

Accelerating Progress on Effective Tobacco Tax Policies in Low- and Middle-Income Countries

National Study - MACEDONIA

Economics of Tobacco and Tobacco Taxation

Authors:

This Study was prepared by researchers from the Analytica think tank from Macedonia. The authors are Tamara Mijovic Spasova MSc, and Bojana Mijovic Hristovska, Msc.



SKOPJE, REPUBLIC OF MACEDONIA 2018

Table of Contents

EXECUTIVE SUMMARY	3
1. INTRODUCTION	5
1.1 Country Profile 1.2 Tobacco cultivation in the Republic of Macedonia	5 6
2. SUPPLY OF TOBACCO PRODUCTS 2.1 Tobacco farming and domestic production of tobacco leaf 2.2 Import and export of tobacco (raw tobacco) 2.3 Retail distribution of tobacco products 2.4 Employment in the tobacco industry (cigarettes manufacturing companies) 2.5 Cigarettes 2.5.1. Domestic production of cigarettes 2.5.2. Import and export of cigarettes 2.5.3. Sales of cigarettes and latest trends 2.5.4. Key players in the cigarettes market 2.6 Cigars, cigarillos and smoking tobacco (fine cut and pipe)	8 8 11 12 13 13 14 16 17 20
3. DEMAND FOR TOBACCO PRODUCTS 3.1 Smoking prevalence 3.2 Minimum smoking age 3.3 Tobacco consumption among youth 3.4 Social acceptance of smoking	23 23 26 26 28
4.1 Institutional and policy framework 4.2 Tobacco control measures 4.2.1 Ratification of the Framework Convention on Tobacco Control (FCTC) 4.2.2 Graphic health warnings 4.2.3 Smoking ban 4.2.4 Tar cap levels 4.2.5 Marketing and advertising of tobacco 4.2.6 Relevant legislation – Excise Law 4.2.7 Other restrictions on tobacco products 4.2.8 Use of banderoles 4.3 Taxation and Excises 4.3.1 Tobacco products taxation 4.3.2 Tobacco products Excise Revenues 4.3.3. Impact of cigarette taxation on the price of cigarettes	29 30 30 31 31 32 32 33 34 34 37 37 39 41
5. ELASTICITY OF TOBACCO PRODUCTS	42
SUMMARY RECOMMENDATIONS Apendix 1 Smokeless tobacco Apendix 2 Electronic cigarettes and vapor products	44 46 47 47
POLICY DIALOGUE	49
REFERENCES	50

EXECUTIVE SUMMARY

This document reviews laws and policies related to tobacco control and especially tobacco taxation in the Republic of Macedonia. It also examines current and potential future impact of tobacco laws and policies on domestic consumption of tobacco products. The primary focus is on tobacco taxation and pricing policies as well as on the excise tax revenues collected from the domestic sales of cigarettes and the impact of the changes to the Excise Tax Law in effect until 2023.

The Republic of Macedonia has a long history and tradition of cultivating and exporting raw tobacco, especially the Oriental type of tobacco. As such, Macedonia is one of the major raw tobacco leaf and finished cigarettes producing countries in the region. In this document, we analyze the specific characteristics of tobacco cultivation in Macedonia, supply and demand of tobacco and tobacco products, tobacco industry and tobacco products market and tobacco control policies, including taxation. Most of Macedonia's cigarette consumption comes from domestic production, while cigars, cigarillos and smoking tobacco are imported. In addition to domestically manufactured cigarette brands, some are imported.

Based on the size of the market and data provided by the Ministry of Finance, Central Registry of Macedonia, State Statistical Office of Macedonia and other sources, we discuss the supply and demand on the tobacco market, as well as the effects of national policies, including taxation, excise tax and value added tax (VAT) on tobacco product prices and consumption levels. The domestic production and import-export data from the MAK STAT database of the State Statistical Office of Macedonia are also included.

This report uses publicly available data, which shows that smoking prevalence in Macedonia is one of the highest in the world, and smoking among youth remains worrisome and needs to be addressed by the government and other authorities.

Additionally, in this study we estimate the price elasticity of demand for cigarettes in Macedonia. In line with theoretical predictions and findings in other empirical studies, results show that the price elasticity of demand for cigarettes in Macedonia is around -0.4, implying that a 10% increase in cigarette prices leads to a decline in consumption of cigarettes by around 4%. The income coefficient was estimated at negative -0.16,¹ implying that 10% increase in income leads to a decline in consumption of cigarettes by 1.6%.

Estimates of the long-run price and income elasticity were used to simulate the possible effect of increases in cigarette excises (as planned in the Law on Excises) on prices of cigarettes, consumption of cigarettes, and tax revenues. According to the simulation, the increase in cigarette price per pack by 50% will lead to decline in consumption of cigarettes per capita by 19.2% (or 519 cigarettes per capita) and higher government excise revenues by 55.9% (cumulative increase of 6 billion MKD or 100 million Euros).

¹ However, results show negative sign as not statistically significant in the model. This implies that probably data series is too short for robust prediction.

In the final section of this document, we propose a set of recommendations to be implemented by the main stakeholders, the Government of Macedonia and its ministries, in order to further reduce smoking prevalence and overall consumption of tobacco products in the country and promote healthier, tobacco-free lifestyles among local residents in the Republic of Macedonia.

1. INTRODUCTION

1.1 Country Profile

The Republic of Macedonia is a mountainous landlocked country located in the Balkan Peninsula, in the southeastern part of Europe. It covers an area of 25,713 km², bordering Kosovo and Serbia to the north, Bulgaria to the east, Greece to the south and Albania to the west. The country was formerly one of the constituent republics in the former Socialist Federal Republic of Yugoslavia. It gained independence in 1991, following a referendum with an overwhelming majority vote in favor of its independence. Ethnic Albanians constitute the second largest ethnic group after ethnic Macedonians, accounting for 25% of the total population. Other ethnic groups include: Turks, Roma, Serbs, Bosniaks, Vlachs and others. The country is bisected from northwest to southeast by its longest river - Vardar. It possesses three natural lakes (Ohrid, Prespa and Dojran) as well as several man-made lakes and dams. Its highest point is *Mount Korab* at 2,764 m, which borders Albania to the west.

Due to the ongoing dispute with Greece regarding the use of the name of Macedonia, which also has a region of its own in northern Greece called Macedonia, the Republic of Macedonia has been admitted to the United Nations under the provisional reference 'The former Yugoslav Republic of Macedonia'. The country covers a part of the larger historical and geographical area known as Macedonia, and its culture and lifestyle is a mix of Ottoman and European influences.

The Republic of Macedonia has a total population of just over 2 million people and has not been able to conduct a census since 2002 due to political interferences and obstructions. The national capital of the Republic of Macedonia is its largest city, Skopje (Cκοπje). The official language in the Republic of Macedonia is Macedonian, which is based on the Cyrillic alphabet.

Macedonia is an upper-middle-income country that has made great strides in reforming its economy over the past decade. Following strong economic growth from 2002 to 2008 averaging 4.3%, the average GDP growth has declined to 2.1% per year since 2009. The main drivers of growth since 2009 have been construction, industry, and wholesale and retail trade.

