0.1
	VAT	0.29	0.39	0.34
	Final retail price	1.98	2.31	2.15
	Excise tax share	$(0.92+0.09)/1.98=51\%$	$(0.95+0.11)/2.31=45.8\%$	$(0.92+0.1)/2.15=47.4\%$
	<b>Total Tax burden</b>	<b><math>(0.92+0.09+0.29)/1.98=65.6\%</math></b>	<b><math>(0.95+0.11+0.39)/2.31=62.7\%</math></b>	<b><math>(0.92+0.1+0.34)/2.15=63.3\%</math></b>
<b>Moldova</b>	Common excise tax*	0.82	0.9	0.8
	VAT	0.29	0.39	0.31
	Final retail price	1.73	2.36	1.88
	Excise tax share	$0.82/1.73=47\%$	$0.9/2.36=38\%$	$0.8/1.88=43\%$
	<b>Total Tax burden</b>	<b><math>(0.82+0.29)/1.73=64\%</math></b>	<b><math>(0.9+0.39)/2.36=55\%</math></b>	<b><math>(0.8+0.31)/1.88=59\%</math></b>

Note: \* 'Common excise' refers to the sum of specific and ad valorem excise taxes.

Sources: Yavorsky (2021) for Ukraine and Moldova; authors' observations for Georgian data. Excise tax share and total tax burden are based on the authors' calculations. All values are in euros.

Figure 1 presents the differences in the tax burden on above-mentioned brands of cigarettes in Georgia, Ukraine and Moldova as of 2021.

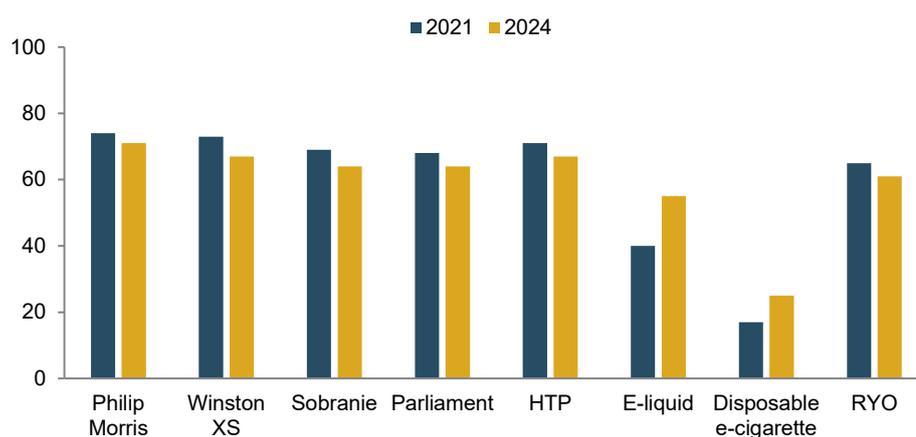
**Figure 1 / Tax burden on selected brands of cigarettes in Georgia, Ukraine and Moldova in 2021**

Sources: Yavorsky (2021) for Ukraine and Moldova; authors' observations for Georgian data

To show the difference in the tax burden over time, we provide appropriate data for the most popular tobacco products in Georgia for the years 2021 and 2024 (Figure 2). Since 2021, the tax burden on the Georgian tobacco market has been reduced due to rising cigarette prices, while the real value of the specific excise tax has been eroded by inflation (as shown in Table 5). Although tobacco taxation rates on conventional cigarettes and HTPs have remained unchanged since 2019, there have been notable

adjustments. The excise rate on electronic cigarettes increased from GEL 0.2 to GEL 1.0 in 2022, while the excise duty on RYO tobacco was recently (June 2024) decreased from GEL 60 to GEL 30 (since price data are from the first half of 2024, this tax change is not taken into account for the tax burden calculations).

**Figure 2 / Total tax burden (including excise taxes and VAT) by cigarette brands and product categories as a share of the retail price (%)**



Notes: The share was calculated for a pack in case of cigarettes and HTPs, for 1 ml of e-liquid, for 2 ml in case of disposable e-cigarettes, and for a 100-gram pack of RYO tobacco. The corresponding data and calculations can be found in Tables 13 and 14 in the Appendix.

Source: authors' calculations

**Table 5 / Total tax in monetary terms for 2021 and 2024, shown in both nominal and real values (base year: 2021)**

Retail prices for the most popular tobacco products in Georgia	Total tax GEL 2021	Total tax GEL 2024 (real, inflation-adjusted, base year 2021)	Total tax GEL 2024 (nominal)
Philip Morris, 1 pack	4.37	4.10	4.69
Winston XS, 1 pack	4.51	4.50	5.23
Sobranie, 1 pack	4.91	5.10	5.82
Parliament, 1 pack	5.09	5.00	5.73
HTP, 1 pack	4.64	4.50	5.23
E-liquid, 1ml	0.32	1.38	1.12
Disposable e-cigarette, 2ml	1.57	4.30	2.53
RYO, 100 g pack	7.83	6.90	7.98

Note: The corresponding data and calculations can be found in Tables A.13 and A.14 in the Appendix.

Source: authors' calculations

Table 5 presents the total tax in monetary terms for 2021 and 2024, shown in both nominal and real values. According to the data, the real cost of tobacco tax for most cigarette brands was lower in 2024 than it was in 2021. However, the tax burden increased for e-liquids<sup>4</sup>. Regarding RYO tobacco, the tax burden figures in Table 7 reflect data prior to June 2024, when the excise rate for it was reduced.

<sup>4</sup> Throughout the paper, unless explicitly stated otherwise, the term 'e-liquids' is used as an umbrella category referring to liquids (with or without nicotine) intended for use in electronic cigarettes, including both refill liquids for open systems and

## 2.4. AFFORDABILITY

Taxation policy has played a central role in shaping tobacco affordability in Georgia. Specifically, the stagnation of excise tax rates, together with income growth, increased the affordability of tobacco products despite rising nominal prices. Affordability is calculated as the share of GDP per capita required to purchase 100 packs of cigarettes. As seen in Table 6, while tax increases between 2017 and 2020 reduced affordability, it has been increasing since 2020 on all types of tobacco products, reaching 2017 levels by 2023. Specifically, by 2023, filtered cigarettes became more affordable than they were in 2017, while the affordability of unfiltered cigarettes reached a level between the 2017 and 2018 levels. The only exception is e-liquids, whose affordability decreased in 2022 and 2023 – in line with the fivefold increase of their excise rate in 2022.

**Table 6 / Affordability indicators for cigarettes, HTPs, RYO tobacco and e-liquids in Georgia**

Year	Affordability for 100 packs of cigarettes or HTP sticks			HTPs	RYO 100 gr	Affordability for e-cigarettes	
	Locally produced without filter	Locally produced with filter	Imported with filter			50 disposable devices, 2 ml, 500 puffs*	10 x 10 ml e- liquid (for open systems)**
2017	1.21%	2.98%	3.77%				
2018	2.27%	3.20%	4.11%				
2019	2.63%	3.14%	4.11%				
2020	2.77%	3.36%	4.49%	4.86%	0.09%	6.73%	0.60%
2021	2.38%	2.93%	3.97%	3.97%	0.07%	5.50%	0.49%
2022	2.14%	2.55%	3.57%	3.57%	0.07%	5.10%	1.12%
2023	1.95%	2.32%	3.43%	3.43%	0.06%	5.10%	1.07%

Notes: \* Most disposable e-cigarettes have a volume of 2 ml. We assessed the affordability of 50 disposable e-cigarettes, each with 2 ml and 500 puffs. \*\* For comparison purposes, we analysed 100 ml of e-liquid (10 × 10 ml), which is equivalent to the volume of 50 disposable 2 ml e-cigarettes.

Sources: authors' calculations

## 3. Evaluation of the legal tobacco market of Georgia

Estimating the size of the Georgian tobacco market is an important and complex issue. The challenge arises from the wide variety of tobacco products, which differ not only in terms of the number of brands but also in terms of technological innovations. Assessing the tobacco market is crucial because changes in tax rates and corresponding price increases often encourage consumers to switch to alternative tobacco products. As a result, the intended effect of tax changes (i.e. reduced consumption) may not be fully realised. In the following discussion, we will estimate the share of the main tobacco products in Georgia. For each product category, we first present trends in the number of excise stamps requested, and then we present our estimation of actual consumption based on tax revenues and tax rates.

The Georgian tobacco market consists of the following primary products: (i) traditional cigarettes with and without filters, domestically produced or imported; (ii) heated tobacco products (HTPs); e-liquids and electronic cigarettes; and roll-your-own (RYO) tobacco. Other nicotine-containing products, as indicated by the export-import data from the National Statistics Office of Georgia (Geostat) and the 2019 National Tobacco Survey (NCDC 2019), are not widely used in Georgia. For example, chewing tobacco and snuff are neither locally produced nor imported in significant quantities. The same applies to cigars and cigarillos, which are produced locally and imported in small amounts but do not significantly impact the overall level of tobacco consumption in Georgia.

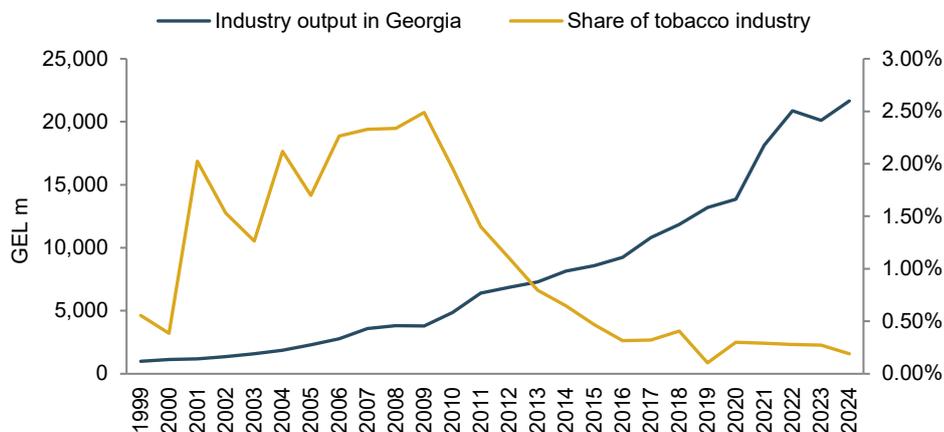
This report does not assess the illicit tobacco market in Georgia due to a lack of comprehensive data, as there are only a few studies estimating the size of the country's illicit cigarette market. Little et al. (2023) conducted a panel study to analyse this market. The first wave of their study revealed that illicit cigarette consumption in Georgia was 1.5% of total consumption in 2017. Subsequent waves showed no significant increase in illicit consumption across most regions of the country, with the exception of Zugdidi, a city near the Russian-occupied territory of Abkhazia, where illicit cigarette consumption reached 30.9% by the third wave of the study (Ross and Bakhturidze 2018).

To estimate trends in the consumption of regular cigarettes, HTPs, e-cigarettes and RYO tobacco, we primarily relied on data from the State Treasury of the Ministry of Finance of Georgia, the Revenue Service, and the Statistical Service of Georgia.

First, we will review the supply side of tobacco products.

### 3.1. SUPPLY SIDE – LOCAL PRODUCTION AND IMPORTS

In 1999, the manufacture of tobacco products accounted for 0.55% of Georgia's total industrial output. While local tobacco-product manufacturing increased alongside overall industrial growth, its share in total production peaked in 2009 and has been declining ever since, reaching 0.27% in 2023 (authors' calculations based on the data from the National Statistics Office of Georgia; see Figure 3).

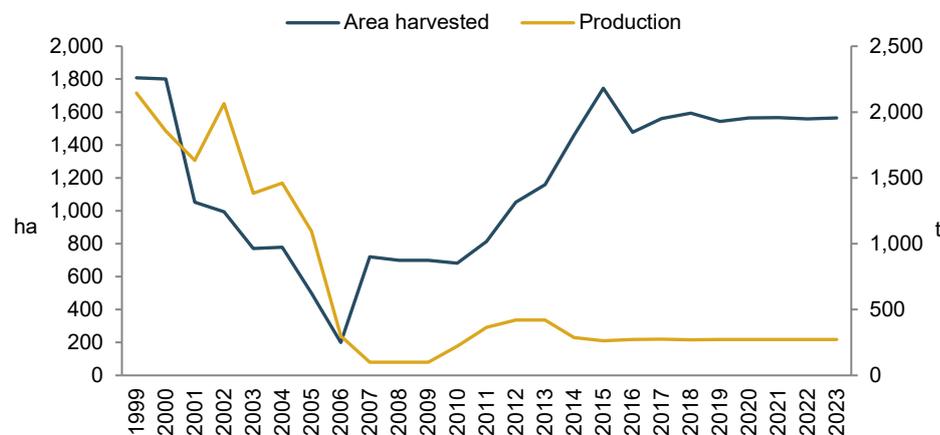
**Figure 3 / Industrial output and share of tobacco industry in Georgia (1999-2023)**

Source: Geostat n.d.

### Supply of raw tobacco

**Local cultivation of tobacco:** Tobacco was introduced to Georgia in the 19th century. During the 1960s, the country saw significant growth in tobacco cultivation, with industrial-scale production concentrated in the regions of Abkhazia and Adjara as well as the towns of Lagodekhi and Marneuli. The 'Samsun' and 'Trapezioni' varieties were particularly prominent in tobacco production (Agriculture 2015).

According to the UN's Food and Agriculture Organization (FAO n.d.), Georgia's annual tobacco harvest averaged 1,900 tonnes between 1999 and 2002. However, production has declined sharply since 2006. In 2023, the tobacco crop harvest was 272 tonnes, a significant drop (85.3%) from the 1,855 tonnes recorded in 2000.

**Figure 4 / FAO data on unmanufactured tobacco in Georgia (1999-2023)**

Source: FAO, FAOSTAT Crops and Livestock Products database (QCL), Tobacco production, Georgia

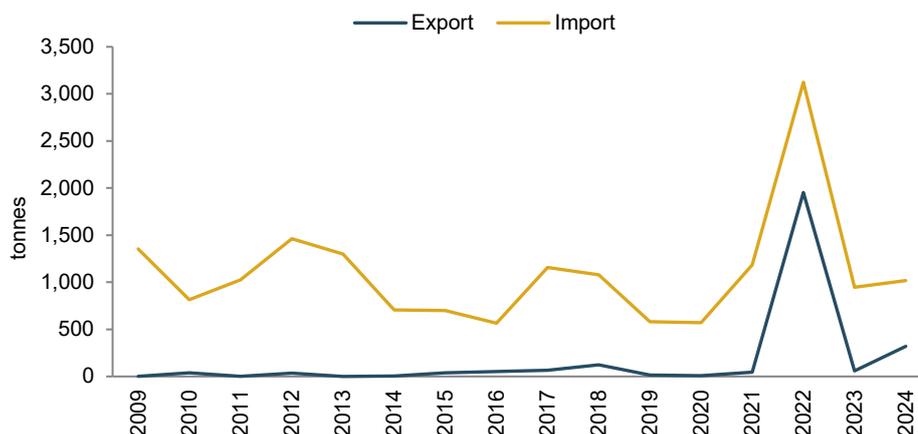
This decline in tobacco production in the early 2000s was primarily due to a reduction in the area of land allocated for tobacco cultivation. In 2000, tobacco crops covered 1,801 hectares, but this area had

shrunk to 682 hectares by 2010. While land dedicated to tobacco cultivation has increased in recent years (stagnating at around 1,500 hectares since 2017), the expansion has not resulted in a proportional increase in tobacco yields (Figure 4).

Trade of Raw Tobacco: Georgia's raw tobacco imports have been recorded in tonnes by the National Statistics Office of Georgia since 2009 based on data from the Geostat External Trade Database (Geostat 2009-2024). Imported volumes have consistently exceeded local production. Since 2016, imports have generally increased, with a temporary decline in 2019 due to a rise in the excise tax on raw tobacco.

Notably, imports peaked in 2022, primarily driven by increased exports of raw tobacco from Georgia to Armenia, Belarus and Kyrgyzstan. However, excluding this exceptional year, Georgia's raw tobacco exports have generally remained significantly lower than its imports (Figure 5).

**Figure 5 / Export-import indicators of raw tobacco (2009-2024)**



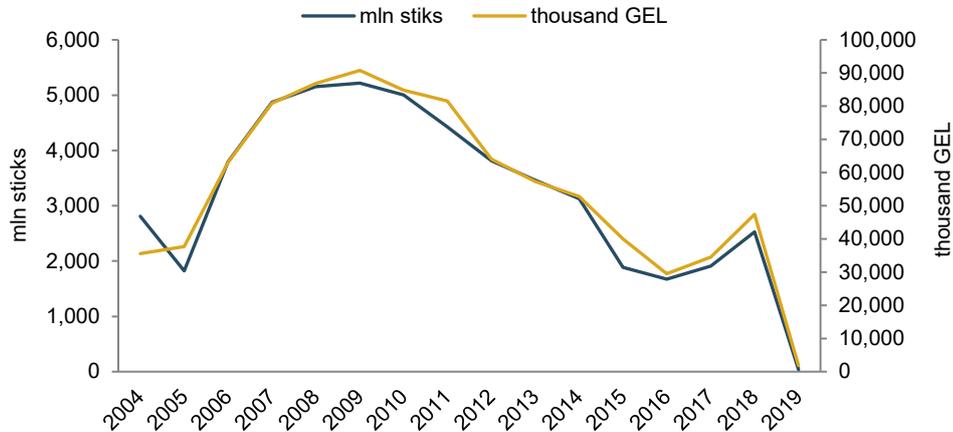
Source: National Statistics Office of Georgia (Geostat), External Trade Database (HS 2401 – Raw tobacco; <https://ex-trade.geostat.ge>)

### Cigarette Production and Supply

**Local Production:** Geostat data on Georgia's manufacturing of cigarettes, cigars and other tobacco products covers the period from 2004 to 2019, providing figures in millions of sticks and production costs. However, the data do not distinguish between cigarettes and cigars. Furthermore, production data for the 2020-2024 period are unavailable, as they are classified as confidential under Georgia's Law on Official Statistics, which restricts the publication of aggregated data when fewer than three statistical units are involved, making indirect identification possible.<sup>5</sup>