Despite slower growth in the recent years, there were improvements in the labor market. The employment rate has been constantly improving, but still remains low at 44%, meaning that more than half of the working-age population is either unemployed or outside of the labor force.³

² The World Bank in Republic of Macedonia, http://www.worldbank.org/en/country/macedonia

³ ibid

Table 1. "Country profile"

General info	Data
Region	SE Europe
Income Category (year)	Upper Middle Income
Population (proj., 000) (2002)	2.1 million
Surface area (sq km) (2017)	25,713
Capital city	Skopje
Macroeconomic indicators	
Gross domestic product, in millions EUR (2017)	10,066
Gross domestic product, per capita, EUR (2017)	4,853
Gross domestic product, real growth, in % (2017)	0.0%
Inflation (2017)	1.4%
Unemployment according to the Survey (in %) (2017)	22.4%
Wages (average for the period, in EUR) (2018)	394
Employment level, average (thousands) (2017)	740,648

About 40% of the population lives in rural areas. The country's agriculture is dominated by small and highly fragmented family farms. Agricultural exports consist mostly of tobacco and tobacco products, wine, grapes, fruit, early market garden vegetables and lambs. The main trading partners are the EU, Serbia and Montenegro.⁴

1.2 Tobacco cultivation in the Republic of Macedonia

In the Republic of Macedonia there is a long history and tradition of cultivating and exporting raw tobacco, particularly the Oriental type of tobacco, mainly of the Prilep, Jaka and Basma varieties.. As such, Macedonia is an important raw tobacco leaf and finished cigarettes producer in the region. Tobacco production has a very important place in the economy of Macedonia, due to both economic and social reasons.⁵ With an estimated share of 3%, Macedonia is positioned among the eight major tobacco producing countries in the world. The area under tobacco occupies 3.4% of total arable land in the country, while the area under energy crops represents around 81.1% of the total area.⁶

⁴ Territorial and natural priorities of Macedonia - important factor for tobacco production development, prepared by Romina Kabranova and Zlatko Arsov, Faculty of Agricultural Sciences and Food, University 'Ss. Cyril and Methodius', Skopje, Macedonia, 2009

⁵ The tobacco sector in The Republic of Macedonia - Competitiveness analysis, prepared by Emelj Tuna, 2006, SLU University, Department of Economics

⁶ Cooperation Centre for Scientific Research Relative to Tobacco – Tobacco production in Macedonia, 2016

The area planted with industrial crops accounts for 9%⁷ of total sown agricultural land, while area planted with cereal, vegetable and fodder crops accounts for 91%. Tobacco, as one of the most important industrial crops for the country, consists of approximately 70% of the areas planted with industrial crops, and an average share of around 30% in total agricultural export representing 1% of GDP. Based on the Food and Agriculture Organization (FAO) data, the Macedonian production of tobacco in tons would represent over 11% of the total EU tobacco production.⁸ The tobacco production engages around 33,000 agricultural households in the primary production.⁹

The entire tobacco industry has been fully privatized since the early 1990s. In recent years, there has been an acquisition of one of the largest cigarette manufacturers in the country (Tutunski Kombinat Prilep ad) by Philip Morris Inc. No green-field investments in the tobacco sector have been registered to date.

⁷ FIELD CROPS, ORCHARDS AND VINEYARDS, Statistical review, Agriculture, 2018, http://www.stat.gov.mk/Publikacii/5.4.18.01.pdf

⁸ Competitiveness analysis of the tobacco sub-sector in the Republic of Macedonia, prepared by Emelj Tuna, Nenad Georgiev, Marina Nacka, Faculty of Agricultural Sciences and Food, University 'Ss. Cyril and Methodius', Skopje, Macedonia, 2013

⁹ ibid

2. SUPPLY OF TOBACCO PRODUCTS

2.1 Tobacco farming and domestic production of tobacco leaf

According to the State Statistical Office of Macedonia¹⁰, between 2000 and 2017, annual average tobacco leaf production was 24,559 tons with minimal deviations depending on natural conditions and the price of tobacco set by the tobacco companies. The largest drop in production to 17,087 tons was experienced in 2008 (Chart 1), coinciding with the global economic crisis. By 2010, the production had recovered, reaching its maximum in recent years of 30,280 tons, after which it briefly stabilized at around 27,000 tons, and then continued declining.¹¹

All activities and processes related to the production are regulated by The Tobacco and Tobacco Products Act. According to the provisions of this Act, tobacco producers are only allowed to use certified seed material and the only authorized institution for production of such material is the Scientific Tobacco Institute in Prilep.

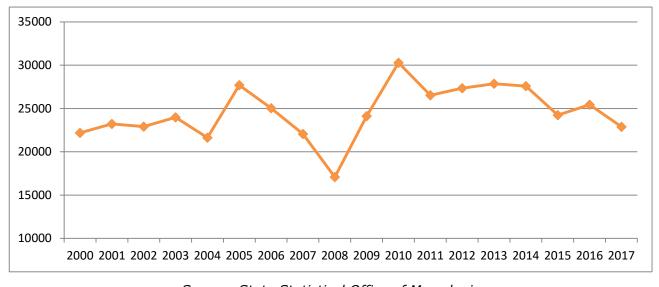


Chart 1: Tobacco Leaf Production 2000-2017 in tons

Source: State Statistical Office of Macedonia

http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat_Zemjodelstvo__ RastitelnoProizvodstvo/175_RastPro_Reg_ZitaIndustr_mk.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef

¹¹ Competitiveness analysis of the tobacco sub-sector in the Republic of Macedonia, prepared by Emelj Tuna, NenadGeorgiev, Marina Nacka, Faculty of Agricultural Sciences and Food, University 'Ss. Cyril and Methodius', Skopje, Macedonia, 2013

Tobacco leaf production in Macedonia is traditionally oriented toward exports to the world market, especially after the country gained its independence. This trend was strengthened after 2000, with 90% of tobacco being exported to the world market, and the remaining 10% being used in domestic cigarette manufacturing.¹²

Concerning the human resources aspect, tobacco is a labor intensive crop which is produced generally by rural family enterprises. Tobacco production currently engages around 33,000 agricultural households in its primary production. The unfavorable side of this is the tradition which ties tobacco farmers to this type of production, because of lack of alternative skills, even when there are unfavorable market conditions and active campaigns to reduce tobacco production.¹³

The production of fermented tobacco depends on the extent to which type of cultivation is subsidized. From 2007 to 2017, the cultivation subsidy for tobacco ranged from MKD 30 to MKD 60 per kg (EUR0.5 to EUR1.0), which supported the increase in production in 2010 and the subsequent years, with some oscillations later on. In 2017, the new government announced that local farmers will be subsidized with MKD 60 to MKD 80 (EUR 1 to EUR 1.3) per kilogram, depending on the class of tobacco. According to data from the Economic Chamber of Macedonia to Bovernment of Macedonia has paid around EUR 23.3 million in subsidies in 2017 to local tobacco growers on the basis of 29,354 contracts. This measure is seen as major support of and maintaining competitiveness for farmers in the regional and global market.

Nevertheless, the data from Chart 1 and Chart 2 suggests that despite the increasing amount of government subsidies to tobacco growers, the production of fermented tobacco leaf and the number of tobacco farmers has declined.

Quantitative Genetic Investigations on Some Important Traits in Tobacco Varieties and their Diallel One-Way and Back-Cross Generations, prepared by Ana Korubin Aleksoska; Scientific Tobacco Institute–Prilep, Republic of Macedonia, SSN 0494-3244 Тутун/Тоbacco, Vol. 66, No 7-12, 3-11, 2016 UDC: 633.71-152.75:575.113.2(497.775)"2014/2015" Original Scientific paper ibid

¹⁴ Ministry of Agriculture, Forestry and Water Economy

¹⁵ State Statistical Office, http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat___Zemjodelstvo__RastitelnoProizvodstvo/175_RastPro_Reg_ZitaIndustr_mk.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef

 $^{^{16}}$ Economic Chamber of Macedonia, Industry data, Association of Tobacco and Tobacco Products Producers http://www.mchamber.org.mk/(S(xgcoarju44rdtw55irgb203n))/default. aspx?mId=73&IId=1&smId=14

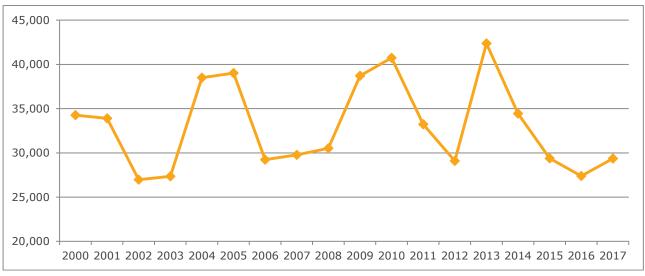


Chart 2: Tobacco Leaf Producers 2000-2017, total number

Source: Economic Chamber of Macedonia

The importance of tobacco production in Macedonia can be seen in the number of registered producers, or rather families producing tobacco.¹⁷ Chart 2 presents the oscillating trend in the number of tobacco leaf producers between 2000 and 2017. On average, 33,000 registered households have been engaged in tobacco production per year, which means that there are approximately 130,000 persons engaged in tobacco production. This number represents around 6.5% of the total population in Macedonia. The main factors contributing to oscillations in the number of tobacco leaf producers are the weather conditions, changes of the purchasing unit prices and the amount of subsidies provided, as well as global demand for tobacco.¹⁸

Chart 3 shows the data for total hectares of land used for tobacco crops from 2000 to 2017. As evident from the chart, the total tobacco harvested areas from 2000 to 2017 were stable, and the average area under tobacco cultivation in Macedonia in the same period was 17,686 ha. With an average yield of 1,315 kg/ha, the average annual production for the same period was 24,559 tons of Oriental tobacco.¹⁹

¹⁷ State of Tobacco Production in the Republic of Macedonia, prepared by Kiril Filiposki, Mile Peshevski, Dragić Živković, Blaze Filiposki, UDK 663.97(497.7), 2011

¹⁸ Biznis Info – https://bi.mk/privrshuva-otkupot-na-tutunot-vo-bitol/ (2013)

¹⁹ State Statistical Office, Statistical Yearbook 2017

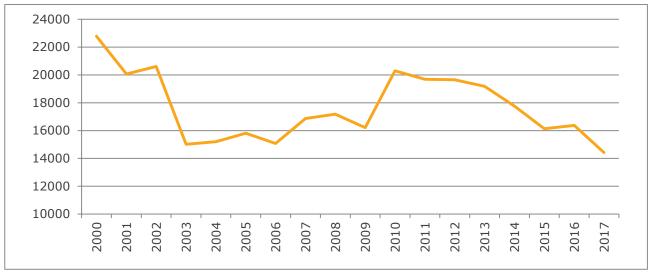


Chart 3: Total Land Used for Tobacco Crops 2000-2017, in hectares

Source: State Statistical Office of Macedonia

2.2 Import and export of tobacco (raw tobacco)

According to the data from State Statistical Office²⁰ presented in Chart 4, between 2001 and 2017, the total volume of raw tobacco exports increased from 15,358 tons in 2001 to 27,318 tons in 2017. The main reason for the significant increase of raw tobacco export in 2006 was the increased foreign demand for tobacco. These increases were in response to increased volume demand from countries that are traditional export markets for Macedonia's raw tobacco. In general, the export of Macedonian tobacco heavily depends of demand from foreign markets.

The total volume of imports of raw tobacco increased from 2,693 tons in 2001 to 4,174 tons in 2017 (Chart 4). The main reason for this increase in imported raw tobacco was the creation of the Prilep based joint venture between Tutunski Kombinat Prilep ad and Philip Morris Inc., which resulted in a significant increase of domestic production of cigarettes. This was mainly due to the fact that the Marlboro cigarette brand began to be produced by TK Prilep in 2016.²¹

²⁰ State Statistical office http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=84dcf0ce-9408-4bcf-bcd7-2027a0857118

²¹ Sitel, Macedonian National TV, https://sitel.com.mk/nova-marlboro-ponuda-proizvedena-vo-makedonija-0

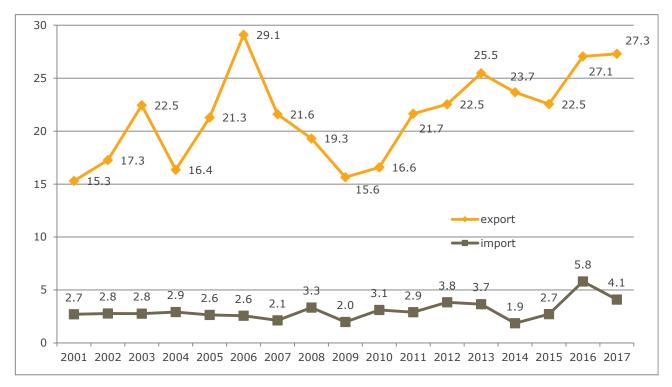


Chart 4: Total Volume of Export and Import of Tobacco (raw tobacco) (000 tons)

Source: State Statistical Office of Macedonia (MAK-STAT database)

2.3 Retail distribution of tobacco products

Traditional grocery stores dominate the distribution of tobacco products in Macedonia, including cigarettes. Independent small grocers and newsagent-tobacconists/kiosks are the two largest distribution channels for cigarettes in Macedonia, both in retail volume and value terms. Modern grocery retailers, such as supermarkets and hypermarkets, have been increasing the distribution share as they keep expanding locally. Independent small grocery retailers benefit from their proximity to the largest portion of consumers and cigarette smokers who make frequent impulse purchases of cigarettes. On the other hand, distribution of cigars and cigarillos is dominated by several specialized tobacco shops, most of which are based in the capital city of Skopje. In recent years, supermarkets and hypermarkets began selling smoking tobacco products (fine cut and pipe tobacco). This is expected to probably further boost sales of smoking tobacco in addition to the growing sales via independently owned kiosks and tobacconists. Most of the consumers in Macedonia purchase vapor products from the internet. Small kiosks and franchises also tend to sell some quantities of vapor products in Macedonia. The heated tobacco products market remains undeveloped.