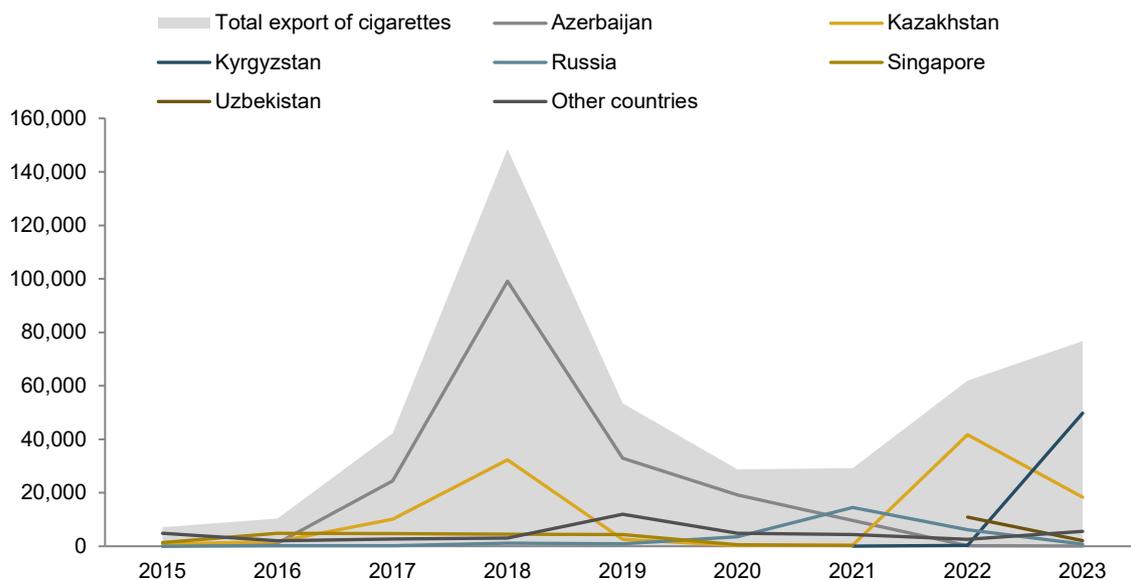
As shown in Figure 6, the production and supply of cigarettes, cigars and other similar products have been declining. This trend has continued beyond 2019, as inferred from the decreasing number of excise tax stamps requested by the tobacco industry for locally produced cigarettes, based on official administrative data provided by the National Statistics Office of Georgia.

<sup>5</sup> Georgia's Law on Official Statistics has been in effect since 2009. The number of local enterprises producing cigarettes has decreased since 2020.

**Figure 6 / Declared data from cigarette and cigar manufacturers (2004-2019)**

Sources: National Statistics Office of Georgia (Geostat), official administrative data provided upon request (letter N 5-509, 29 February 2024)

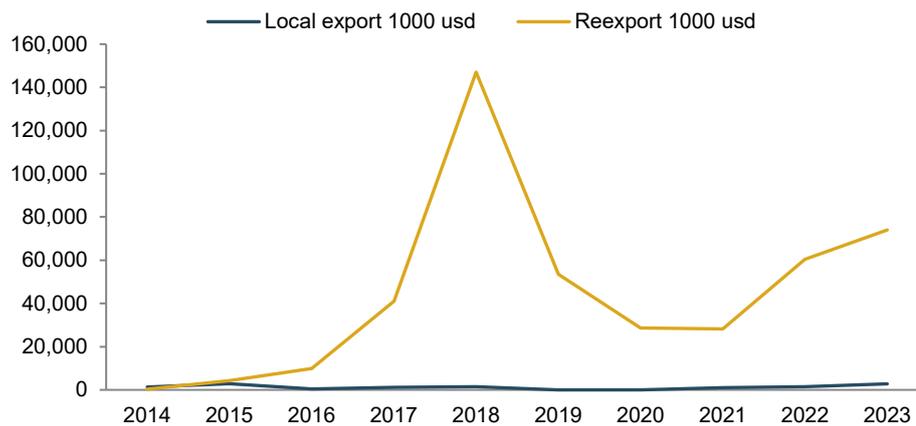
**Trade of Cigarettes:** Although domestic cigarette production in Georgia began to decline in 2019, cigarette exports have shown an upward trend in recent years. In 2012, Georgia exported cigarettes worth USD 5 million; by 2023, this figure had increased to USD 76 million. In 2022 and 2023, the main importers of Georgian cigarettes were countries in Central Asia, which accounted for more than 85% of total cigarette exports (Geostat 2012-2023; see Figure 7).

**Figure 7 / Export of cigarettes from Georgia and main importer countries between 2015 and 2023 (USD thousand)**

Source: National Statistics Office of Georgia (Geostat), External Trade Database, cigarette exports (HS 2402), 2012–2023 (<https://ex-trade.geostat.ge>)

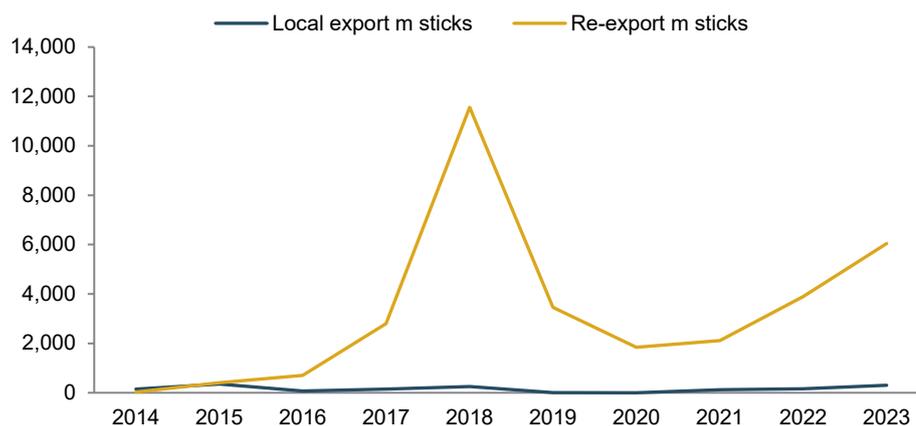
Cigarette exports from Georgia consist of both re-exports and exports of locally produced cigarettes. The volume of locally produced cigarette exports remains significantly lower than re-exports; by 2023, locally produced cigarettes made up only around 4% of total cigarette exports (see Figures 8 and 9). The share of exported Georgian-produced cigarettes relative to re-exports is shown in Figure 8 (Geostat 2012-2023).

**Figure 8 / Georgian exports of locally produced and imported cigarettes between 2014 and 2023 (USD)**



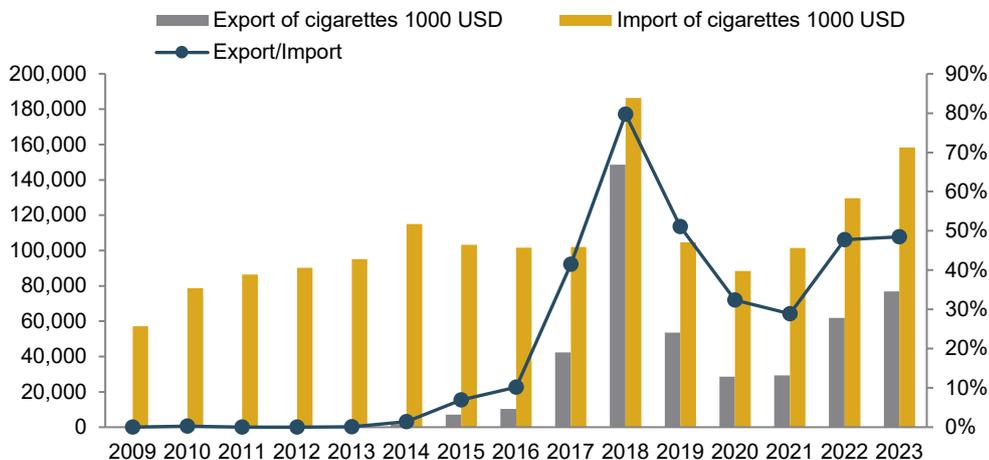
Source: National Statistics Office of Georgia (Geostat), External Trade Database, cigarette exports (HS 2402), 2014–2023 (<https://ex-trade.geostat.ge/>)

**Figure 9 / Georgian exports of locally produced and imported cigarettes between 2014 and 2023 (sticks)**

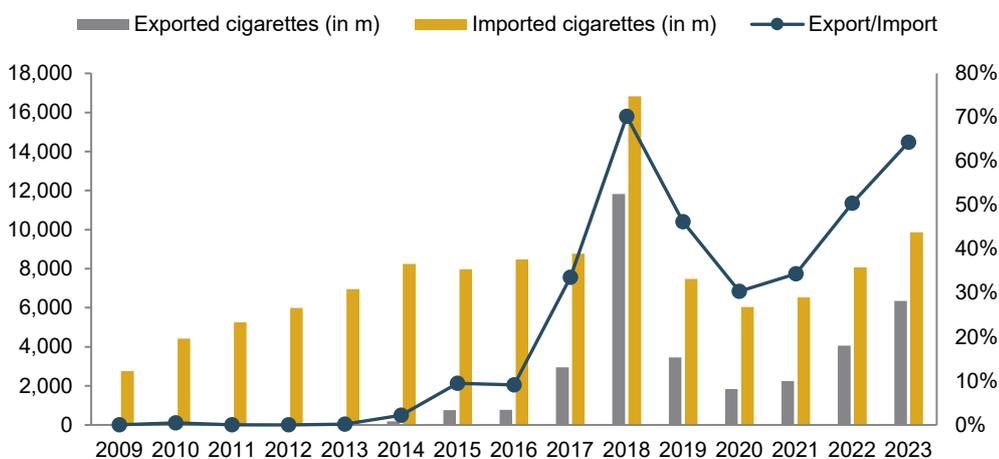


Source: National Statistics Office of Georgia (Geostat), External Trade Database, cigarette exports (HS 2402), 2014–2023 (<https://ex-trade.geostat.ge/>)

The growth in re-exports is closely tied to cigarette imports. The rise in re-exports began in 2015 and peaked in 2018, when 70% of cigarettes imported into Georgia were re-exported, mainly to Azerbaijan and Kazakhstan. Although the share of re-exports declined in the following years, it began rising again in the 2022-2023 period, this time driven by exports to Central Asian countries (Figures 10 and 11; Geostat 2002-2023).