2.4 Employment in the tobacco industry (cigarettes manufacturing companies)

According to the State Statistical Office²², ²³ there were 1,370 people employed in the tobacco manufacturing industry in 2017, which is 1% of total manufacturing employment in the country. ²⁴ Chart 5 shows that the number of people employed in the industry kept declining compared to the early 2000s, due to restructuring of the operations and the recent acquisitions of the domestic tobacco manufacturing companies by global players in the tobacco sector.

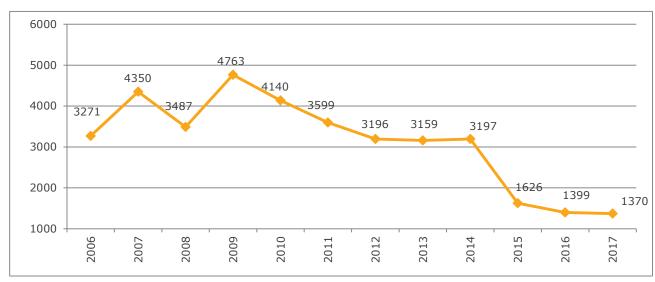


Chart 5: Tobacco Product Manufacturing Employment (total number of employees)

Source: State Statistical Office of Macedonia

2.5 Cigarettes

2.5.1. Domestic production of cigarettes

According to the State Statistical Office of the Republic of Macedonia²⁵, 4.1 billion cigarettes were produced domestically in 2017. Chart 6 shows that there is a steady decline in domestic production, due to oscillations in demand from other countries as well as some major restructurings on the part of the major global brand owners operating their manufacturing facilities in the country.

²² State Statistical Office http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=50&rbrObl=14

²³ http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=14&rbrObl=23

MAKstat Database http://makstat.stat.gov.mk/PXWeb/pxweb/en/MakStat/MakStat__ PazarNaTrud__AktivnosNaNaselenie/475_PazTrud_Mk_07Sektori2_mk.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef

²⁵ State Statistical Office http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=8&rbrObl=19

10.0 8.7 9.0 7.8 7.7 8.0 6.8 6.6 6.5 7.0 6.3 6.0 5.9 5.8 5.6 5.5 6.0 5.1 5.1 5.1 5.0 4.1 4.0 3.9 4.0 3.0 2.0 1.0 0.0 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Chart 6: Total number of cigarettes produced domestically (mil. sticks)

Source: State Statistical Office of Macedonia

2.5.2. Import and export of cigarettes

As Chart 7 shows, starting from 2011, domestic production of cigarettes has been decreasing, while imports have been significantly increasing, suggesting that domestic brands have been substituted for the imported foreign brands of cigarettes.

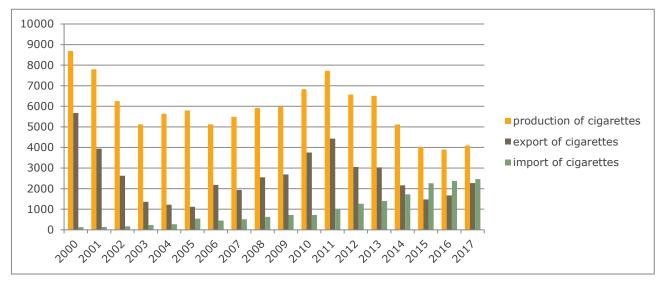


Chart 7: Number of cigarettes – production, export, import (million sticks)

Source: State Statistical Office of Macedonia

The primary reason for the increase in import of cigarettes during this period is the market activity of the leading global brand owners maintaining market presence in Macedonia. These international companies, especially following the recent acquisitions of the local cigarette manufacturing companies, had a tendency to increase imports of their own cigarette brands, as they gradually phased out domestic cigarettes. One example of that was British American Tobacco's 2015 acquisition of the third largest market player at the time, TDR Rovinj. Most of the cigarette brands previously owned by TDR were gradually replaced with BAT cigarette brands, as the company managed to increase its market presence and climb to the second position.

In 2017, Serbia was the major supplier of cigarettes to Macedonia with the highest volume of imports (1,489 tons), followed by Germany (421 tons) and Croatia (368 tons) (Chart 8). Other countries from which Macedonia imports cigarettes include: Poland, Bosnia and Herzegovina, Russia, Greece and Romania, albeit imports from these countries are no match to the imports from Serbia, Germany and Croatia.

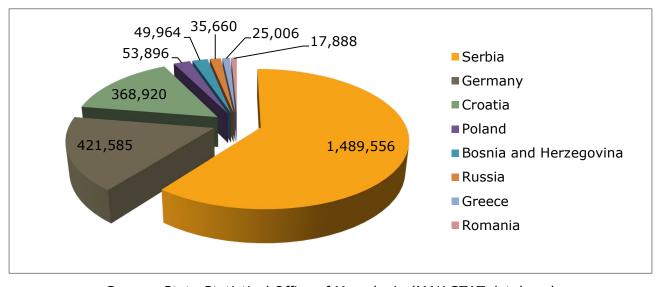


Chart 8: Volume of imports of cigarettes to Macedonia per country in kilograms in 2017

Source: State Statistical Office of Macedonia (MAK STAT database)

On the other hand, in 2017 Russia was the leading export market for cigarettes from Macedonia with the highest volume of exports (1,331 tons), followed by Serbia (380 tons) and Bosnia Herzegovina (211 tons) (Chart 9). Other countries to which Macedonia exported cigarettes in 2017 include: Kosovo, Slovenia, Albania and Croatia.

73,668 44,928 30,430

199,938
211,271

380,142

1,331,921

Russia
Serbia
Bosnia and Herzegovina
Kosovo
Slovenia
Albania
Croatia

Chart 9: Total volume of exports of cigarettes from Macedonia per country in kilograms in 2017

Source: State Statistical Office of Macedonia (MAK STAT database)

2.5.3. Sales of cigarettes and latest trends

The period between 2000 and 2005 was characterized by an annual increase in cigarettes sold. In January 2006, there was an increase in the price of cigarettes of 21.6%, which followed an increase in excise tax on cigarettes by 10% in January 2006, in line with the EU Directives. In addition, a new fee for the production or import of tobacco products²⁶ was introduced in the amount of MKD 0.15 per piece (i.e. MKD 3 per pack).²⁷ As a consequence of this sharp increase in the price of cigarettes, by the end of 2006, there was a sharp decline in the number of cigarettes sold. Similarly, from 2014 to 2017, there was a decline in the number of cigarettes sold annually due to the new excise tax rates, which had been applied back in 2013 and 2014.