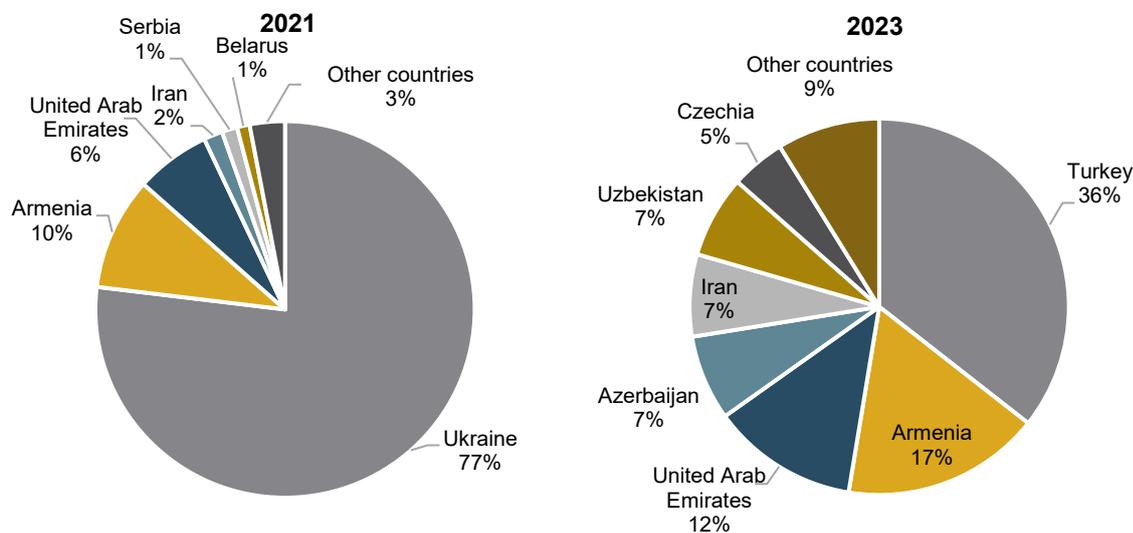
**Figure 10 / Georgian exports and imports of cigarettes (USD)**

Source: National Statistics Office of Georgia (Geostat), External Trade Database, cigarette exports (HS 2402), 2009–2023 (<https://ex-trade.geostat.ge/>)

**Figure 11 / Georgian exports and imports of cigarettes (sticks)**

Source: National Statistics Office of Georgia (Geostat), External Trade Database, cigarette exports (HS 2402), 2009–2023 (<https://ex-trade.geostat.ge/>)

Before Russia launched its full-scale invasion of Ukraine in 2022, around 70% of Georgia's cigarette imports came from Ukraine. However, in 2023 and 2024, Ukrainian imports were largely replaced by supplies from Turkey (21%), Armenia (21%), Azerbaijan (14%) and the United Arab Emirates (13%; Figure 12). We continue observing the trends in supply of imported cigarettes through the number of excise stamps issued in the next section (Table 7).

**Figure 12 / Cigarette importers by country in 2021 and 2023**

Note: The total import volume was USD 101.3 m in 2021 and USD 158.3 m in 2023.

Source: National Statistics Office of Georgia (Geostat), External Trade Database, cigarette exports (HS 2402), 2021, 2023 (<https://ex-trade.geostat.ge/>)

### 3.2. DEMAND SIDE – ESTIMATION OF CONSUMPTION

**Cigarettes:** Regular cigarettes remain the most widely consumed tobacco product among smokers in Georgia. We begin our analysis by examining the number of excise stamps requested by the tobacco industry. Although excise stamps are typically purchased in advance and do not directly reflect current consumption, these data provide valuable insight into industry expectations (see Table 7).

Between 2015 and 2018, the demand for excise stamps for domestic unfiltered cigarettes increased by a factor of 4.5. Meanwhile, domestic filtered cigarettes disappeared from the market in 2019. Similarly, the number of excise stamps for imported filtered cigarettes declined in 2019. This shift was mainly driven by tax policies, particularly increases in excise taxes, which resulted in higher cigarette prices and a subsequent drop in demand.

However, tax policy was not the only factor influencing demand. The growing popularity of locally produced unfiltered cigarettes and the declining demand for filtered cigarettes were also shaped by the strategies employed by local cigarette manufacturers in response to tax changes. To circumvent the higher excise and ad valorem taxes, local producers introduced modified products. They increased the availability of unfiltered cigarettes, priced them lower than filtered cigarettes, and even offered a filter as a 'gift' with each purchase. As a result, this modified substitute shifted consumer demand from filtered to unfiltered cigarettes, making the local production of filtered cigarettes unprofitable.

By the end of 2018, the excise tax on unfiltered cigarettes was equalised with that of filtered cigarettes. Additionally, in 2019, the ad valorem tax was also increased from 10% to 30% for all types of cigarettes. As a result, the price increases made the production of unfiltered cigarettes unprofitable, which led to a shift in demand back towards filtered cigarettes.

**Table 7 / Issued excise marks and excise rates per pack of cigarettes**

	Issued excise stamps				Excise rates		Ad valorem tax
	Locally produced with filter	Locally produced without filter	Imported with filter	Imported without filter	Specific excise tax for filtered cigarettes (GEL)	Specific excise tax for unfiltered cigarettes (GEL)	
2006	128,908,925	45,036,001	64,913,035		0.40-0.60	0.10-0.15	
2007	202,156,998	45,236,973	111,092,126		0.40-0.60	0.10-0.15	
2008	210,187,998	51,650,000	155,839,809		0.40-0.60	0.10-0.15	
2009	209,388,998	53,514,999	145,534,788		0.40-0.60	0.10-0.15	
2010	184,870,199	66,970,000	234,459,307		0.60	0.15	
2011	174,094,798	55,998,000	266,575,728	175,000	0.60	0.15	
2012	150,499,998	49,880,000	326,728,351	175,000	0.60	0.15	
2013	121,652,011	43,277,001	328,887,702	1,073,000	0.75	0.20	
2014	88,668,000	35,011,000	354,240,000	1,247,000	0.75	0.20	
2015	41,580,000	24,040,000	420,043,104	1,620,800	0.90	0.25	5%
2016	26,784,000	34,996,000	399,686,400	4,192,600	1.10	0.30	10%
2017	13,176,000	73,727,000	305,078,410	5,185,800	1.70	0.60	10%
2018	540,000	108,431,000	267,807,600	7,366,000	1.70	0.60	10%
2019		1,735,000	211,474,800	334,000	1.70	1.70	30%
2020	20,952,000	1,050,000	243,010,800	1,221,000	1.70	1.70	30%
2021	22,356,000	62,000	255,772,200	147,000	1.70	1.70	30%
2022	28,728,000	10,000	291,805,200	318,000	1.70	1.70	30%
2023	20,314,800	5,000	314,258,400	306,000	1.70	1.70	30%

Note: Different excise rates were applied in the 2006-2009 period: domestic filtered cigarette excise – GEL 0.40; imported filtered excise – GEL 0.60; domestic unfiltered excise – GEL 0.10; imported unfiltered excise – GEL 0.15.

Source: Data on excise tax stamps for tobacco products for the 2001-2013 period were obtained upon official request from the Revenue Service of Georgia, while data for the 2014-2024 period are based on publicly available statistics published by the Revenue Service of Georgia (Revenue Service of Georgia 2024a, 2014-2024).

As mentioned earlier, excise stamps do not directly reflect current levels of cigarette consumption. Instead, the excise stamps requested by the industry serve as an indicator of anticipated future demand. If these excise stamps are not used, local cigarette manufacturers and importers are required to return them.

To analyse the current volume of cigarette demand, we requested data on returned cigarette excise stamps from official agencies. According to data from the Revenue Service, the total number of returned excise stamps for tobacco products between 2013 and 2023 – including both domestically produced and imported filtered and unfiltered products – amounts to approximately 15.6 million. For comparison, a total of 4,122.1 million excise stamps were issued during the same period. Accordingly, the number of returned stamps represents 0.38% of the total (Revenue Service of Georgia 2024b).

Until 2016, the Treasury of the Ministry of Finance recorded revenues from cigarette excise taxes under four categories: local filtered, local unfiltered, imported filtered and imported unfiltered. To estimate the number of cigarette packs sold during these years in each category, we used the following formula: number of consumed packs = revenue / specific excise tax rate per pack. For example, in 2013, revenue from excise taxes on locally produced filtered cigarettes amounted to GEL 85 million, according to consolidated budget revenue data published by the Treasury of Georgia. At the same time, the corresponding specific excise tax rate was GEL 0.75 per pack, based on administrative data on excise tax stamps obtained upon official request from the Revenue Service of Georgia. Accordingly, GEL 85

million / GEL 0.75 = 113 million packs of local filtered cigarettes were estimated to have been sold in 2013 (Treasury of Georgia 2006-2024; Revenue Service of Georgia 2024a; authors' calculations).

Starting in 2016, an ad valorem tax was introduced alongside the specific excise tax. Treasury reports were modified, consolidating excise tax revenues into just two categories: locally produced cigarettes and imported cigarettes. The reported revenue figures reflect the total revenues from both specific and ad valorem excise taxes on filtered and unfiltered cigarettes combined.