²⁶ According to the Law on Health Protection and the provisions of the Law on Environment (as of 1 January 2006) and the Law on Tobacco (as of 1 April 2006)

²⁷ Annual report for 2006, National Bank of Republic of Macedonia

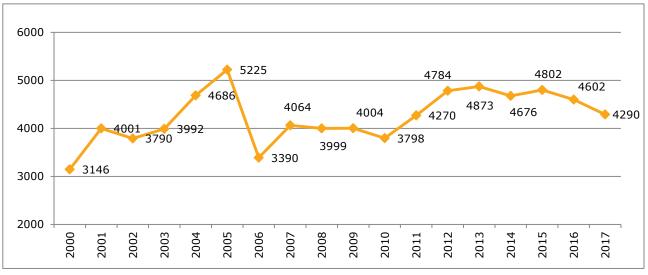


Chart 10: Total number of cigarettes sold annually (million sticks)

Source: State Statistical Office (apparent consumption method)

2.5.4. Key players in the cigarettes market

Chart 11, based on the Central Registry of Macedonia data, 28 shows the annual turnover of key market players in 2016. It shows that Imperial Tobako TKS ad, a subsidiary of Imperial Brands Plc, was the leading cigarette market player in Macedonia in 2016, both in terms of value and volume. 29 The company markets a diverse brand of cigarettes led by Rodeo, Boss and Davidoff. The share of Imperial Tobako TKS ad suffered a significant decline from 2014 to 2016. For example, its 2016 volume share represented a significant decline relative to the volume share back in 2014. 30 One of the main reasons for this decline was the strong competitive pressure from players such as TDR Skopje dooel, its new national and global brand owner British American Tobacco, as well as Japan Tobacco International represented by Prima MK doo.

The second most important cigarette market player in Macedonia with a rapidly growing value and volume share is British American Tobacco, which following the acquisition of TDR dooel and Adris Grupa dd (including their Macedonian subsidiary TDR Skopje dooel)³¹ consolidated its market position and significantly improved its ranking in 2016. Until 2016, TDR Skopje dooel, a Macedonia based subsidiary of TDR Rovinj and Adris Grupa dd, continuously ranked third.

²⁸ Central Registry of the Republic of Macedonia, http://www.crm.com.mk/DS/

²⁹ Kaptal, Macedonian newspaper, https://kapital.mk/robert-beresh-imperial-tobako-lideri-sme-na-pazarot-toa-e-uspeh-no-i-odgovornost/

³⁰ Central Registry of Macedonia

³¹ Balkan Insight, http://www.balkaninsight.com/en/article/biggest-croatian-tobacco-company-sold-to-british-buyers (2015)

Following the acquisition by British American Tobacco Plc (BAT), TDR secured the second position, managing to significantly increase its volume share. As of 2017, in addition to its brands originally competing on the market, British American Tobacco Plc took over full brand ownership of the TDR brands. Several of the leading TDR brands have been replaced by BAT's owned brands, which led to an enormous increase in its volume share and further reduction of the gap in volume share with Imperial Tobako TKS Skopje ad.

The creation of the Prilep based joint venture between Tutunski Kombinat Prilep ad and Philip Morris Inc. resulted in significant increase of the domestic production of cigarettes, following the initial slump back in 2016 when domestic production declined for several consecutive years. The Marlboro cigarette brand is now produced in the Macedonian town of Prilep.³² During this period, domestic tobacco manufacturing companies lost their market dominance and now account for half of the volume share of the total cigarettes output in 2017, while the remaining half is purely imported cigarette brands.³³

Based on the annual turnover³⁴, Imperial Tobako TKS ad, i.e., Imperial Brands Plc, leads the cigarettes market with total sales value of EUR 38.8 million in 2016. Following its acquisition by British American Tobacoo (BAT), TDR Skopje doo, which is still registered under the old name but may be renamed very soon, ranks second with total sales value of EUR 36.7 million. Other significant players include Prima.mk and Philip Morris Tutunski Kombinat Prilep doo.

³² Sitel, national TV, https://sitel.com.mk/nova-marlboro-ponuda-proizvedena-vo-makedonija-0

³³ State Statistical Office, Statistical yearbook, (MAK STAT database)

³⁴ Central Registry of Macedonia, http://www.crm.com.mk/DS/

IMPERIAL TOBAKO TKS AD

TDR SKOPJE DOOEL

PRIMA.MK DOO SKOPJE

PHILIP MORRIS TUTUNSKI KOMBINAT PRILEP DOO

TUTUNSKI KOMBINAT PRILEP AD

0.0 5.0 10.0 15.0 20.0 25.0 30.0 35.0 40.0

Chart 11: Annual turnover of key market players in 2016 (million EUR)

Source: Central Registry of Macedonia

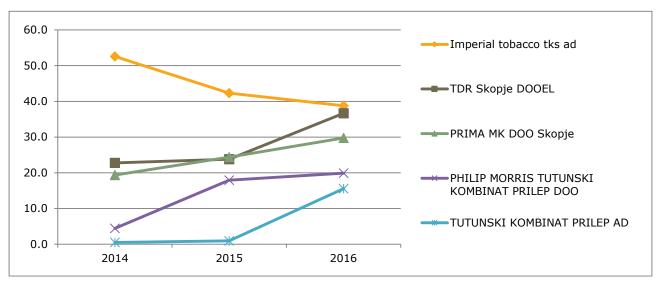


Chart 12: Annual turnover of key cigarette market players in 2014-2016 (value in million EUR)

Source: Central Registry of Macedonia

Evident from Chart 12 are the four key market players within the cigarette market in Macedonia, who demonstrate an increasing trend of annual turnover from 2014 to 2016, and are slowly representing bigger market shares. Only Imperial Tobacco TKS AD realized decreasing turnover between 2014 and 2016. One of the main reasons for this decline is the strong competitive pressure from players such as TDR Skopje dooel and its new national and global brand owner British American Tobacco, as well as Japan Tobacco International represented by Prima MK doo.³⁵

³⁵ Central Registry of Macedonia

2.6 Cigars, cigarillos and smoking tobacco (fine cut and pipe)

There are no domestic manufacturers of cigars, cigarillos and smoking tobacco in Macedonia, as all products and brands are imported. In 2017, cigars, cigarillos and smoking tobacco achieved 21% of the current retail value growth to reach current retail value sales of EUR 1.4 million. In terms of volume terms, cigars accounted for 9% and cigarillos 8%. Smoking tobacco achieved 58% of the volume growth.³⁶

Once highly popular, smoking tobacco's popularity in Macedonia steadily declined in the 1950s and 1960s, as industrially manufactured cigarettes took over the tobacco market in the former Yugoslavia. As a result, there was not any domestic production of roll your own (fine cut) or pipe tobacco in Macedonia aimed for retail distribution or exports. Although some of the domestic companies produce fermented tobacco leaf, they export all of their products abroad. No packaged smoking tobacco products and brands are sold on the local market.

Nonetheless, in 2017 smoking tobacco outperformed cigars and cigarillos as consumers economized by turning to fine cut tobacco. Between 2010 and 2017, smoking tobacco had experienced steady growth in volume, on average 140% annually (Chart 13).³⁷ This is a result of increased domestic demand and the fact that there is no a single factory in Macedonia that produces fine cut tobacco. Hence, all of the domestic demand has to be satisfied with imports. Despite these movements, the value share of all these categories will remain very small at the tobacco category level.

In 2017, the bulk of imported smoking tobacco came from Belgium and Germany, while much smaller imports of smoking tobacco come from countries such as Ireland, Denmark and Netherlands (Chart 14).