To estimate separately the number of packs of domestically produced and imported cigarettes sold as well as the number of these that were filtered or unfiltered, we assumed that the distribution of excise tax revenue across product types is proportional to the number of excise stamps issued, adjusted for tax and price differences. In other words, we did not assume that revenue shares mirror the stamp distribution directly (e.g. the 43/57 ratio discussed immediately below), but rather applied a weighted formula that accounts for both specific and ad valorem taxes as well as differences in average retail prices between the two product categories.

For example, in 2016, the number of excise stamps issued for domestically produced cigarettes was distributed in a 43% (filtered) to 57% (unfiltered) ratio. Total excise revenue from locally produced cigarettes was GEL 30 million. Using the following formula, we calculated the number of packs of domestic unfiltered cigarettes sold:

$$N_{unf} = \frac{R * S_{unf}}{S_f * (T_{specf} + P_f * T_{adv}) + S_{unf} * (T_{specunf} + P_{unf} * T_{adv})}$$

Where:

- ›  $N_{unf}$  = number of unfiltered cigarette packs
- ›  $R$  = total excise revenue
- ›  $S_f, S_{unf}$  = share of issued excise stamps for filtered/unfiltered cigarettes (relative to all excise stamps for domestically produced cigarettes)
- ›  $T_{specf}, T_{specunf}$  = specific excise rate for filtered/unfiltered cigarettes, respectively
- ›  $T_{adv}$  = ad valorem tax rate
- ›  $P_f, P_{unf}$  = average price of filtered/unfiltered cigarettes

**Table 8 / Estimated cigarette sales and issued excise tax stamps in Georgia, 2013-2023 (aggregated totals)**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Issued excise stamps (in m)	494.9	479.2	487.3	465.7	397.2	384.1	213.5	266.2	278.3	320.9	334.9
Calculation of sales in cig. packs (revenue/excise tax) (in m)	408.1	470.5	422.3	426.1	368.2	375.2	256.5	245.5	256.8	266.8	292.6
Difference	86.8	8.7	65.0	39.6	29.0	8.9	-43.0	20.7	21.5	54.1	42.3

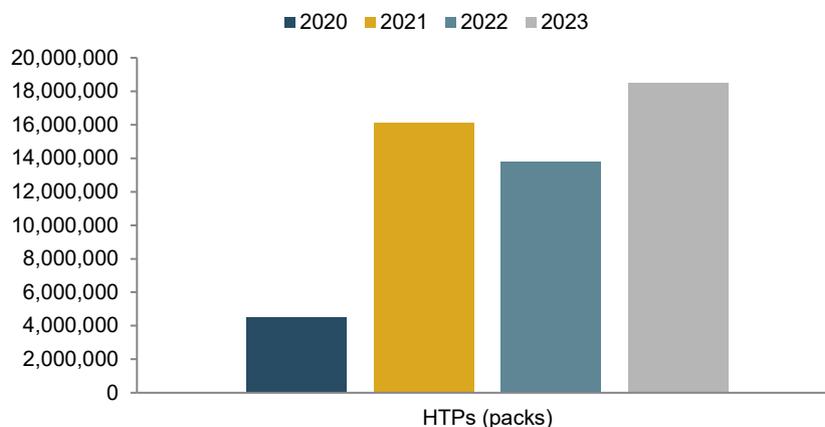
Notes: Cigarette packs are estimated based on analysis of excise revenue, excise rate and import data.

Sources: Ministry of Finance, State Treasury, revenue reports 2006-2024, Tax code of Georgia 2011-2024, Revenue Service of Georgia, 2014-2024 reports

We applied the same method to calculate cigarette sales volumes for local filtered, imported filtered and imported unfiltered cigarettes. The summarised (aggregated) results – representing the total number of cigarette packs across all four categories – are presented in Table 8.

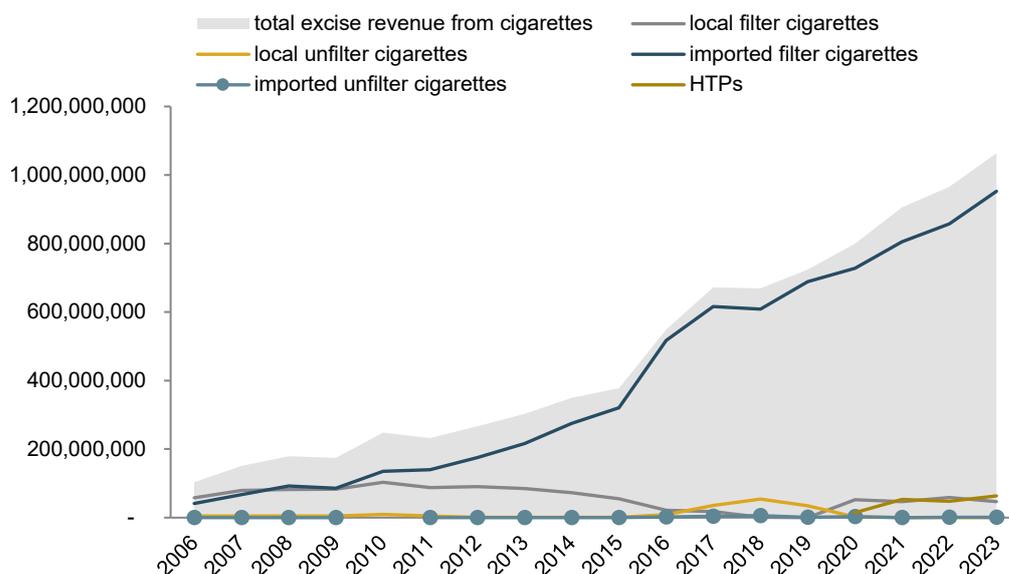
**HTPs:** Since 2016, the Tax Code of Georgia has also included rates for excise taxes on heated tobacco products (HTPs). However, detailed accounting for these products only began in 2020, according to the Statistics Service of Georgia (Geostat 2009-2024). HTP consumption increased fourfold after 2020 and accounted for roughly 5% of the market in 2023. All HTPs in Georgia are imported. Although imports of HTPs are increasing, their share in the overall import market for tobacco products remains relatively small.

**Figure 13 / Georgian imports of HTP packs between 2020 and 2023**



Note: In Georgia, the demand for heated tobacco products is entirely met through imports.  
Source: National Statistics Office of Georgia (Geostat), External Trade Database 2009-2024

**Figure 14 / Budget revenue (in nominal GEL values) from excise taxation, 2006-2023**



Source: Ministry of Finance, State Treasury, revenue reports 2006-2024

In Figure 14, the shaded area represents excise tax revenues (in nominal values) for all types of cigarettes and HTPs. Until 2010, revenues from domestic and imported filtered cigarettes were approximately equal. However, since 2011, excise tax revenues from imported filtered cigarettes began to increase significantly. By 2015, revenues from this category accounted for 80-90% of total cigarette excise tax revenues, while revenues from domestic filtered cigarettes steadily declined, reaching nearly zero by 2019.

**Electronic cigarettes:** According to the export-import data provided by the Statistics Service of Georgia (Geostat 2009-2024), the registration of e-liquids in Georgia began in 2015, although the excise rate for e-liquids was set in the Tax Code of Georgia in 2017 at GEL 0.2 per millilitre. In subsequent years, demand for e-liquids grew significantly. By 2023, the Tax Code introduced a fivefold increase in the excise tax rate, raising it to GEL 1 per millilitre.

Unfortunately, until 2024, no distinction was made between disposable e-cigarettes and e-liquids in the reporting of data on domestically produced and imported e-cigarettes. As a result, it is not possible to analyse e-cigarette consumption volumes based on the data provided by the Statistics Service and the Revenue Service. However, these data clearly indicate a trend of rising e-cigarette consumption (Table 9).

**Table 9 / Net imports of e-liquids, the number of issued excise stamps, and the excise tax rate for e-cigarettes**

	Thousands of USD	Tonnes	Issued excise stamps	Excise rate (GEL)
2015	11.2	0.5		
2016	35.6	0.8		
2017	245.0	8.2	N/A	0.2
2018	151.2	2.3	N/A	0.2
2019	207.3	1.4	36,000	0.2
2020	158.5	9.4	41,000	0.2
2021	2,409.7	30.7	979,000	0.2
2022	10,830.0	151.1	4,472,000	0.2
2023	10,888.3	171.6	4,518,600	1.0

Sources: National Statistics Office of Georgia, Revenue Service of Georgia, Tax Code of Georgia

It is difficult to estimate the consumption of e-cigarette liquids by weight (tonnes), as importers typically report the gross volume of the product on import declarations. Additionally, determining consumption volumes from excise stamp data is not possible because excise stamps are purchased in advance (i.e. before the sale of the goods). Moreover, a single excise stamp could be used for either a 2 millilitre disposable e-cigarette or a 10 millilitre bottle of e-liquid. This accounting issue was addressed in 2024 by the introduction of a requirement to register the net weight of e-cigarette liquids in millilitres.

**RYO tobacco:** Another important product in the Georgian tobacco market is roll-your-own (i.e. raw) tobacco. While a small amount is produced locally, it does not significantly impact the overall market. In contrast, imported raw tobacco holds a significant share of the market. Both raw tobacco and homogenised or reconstituted tobacco are subject to an excise duty based on weight, measured in kilograms. The excise tax on raw tobacco rose from GEL 20 per kilogram (1999-2015) to GEL 60 per kilogram in 2019. However, it was subsequently lowered to GEL 30 per kilogram in 2024 (Government of Georgia 2024).

By converting raw tobacco into its cigarette equivalent (1 pack = 20 sticks, with 1 stick containing 0.7 grams of tobacco), we estimate that RYO tobacco accounted for 15-22% of total cigarette consumption in the 2021-2023 period (authors' calculations; Table 10).