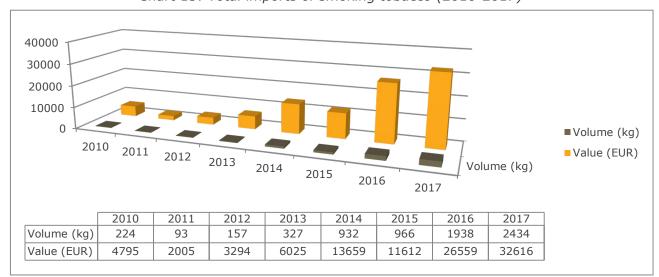


Chart 13: Total imports of smoking tobacco (2010-2017)

Source: State Statistical Office of Macedonia (MAK STAT database)

³⁶ IMEX DATA dooel Skopje based on sources: Central Registry of Macedonia, State Statistical Office of Macedonia MAK-STAT database

³⁷ State Statistical Office (MAK STAT database)

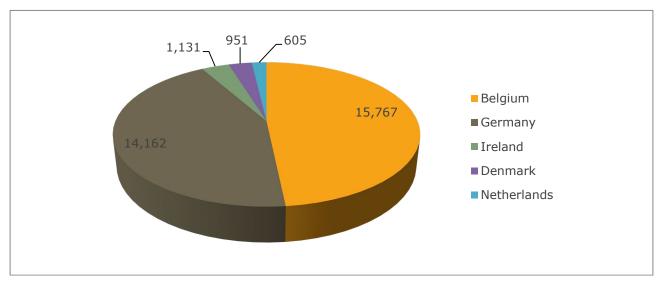


Chart 14: Total imports of smoking tobacco in 2017 per country, value in EUR

Source: State Statistical Office of Macedonia (MAK STAT database)

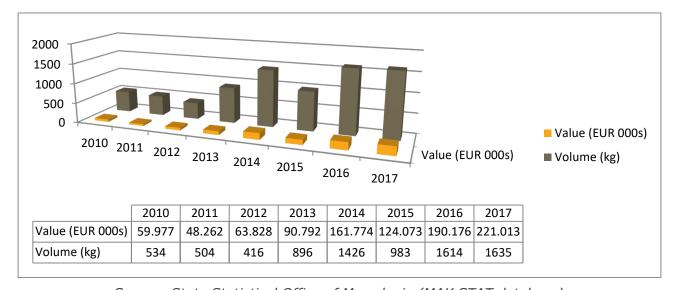


Chart 15: Total imports of Cigars and cigarillos (2010-2017)

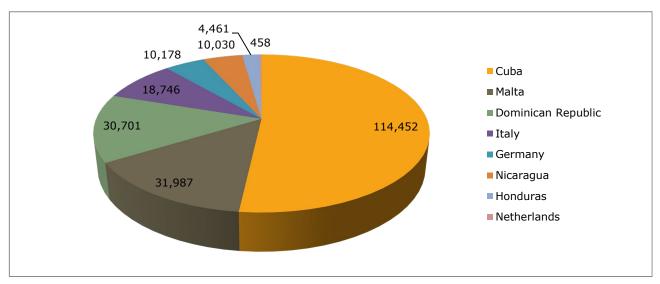
Source: State Statistical Office of Macedonia (MAK STAT database)

As shown in Chart 15, according to the data from State Statistical Office,³⁸ the total value of imports of cigars and cigarillos increased from EUR 6,000 in 2010 to EUR 221,013 in 2017. The volume of imports also increased from 534 kg in 2010 to 1,636 kg in 2017. In 2017, the bulk of imported cigars and cigarillos came from Cuba, followed by Malta, Dominican Republic, Italy and Germany. Market negligible imports come from countries such as Nicaragua, Honduras and Netherlands³⁹ (Chart 16).

³⁸ State Statistical Office http://www.stat.gov.mk/PrethodniSoopstenijaOblast.aspx?id=108&rbrObl=26

³⁹ http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/search/?searchquery=%u0443%u0432%u043e%u0437+%u0438%u0437%u0432%u043e%u0437&rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef

Chart 16: Total imports of cigars and cigarillos in 2017 per country, value in EUR



Source: State Statistical Office of Macedonia (MAK STAT database)

3. DEMAND FOR TOBACCO PRODUCTS

3.1 Smoking prevalence

Smoking prevalence in Macedonia continues to decline slightly. With a total number of 571,000 smokers, smoking prevalence stands at around 35% in 2017.⁴⁰ Macedonia is among the top ranking countries globally⁴¹ based on the smoking prevalence and the total number of cigarettes smoked per day per smoker (Chart 17).

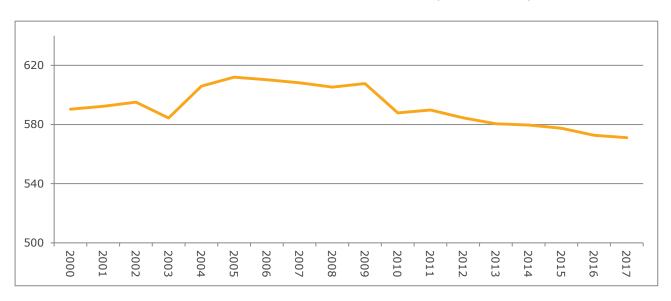


Chart 17: Total number of smokers in 000s (2000 - 2017)

Source: Author calculations based on sources on data from Institute for Public Health of Macedonia, WHO estimates and IMEX DATA dooel Skopje estimates

From 2000 up until 2017, the prevalence of smoking moderately declined. In 2017, based on estimated data, smoking prevalence was at 35%.⁴² In 2017, out of the total number of smokers in Macedonia, 304,000 were men and 267,000 were women. Smoking prevalence among men was higher at 37% and lower among women at 32%.⁴³ (Chart 18)

⁴⁰ Author calculations based on sources on data from Institute for Public Health of Macedonia, WHO estimates and IMEX DATA dooel Skopje estimates

http://www.healthdata.org/sites/default/files/files/research_articles/2014/JAMA_Smoking_prevalence_and_cigarette_consumption_in_187_countries_1980-2012.pdf

⁴¹ http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf; https://www.telegraph.co.uk/travel/maps-and-graphics/world-according-to-tobacco-consumption/

⁴² Global Journal of Medicine and Public Health; http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf; http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf

⁴³ IMEX DATA dooel Skopje estimates, based on multiple sources, including the Institute for Public Health of Macedonia, WHO estimates, http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf; http://www.healthdata.org/sites/default/files/files/research_articles/2014/JAMA_Smoking_prevalence_and_cigarette_consumption_in_187_countries_1980-2012.pdf;

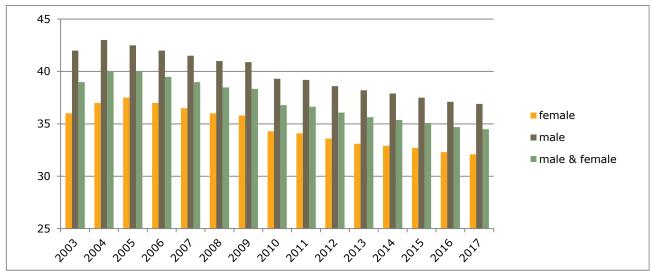


Chart 18: Smoking Prevalence Male & Female 2000 - 2017

Source: Author calculations based on sources on data from Institute for Public Health of Macedonia, WHO estimates and IMEX DATA dooel Skopje estimates, Global Journal of Medicine and Public Health; http://www.gjmedph.com/uploads/03%20-Vo3No4.pdf;http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf

Smoking prevalence recently registered a moderate decline in both women and men. This is primarily attributed to factors such as increasing unit prices of cigarettes, as well as improved education and health awareness about the negative health effects of smoking.