**Table 10 / Excise tax and revenue of RYO tobacco in Georgia, cigarette-pack equivalents, and share of RYO tobacco in total cigarette consumption (2011-2023)**

	Raw tobacco (kg)	Specific excise (GEL/kg)	Excise revenue (GEL)	RYO tobacco converted into cigarette packs (20 sticks)	Total number of cigarette packs (filtered, unfiltered, HTPs)	Share of RYO
2011	1,024,417	20	20,488,346	73,172,665	409,161,728	15.17%
2012	1,461,886	20	29,237,714	104,420,407	451,052,054	18.80%
2013	1,290,958	20	25,819,160	92,211,286	408,139,426	18.43%
2014	706,999	20	14,139,982	50,499,936	470,466,135	9.69%
2015	700,418	20	14,008,351	50,029,825	422,310,316	10.59%
2016	565,714	25	14,142,844	40,408,125	426,063,575	8.66%
2017	1,127,080	35	39,447,786	80,505,686	368,243,932	17.94%
2018	991,834	35	34,714,204	70,845,314	375,163,208	15.88%
2019	570,206	60	34,212,360	40,729,000	256,533,322	13.70%
2020	560,950	60	33,656,988	40,067,843	250,032,299	13.81%
2021	1,072,330	60	64,339,820	76,595,024	272,928,734	21.91%
2022	1,048,354	60	62,901,240	74,882,429	280,527,124	21.07%
2023	767,035	60	46,022,100	54,788,214	311,101,322	14.97%

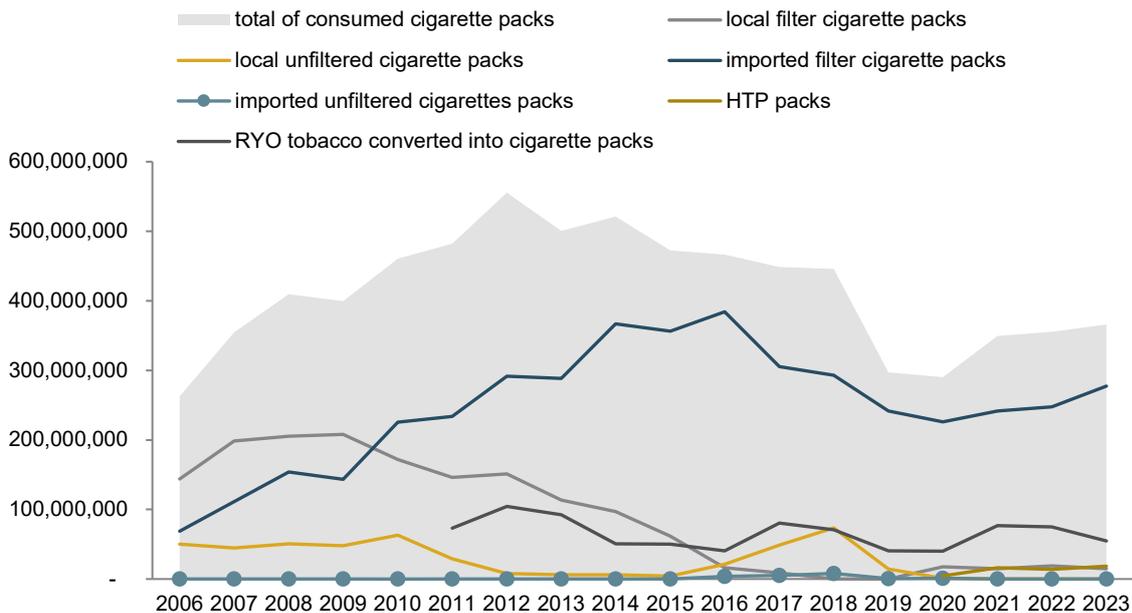
Sources: Ministry of Finance, State Treasury, revenue reports 2006-2024, Tax Code of Georgia 2011-2024

# 4. Conclusion of landscape study

To summarise, we can combine the analysed data for cigarettes, heated tobacco products (HTPs) and roll-your-own (RYO) tobacco to estimate the consumption volume and market share of different tobacco products in Georgia. The shaded area in Figure 14 represents the total volume of tobacco products sold in the country, excluding e-cigarettes.

Tobacco consumption in Georgia reached its peak in 2014. However, after 2016, the increase in the specific excise rate and the introduction of an ad valorem tax contributed to a decline in consumption. This downward trend continued until 2020, when consumption significantly decreased compared to previous years. This data highlights the impact of tax policy on tobacco consumption patterns in Georgia (Figure 15).

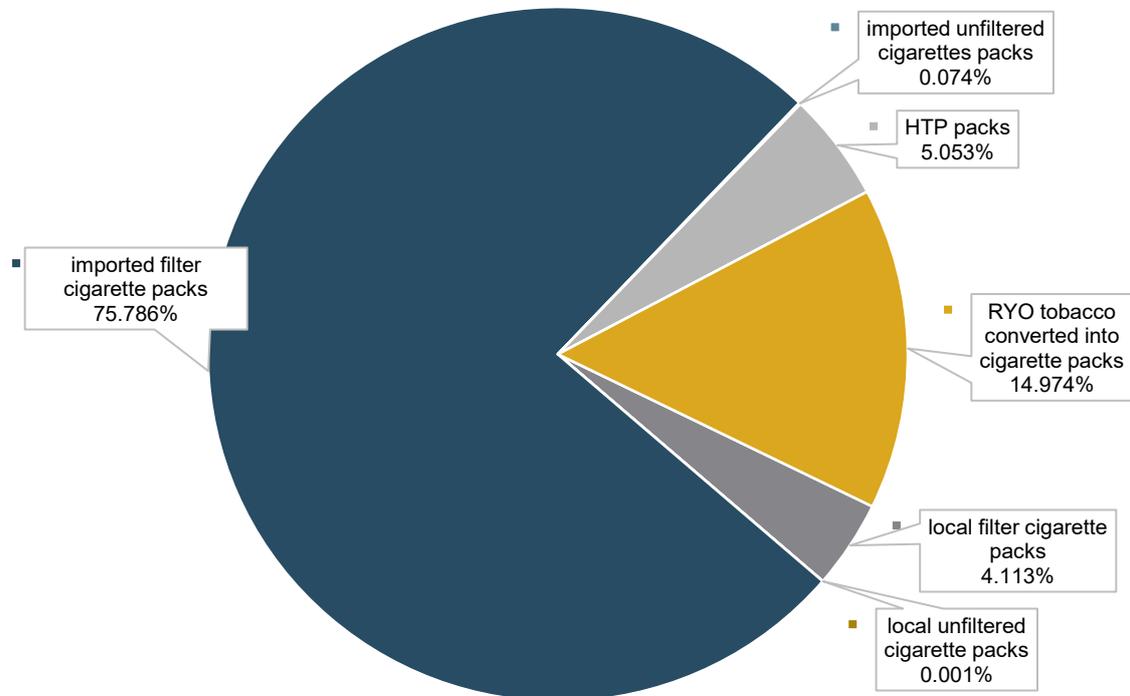
**Figure 15 / Consumed tobacco products in Georgia, excluding e-cigarettes (2006-2023)**



Notes: Measured as packs containing 20 sticks (including cigarettes, HTPs and RYO tobacco converted into pack equivalents), calculated based on excise tax revenue.  
Sources: authors' calculations

Figure 16 reflects market share in 2023. In this case, the share of regular cigarettes is approximately 80%, while RYO tobacco and HTPs account for 15% and 5%, respectively.

**Figure 16 / 2023 market share of conventional cigarettes, RYO tobacco and HTPs, excluding e-cigarettes**



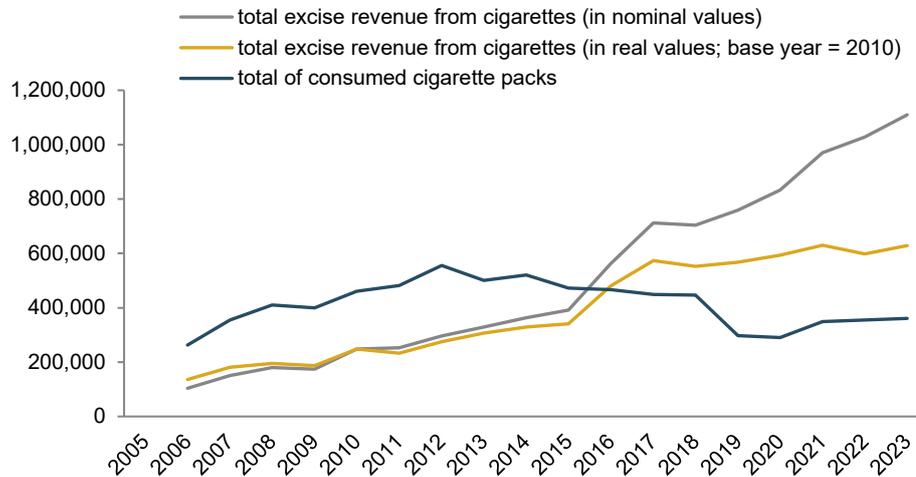
Source: authors' calculations

Next, Figure 17 shows the impact of tobacco policy in Georgia by comparing the consumption volume of tobacco products (with cigarettes, HTPs and RYO tobacco measured in terms of cigarette packs) with budget revenues (in nominal values), which consist of the specific excise and ad valorem taxes.

The trend of tobacco product consumption between 2006 and 2023 shows the following key points:

The highest consumption was in 2012, with approximately 555 million packs sold. As a result of tobacco control including tobacco taxation, Georgia recorded the lowest consumption in 2020, at approximately 290 million packs.

Since 2021, tobacco consumption has been growing slowly. There are several reasons for this. First of all, the excise tax rate of the majority of tobacco products has not changed since 2019. The specific excise tax rate on cigarettes and HTPs remains at GEL 1.7, and the excise tax rate on raw tobacco remained unchanged until June 2024, when it was halved, from GEL 60 to GEL 30 per kilogram. Although the excise tax on e-cigarettes has increased, this has not led to a decrease in their affordability. The second reason is the growth of income. Since 2006, the average annual growth of GDP per capita in Georgia has been 6%, and the average annual growth of wages of employees has been 13% (Geostat – National Accounts 2024), which has contributed to making tobacco products more affordable.

**Figure 17 / Excise tax revenues and cigarette consumption in Georgia (2005-2023)**

Notes: Excise tax revenues are in nominal values (thousand GEL). Cigarette consumption is measured in thousands of packs or pack equivalents.

Sources: National Statistics Office of Georgia (Geostat). National accounts: GDP per capita (<https://www.geostat.ge/en>)

To assess the effectiveness of tax policy, it is important to also consider its impact on the prevalence of tobacco use. Over the years, studies conducted in Georgia have evaluated tobacco use trends. According to the STEPS surveys in 2011 and 2016, Georgia had one of the highest – and increasing – smoking prevalence rates among WHO European Region countries, with 33% of adults identified as current smokers (WHO STEPS Survey 2011, 2016). However, comprehensive tobacco control measures have contributed to a decline in smoking rates. A 2020 study reported that smoking prevalence dropped to 28.2%, and the average number of cigarettes smoked daily decreased from 21.4 in 2016 to 18.6 in 2020 (NCDC 2021).

## 5. Estimation of price and income elasticities of cigarette consumption

In this analysis, price and income elasticities of cigarette consumption are estimated for Georgia since the ratification of the WHO FCTC. Using aggregate time-series data for the 2006-2023 period, we apply an error correction model (ECM), following the methodology outlined in the literature (Ross and Al-Sadat 2007; Cetin 2017; Jovanovic et al. 2018; Mugosa et al. 2020).

Although prices and volumes are available by categories, the analysis focuses on total cigarette consumption. This is because volumes by categories can be substantially affected by industry tactics (e.g. as discussed above, when unfiltered cigarettes had a tax advantage, local manufacturers started selling unfiltered cigarettes with filters as a 'gift' to the buyers).

As the weighted average price (WAP) is calculated using these volumes, we also use the price of imported filtered cigarettes, which dominate the market, as an alternative measure.

### 5.1. TESTS

To test for stationarity, the Dickey-Fuller test is applied to the 2006-2023 series (excluding 2005 due to a higher share of illicit trade and uncertainty about market shares). The null hypothesis of the test is that the series is non-stationary. Significance levels in the table below indicate rejection of the null hypothesis at the 10% (\*), 5% (\*\*) or 1% (\*\*\*) level.

**Table 11 / Results of Dickey-Fuller unit root test**

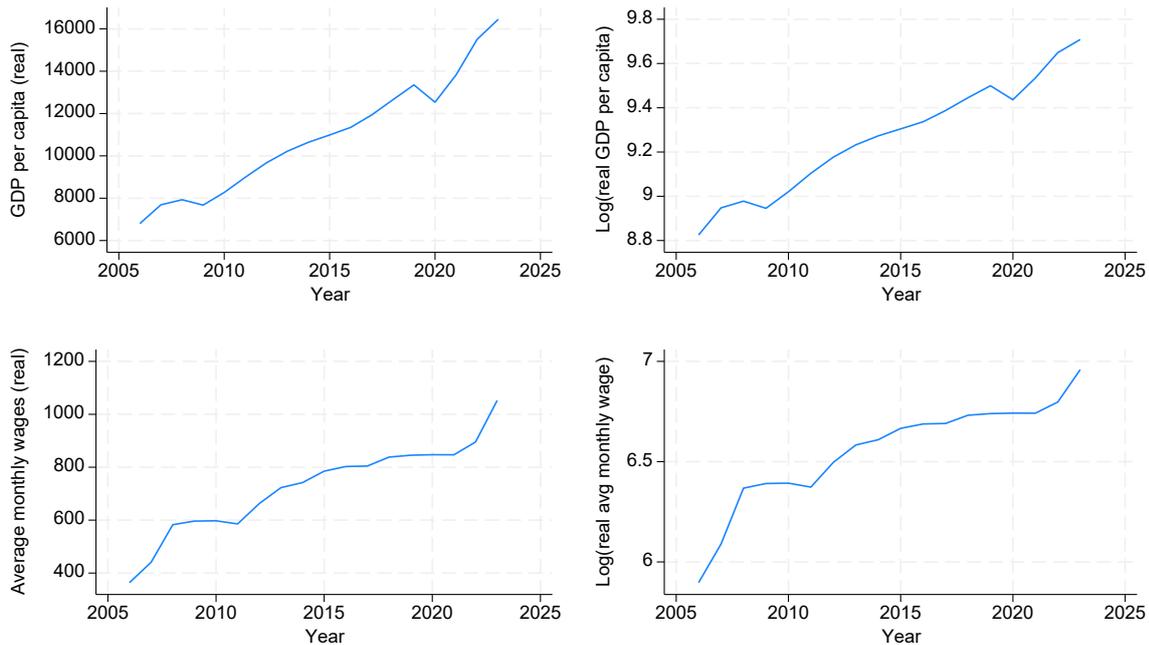
	Number of lags (for the FD model), based on lag-order selection stats	Level Z(t)	First difference (FD) Z(t)	Order of integration
Total volume based on tax revenues and tax rates, log of per capita	2	-1.62	-4.49***	I(1)
EM2024, log of per capita	0	-2.56	-2.72*	I(1)
EM2024, including illicit, log of per capita	0	-2.46	-2.87*	I(1)
Excise stamps, log of per capita	0	-3.08	-4.37***	I(1)
GDP per capita (real), log	0	-3.01	-4.27***	I(1)
Average monthly earning (real), log	0	-4.01**	-2.72*	I(0)
WAP (real)	0	-2.21	-3.59**	I(1)
Price, import filtered cig. (real)	0	-2.88	-3.05**	I(1)

Source: authors' calculations

As theory would predict income and price variables to be I(1), and because the available time series are relatively too short to provide strong evidence, we rely on the graphical representations and continue

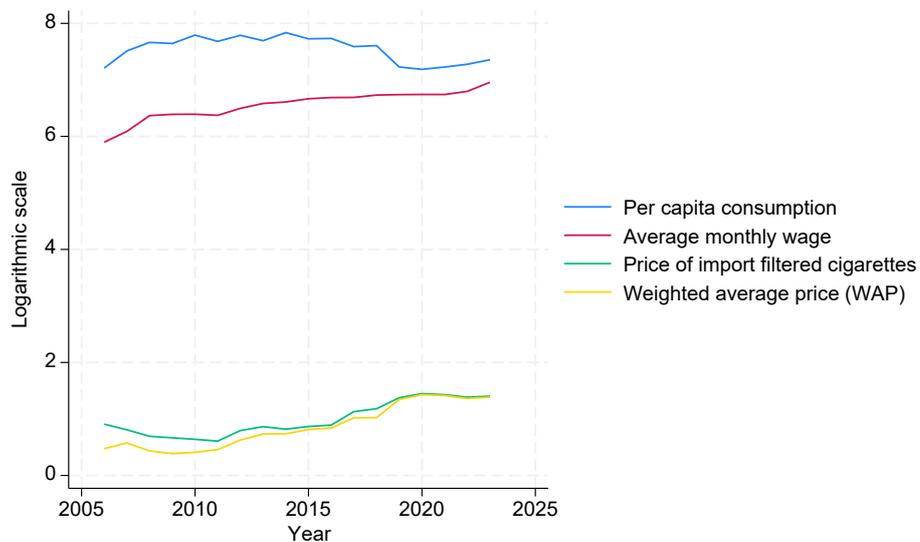
with the cointegration tests while assuming that the series are of the same order. Note that the logarithm of real wages is integrated of order one when tested only in the post-2011 period (i.e. after the stagnation observed on the panels in Figure 18).

**Figure 18 / Time series of (real) GDP per capita and average monthly wages as well as their logarithm**



Source: authors' calculations

**Figure 19 / Time series of income and price variables**



Source: authors' calculations

Applying the Engle-Granger test for cointegration with no lags confirms the presence of a long-run relationship between consumption, prices and wages. The test statistics are below the 5% critical value in specifications with WAP and below the 1% critical value in specifications with the price of imported filtered cigarettes. Thus, the null hypothesis of no cointegration is rejected at the 5% and 1% level, respectively. The use of no lags is confirmed by post-estimation tests for serial correlation in the residuals (Breusch-Godfrey test, Durbin's alternative test).

## 5.2. ESTIMATION SPECIFICATION AND RESULTS

Table 12 presents long- and short-run price and income elasticities estimated in the ECM model. The outcome variable is per capita total consumption of cigarettes, calculated based on tax revenues and tax rates. As price measures, both real WAP and the real price of imported filtered cigarettes are used. Our preferred income measure is average monthly nominal wage (real), but we also present the results using GDP per capita. In addition, we control for changes in tobacco control policies by including a dummy variable for the years after 2018, as stricter regulations were introduced on smoke-free places, labelling/packaging and advertising in May and September of that year.