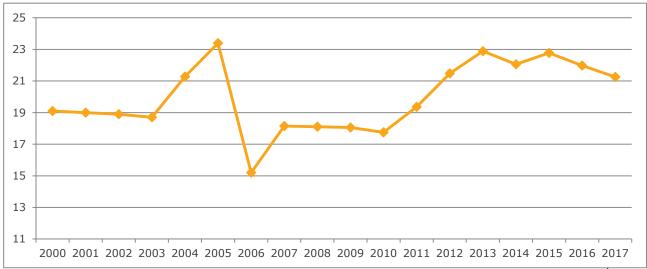


Chart 19: Mean number of cigarettes smoked per day per smoker 2000 - 2017

estimates and IMEX DATA dooel Skopje estimates, Global Journal of Medicine and Public Health; http://www.gjmedph.com/uploads/03%20-Vo3No4.pdf;http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf

https://www.rferl.org/a/balkans-serbia-montenegro-macedonia-bosnia-smoking-bucks-global-trend/28822326.html

While smoking prevalence continues to decline, the mean number of cigarettes smoked per day per smoker remains fairly stable (Chart 19). In 2017, the average smoker in Macedonia smoked 21.3 cigarettes per day.⁴⁴

The trend from Chart 19 coincides with the trend of cigarettes sold (Chart 10) showing the same sharp decline of cigarettes smoked per day per smoker in 2006. This is due to the drastic increase in the price of cigarettes in January 2006; hence, the sharp decline in the number of cigarettes sold at the end of 2006.

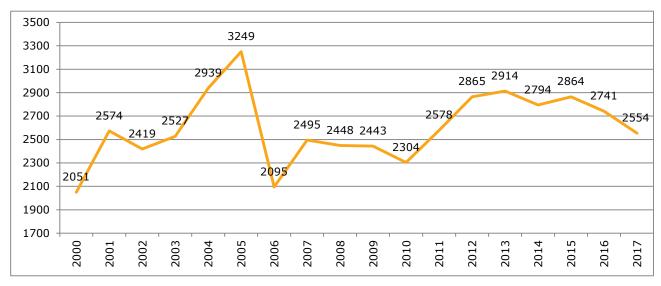


Chart 20: Annual per capita consumption of cigarettes 2000 – 2017 (sticks)

Source: State Statistical Office of Macedonia (apparent consumption method)⁴⁵

Chart 20 shows that annual consumption of cigarettes per capita between 2000 and 2017 has been oscillating around a moderately increasing trend. In 2006, a sharp decline was evident in annual consumption of cigarettes per capita, which followed an average increase of 21.6% in cigarette prices after a 10% increase in excise tax on cigarettes and introduction of a new fee of MKD 0.15 per piece for each manufactured or imported tobacco cigarette (i.e. MKD 3 per pack).⁴⁶ As a consequence of this sharp increase in the price of cigarettes, there was a sharp decline in annual consumption of cigarettes per capita at the end of 2006.

⁴⁴ Author calculations based on sources on data from Institute for Public Health of Macedonia, WHO estimates and IMEX DATA dooel Skopje estimates, Global Journal of Medicine and Public Health; http://www.gjmedph.com/uploads/03%20-Vo3No4.pdf;http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf

⁴⁵ http://www.stat.gov.mk/PublikaciiPoOblast_en.aspx?id=2&rbrObl=13

⁴⁶ Annual report for 2006, National Bank of Republic of Macedonia

The increasing trend between 2010 and 2017 might be explained by increased cross-border purchases of cigarettes by visiting tourists from neighboring countries, particularly Greece, Bulgaria and Kosovo with significantly higher cigarette prices. This coincides with the EU regulations - the Common Agricultural Policy (CAP). Between 2007 and 2013, there were major changes in the EU's policy on tobacco production, which led to a sharp decline in production of tobacco in all member states, and especially in neighboring Greece and Bulgaria. ⁴⁷

3.2 Minimum smoking age

According to Article 5 of the Law on Protection from Smoking, the legal age for smoking in Macedonia is 18 years old. There are no constitutional or legal grounds for any single government body in Macedonia to increase the minimum legal smoking age, as any such move would be viewed as discriminatory to the young adult population. Hence, it is highly unlikely the legal smoking age has any chance of being moved above or below 18 years of age in the foreseeable future.

Just as is the case in other countries, the Government of Macedonia has put legislation and measures in place to prevent the sale of tobacco products to minors (below 18 years of age). With this in mind, self-service (vending) of tobacco products is strictly prohibited in Macedonia. Internet retailing of tobacco products is not prohibited per se, but is subject to strict legislation, which regulates and prohibits underage sales. Article 9 of the Law on Protection from Smoking stipulates that legal entities and persons found to be in contravention to the law would face fines of between EUR 2,000 and 4,500. Each parent or guardian of the underage individual will also be fined between EUR 500 and 1,000. These fines apply to a number of violations of the law, including the sale of tobacco products to underage individuals.

3.3 Tobacco consumption among youth

The smoking prevalence among youth in Macedonia is particularly worrisome.⁴⁸ The most vulnerable population is between13 and 17 years of age. The Government of Macedonia has been implementing measures to tackle this problem, albeit they have had limited success insofar. Nationally sponsored campaigns were conducted aiming to inform the public and prevent underage smoking, as well as to reduce smoking prevalence among underage persons.

In Macedonia, there is a specific governmental body, the Agency for Youth and Sport, which in the recent years continuously encouraged youth to adopt healthy lifestyles and participate in sports. So, there is an obvious trend of increased health and wellness focus by the younger generations who tend to lead healthier lifestyles and are more enthusiastic about sports and wellbeing.

⁴⁷ https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/cap-glance_en

⁴⁸ http://iph.mk/wp-content/uploads/2018/06/GYTS-publikacija-en-2016-finale.pdf

According to this Agency, health awareness about the negative effects of smoking among youth in Macedonia in the recent years is increasing. With the development of social media, more consumers are increasingly aware of the serious health hazards associated with smoking and tobacco consumption. Government sponsored media campaigns have been contributing to the additional increase of the public awareness related to tobacco consumption. Public awareness about the detrimental effects of smoking on human health (both active and passive smoking) and pro-active contemporary lifestyles will continue to influence consumer attitudes and habits.