In our preferred specification (columns 1-2), long-run price elasticity estimates are significant: -0.56 with respect to the WAP, and -0.64 with respect to the imported filtered prices. These are in line with recent elasticity estimates for Georgia (using Household Budget Survey data, Fuchs and Gonzalez Icasa (2020) estimate a price elasticity around -0.6 for the middle income deciles). The long-run income elasticity estimates are in the range of 0.63 and 0.81, which is also consistent with the income elasticity of 0.59 estimated in the NCDC report (2016).

Long-run elasticities are generally higher in specifications using GDP per capita as the income measure (columns 3-4). Price elasticities are -0.85 and -0.89, while income elasticities are in the range of 0.85 and 1.2. Note that in Model (4), the null hypothesis of no serial correlation in the residuals is rejected.

When significant, the short-run price elasticity is similar to the long-run price elasticity, while wage elasticities seem to be higher in the short run than in the long run. The coefficient estimates of the lagged first-step residuals ( $L\_egresid$ ) are not statistically significantly different from -1, which suggests fast adjustment mechanisms.

As robustness checks, we also estimated the elasticities in ordinary least squares (OLS) regressions using alternative measures of cigarette volumes (see Table 15 in the Appendix): retail volume, including illicit sales (Euromonitor International, 2024), and volume based on excise stamps issued (Revenue Service of Georgia 2014-2024). As the Engle-Granger test did not confirm the existence of cointegration in these specifications, we also estimated the relationship on the first-differenced (FD) series. However, elasticity estimates in the FD series are either not or only weakly significant. While emphasising the limited validity of these results, one could observe patterns as expected: price elasticity is lowest (in absolute terms) when the outcome measure includes illicit volumes, and it is highest when the outcome measure is based on excise stamps issued, which are also likely capturing industry strategies (e.g. forestalling).

Overall, we conclude that despite the low number of observations, the estimated elasticities and the observed patterns are in line with previous results. We consider the volumes calculated based on tax revenues and tax rates as the best proxy for consumption. Using this measure, econometric tests confirm the presence of a long-run relationship, and we find that price elasticity is around -0.6 and income elasticity is in the range of 0.63 and 0.81.

**Table 12 / Price and income elasticity of cigarette demand**

	(1)	(2)	(3)	(4)
<b>LONG RUN</b>				
<i>Outcome: log of per capita cigarette consumption</i>				
Log of real WAP	-0.563*** (0.123)		-0.853*** (0.225)	
Log of real price (import filtered)		-0.637*** (0.0937)		-0.887*** (0.135)
Log of real wages	0.811*** (0.109)	0.629*** (0.0640)		
Log of real GDP per capita			1.198*** (0.245)	0.854*** (0.113)
<b>SHORT RUN</b>				
<i>First difference of log per capita cigarette consumption</i>				
D. log of real WAP	-0.337 (0.192)		-0.701*** (0.226)	
D. log of real price (import filtered)		-0.655*** (0.119)		-0.906*** (0.156)
D. log of real wages	1.003*** (0.195)	0.835*** (0.135)		
D. log of real GDP per capita			0.588 (0.387)	0.368 (0.297)
Lagged error correction term	-1.339*** (0.254)	-1.637*** (0.217)	-1.079*** (0.229)	-1.384*** (0.233)
Constant	-0.0131 (0.0217)	-0.00968 (0.0140)	0.0388 (0.0285)	0.0321 (0.0211)
Observations	17	17	17	17
R-squared	0.887	0.948	0.844	0.910

Notes: Error correction model. Control for non-price policies: dummy taking value 1 starting in 2019, which in the first-differenced specification reduces to a dummy taking value 1 only in 2019. D. corresponds to first-differenced variables. Lag order is zero. Post-estimation tests for serial correlation in the residuals (Breusch-Godfrey test, Durbin's alternative test): null hypothesis of no serial correlation cannot be rejected in specifications (1), (2), and (3), but it is rejected in specification (4). Sources: authors' calculations

## 6. Recommendations

Based on this landscape study of the Georgian tobacco market and the estimated price elasticities, this study offers the following policy recommendations:

**Increase excise tax on all tobacco products.** Weakening of tobacco tax pressure led to an increase in tobacco consumption. In order to continue the successful practice of the 2019-2021 period, it is important to revise excise policy to increase excise rates on all tobacco products, cigarettes, HTPs, e-cigarettes and RYO tobacco. As the analysis shows, consumers switch between products based on price and tax differences. A uniform and comprehensive tax policy can reduce the likelihood that consumers will switch from one product to another instead of quitting in response to tax increases.

**Improve data collection and monitoring.** Improved monitoring and data collection mechanisms need to be put in place for all tobacco products, including e-liquids, disposable e-cigarettes, HTPs and RYO tobacco.

Gaps in data collection, particularly for e-cigarettes, limit the ability to effectively analyse consumption trends and calculate elasticities for tobacco products. Accurate data will allow researchers and policy makers to develop optimal decisions to reduce tobacco consumption and increase budget revenues.

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## Appendix

**Table 13 / Calculation of total tax burden (including excise taxes and VAT) by cigarette brands and product categories as a share of the retail price (%), 2021**

2021 retail prices for the most popular tobacco products in Georgia	Retail price	Specific excise tax	Ad valorem excise tax	VAT	Total tax	Share of excise	Share of VAT	Total tax burden (excise + VAT)
Philip Morris, 1 pack	5.9	1.7	1.77	0.90	4.37	59%	15%	74%
Winston XS, 1 pack	6.2	1.7	1.86	0.95	4.51	57%	15%	73%
Sobranie, 1 pack	7.1	1.7	2.13	1.08	4.91	54%	15%	69%
Parliament, 1 pack	7.5	1.7	2.25	1.14	5.09	53%	15%	68%
HTP, 1 pack	6.5	1.7	1.95	0.99	4.64	56%	15%	71%
E-liquid, 1ml	0.8	0.2	0	0.12	0.32	25%	15%	40%
Disposable e-cigarette, 2ml	18	0.2	0	1.37	1.57	2%	15%	17%
RYO, 100 g pack	12.00	6.0	0	1.83	7.83	50%	15%	65%

Notes: Data is obtained from the yearly reports of the Ministry of Finance of Georgia – Retail selling price of filtered and unfiltered cigarettes to calculate the amount of excise tax in GEL (2021).

**Table 14 / Calculation of total tax burden (including excise taxes and VAT) by cigarette brands and product categories as a share of the retail price (%), 2024**

2024 retail prices for most popular tobacco products in Georgia	Retail price	Specific excise tax	Ad valorem excise tax	VAT	Total tax	Share of excise	Share of VAT	Total tax burden (excise + VAT)
Philip Morris, 1 pack	5.7	1.5	1.7	0.9	4.1	56%	15%	71%
Winston XS, 1 pack	6.7	1.5	2.0	1.0	4.5	52%	15%	67%
Sobranie, 1 pack	7.9	1.5	2.4	1.2	5.1	49%	15%	64%
Parliament, 1 pack	7.7	1.5	2.3	1.2	5.0	49%	15%	64%
HTP, 1 pack	6.7	1.5	2.0	1.0	4.5	52%	15%	67%
E-liquid, 1ml	2.5	1.0	0	0.38	1.38	40%	15%	55%
Disposable e-cigarette, 2ml	17.3	1.7	0.0	2.6	4.3	10%	15%	25%
RYO, 100 g pack	11.2	5.2	0.0	1.7	6.9	46%	15%	61%

Notes: Data collected through self-observation in 2024. Prices and tax rates in GEL are inflation-adjusted (base year: 2021).

**Table 15 / Price and income elasticity of cigarette demand, using alternative measures of cigarette volume**

Volume measure based on	(1) Tax revenues	(2) Euromonitor (2024)	(3) EM (2024), legal+illicit	(4) Excise stamps	(5) Tax revenues	(6) Euromonitor (2024)	(7) EM (2024), legal+illicit	(8) Excise stamps
<b>Levels</b>								
<i>Outcome: log of per capita cigarette consumption or volume</i>								
Log of real WAP	-0.563*** (0.123)	-0.421** (0.148)	-0.256** (0.118)	-0.716*** (0.228)				
Log of real price (imp. filt.)					-0.637*** (0.0937)	-0.529*** (0.120)	-0.332*** (0.104)	-0.850*** (0.192)
Log of real wages	0.811*** (0.109)	1.047*** (0.131)	0.772*** (0.105)	1.107*** (0.202)	0.629*** (0.0640)	0.924*** (0.0821)	0.700*** (0.0708)	0.886*** (0.131)
<b>First-differenced series</b>								
<i>Outcome: first difference of log per capita cigarette consumption or volume</i>								
D.log of real WAP	-0.218 (0.334)	-0.258 (0.222)	-0.213 (0.167)	-0.0505 (0.425)				
D.log of real price (imp. filt.)					-0.535* (0.271)	-0.469** (0.167)	-0.322** (0.134)	-0.653* (0.341)
D.log of real wages	0.781** (0.334)	0.525** (0.222)	0.330* (0.167)	0.698 (0.424)	0.642* (0.305)	0.419** (0.188)	0.265 (0.151)	0.479 (0.384)

Notes: Ordinary least squares (OLS) estimation using all available cigarette volume measures converted to million sticks (consumption based on tax revenues, retail volume from Euromonitor (2024), retail volume including illicit sales from Euromonitor (2024), volume based on excise stamps issued (Revenue Service of Georgia 2014-2024)). D. corresponds to first-differenced variables. Control for non-price policies: dummy taking value 1 starting in 2019, which in the first-differenced specification reduces to a dummy taking value 1 only in 2019. The existence of a long-run relationship between volumes, prices and wages is confirmed in Model (1) and Model (5), using the Engle-Granger cointegration test.

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