Three series of smoking prevalence surveys among youth were conducted in Macedonia: European School Survey Project on Alcohol and other Drugs (ESPAD), Health Behavior School Children Study (HBSC) and Global Youth Tobacco Survey (GYTS). So far, in the Republic of Macedonia, the ESPAD survey has been conducted four times: in 1999, 2008, 2012 (only on the territory of the city of Skopje) and 2015. ⁴⁹

According to the 2008 ESPAD, smoking among minors is widespread in Macedonia. Around 43% of minors aged 16 years and below have smoked at least once in their lifetime, while around 13% smoke at least one cigarette per day. The 2008 "Global School-Based Student Health Survey" showed that 14% of minors between the ages of 12 and 16 had smoked at least once in the last calendar month. The study also highlighted an encouraging trend regarding tobacco exposure among young people, with 67% of youths exposed to tobacco smoke in public places in 2008, which was significantly lower when compared to 2002. According to the most recent ESPAD study⁵⁰ in 2015, the percentage of minors who have smoked at least once in their lifetime dropped to 38.4%, while those who answered that they smoked one to two times in their lifetime is 14.7%. Most of the young people start smoking at age 15 according to this study. Compared to previous years, the number of young people using cigarettes is decreasing. Life prevalence in smoking declined from 57.6% in 1999 to 38.4% in 2015.

3.4 Social acceptance of smoking

In general, the level of social acceptance of smoking in Macedonia has been quite high. However, in recent years, there has been a trend in changing lifestyles and increased public awareness and focus on health and wellbeing, which have contributed to an increase in the numbers of non-smokers. This has become a prevailing trend, as more people demand smoke-free and healthier air and environments.

⁴⁹ Institute for Public Health, http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf

⁵⁰ Institute for Public Health, http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final.compressed.pdf



One of the facts that confirmed the social acceptance of smoking is the most recent change of the Law on Prevention of Smoking. The newly elected government amended the Law and eased the all-out smoking ban, permitting smoking in designated smoking areas and open air terraces.⁵¹ The move was actually welcomed by the vast majority of smokers and the HoReCa (Hotel Restaurant Café) establishments.⁵² Non-smokers and even some smokers see this measure as retrograde with a potential future negative impact on the overall health and wellbeing of the nation.

⁵¹ https://www.slobodenpecat.mk/makedonija/ne-se-trga-zabranata-tuku-se-dozvoluva-pushene-vo-najlon-terasite/

 $^{^{52}\} http://www.ohridnet.com/vesti/makedonija/11084-ugostitelite-baraat-izmeni-vo-zakonot-protiv-pushenje$

4. TOBACCO TAXATION AND PRICING POLICIES

4.1 Institutional and policy framework

The legislative framework in Macedonia regulating tobacco and tobacco products consists of several tobacco control laws and policies. The primary goal of these regulations is curbing illicit trade, preventing underage tobacco sales, improving tax collection and adjusting excises, as well as imposing greater financial discipline on local retailers and the major domestic and international manufacturers in the country.

There are corresponding laws regulating the production, distribution, packaging and implementation of health warnings on tobacco products and raw tobacco. Additionally, there are laws relating to tobacco-specific taxation and smoking in general. These laws include:

- Law on Tobacco and Tobacco Products (Official Gazette 24/06, 88/08, 31/10, 36/11,53/11, 93/13, 99/13, 164/13, 151/14 193/15, 213/15 and 39/16)
- Law on Protection from Smoking (Official Gazette 36/1995, 70/03, 29/04, 37/05, 6/07, 103/08, 140/08, 35/10, 100/11, 157/13 and 51/18)
- Excise Law (Official Gazette 32/01, 50/01, 52/01, 45/02, 98/02, 24/03, 96/04, 38/05, 88/08,105/09, 34/10, 24/11, 55/11, 135/11, 82/13, 98/13, 43/14, 167/2014, 188/2014, 129/2015, 154/2015, 192/2015, 23/2016, 31/2016, 171/2017 and 120/2018)
- Law on Environmental Protection (Official Gazette 53/2005, 81/2005, 3 decisions 2006,24/2007, 159/2008, 83/2009, decision 2009, 47/2010, 124/2010, 51/2011, 123/2012, 93/2013, 187/2013, 42/2014, 44/2015, 129/2015, 192/2015, 39/2016)
- Law on Health Protection (Official Gazette 43/2012, 145/2012, 10/2013, decision 2013, 87/2013, 164/2013, 39/2014, 43/2014, decision 2014, 188/2014, 10/2015, 61/2015, 154/2015, 192/2015, 17/2016, 37/2016, decision 2017)
- Law on Broadcasting (Official Gazette 100/2005, 19/2007, decision 2007. Decision 2008, 103/2008, 152/2008, 6/2010, decision 2010, 145/2010, 97/2011, 13/2012, 72/2013).

The Tobacco Control Policy in the Republic of Macedonia has three main objectives: Health promotion, Protection of the citizens against tobacco use, and Integrated systematic, and gender-sensitive approach in policy-making on a national and local level that will fit the specific needs and rights of the citizens.⁵³

⁵³ THE HARMFUL EFFECTS OF TOBACCO USE - A CHALLENGE FOR INTERSECTORAL COOPERATION AT A LOCAL LEVEL IN THE REPUBLIC OF MACEDONIA, prepared by Elena Kjosevska, Journal for European issues, June 2017

The institutional setup and allocation of responsibilities still hold this complex activity disintegrated. This is reflected in the insufficient inclusion and coordination of various institutions and departments: The Ministry of Finance, Customs Administration, Ministry of Environment and Physical Planning, Ministry of Economy, Ministry of Health, Ministry of Agriculture, Forestry and Water Economy, Ministry of Education and Science, the Bureau for Development of the Education, Ministry for Local Government, Institute for Public Health, and the 10 Centers for Public Health. Achieving a high level of proper behavior towards health requires strong collaboration among public health, the healthcare sector and other sectors, particularly the sectoron education and science. Therefore, the public health sector should play a key role in building a community of various partners and stakeholders that share similar goals and responsibilities.⁵⁴

In the past, the Government of Macedonia has conducted elaborate mass media campaigns and activities aimed at promoting healthier lifestyles by exposing the harmful effects of smoking and raising public awareness about the benefits of early smoking cessation. Some of these activities have been in direct correlation with the process of approximation of local legislation to the EU legislation as a prerequisite for (future) EU membership of the country, known as *Acquis Communautaire*.

4.2 Tobacco control measures

4.2.1 Ratification of the Framework Convention on Tobacco Control (FCTC)

The Republic of Macedonia is one of the 168 countries in the world that ratified the WHO FCTC in 2006. ⁵⁵ The country closely followed the recommendations of the WHO FCTC, and as of January 2010 it implemented strict anti-smoking and anti-tobacco advertising measures. A smoking ban was introduced in all public places, including bars and restaurants. ⁵⁶ Color pictorial health warnings on tobacco packages became mandatory in September 2009 following EU directive 2001/37/EC. Implementation of these legislations placed Macedonia among one of the top countries in the Balkan region that had implemented such strict anti-smoking measures.

Parallel to these processes, the Government continued to support and subsidize tobacco farming.⁵⁷ This put the country in a tricky position: to balance the requirements of EU and WHO policies in order to protect the population from the hazardous effects of smoking, while continuing to support tobacco production.⁵⁸

⁵⁴ ibid

Law on ratification of the Framework Convention of Tobacco Control of the World Health Organization Official Gazette of the Republic of Macedonia No 68,2006

⁵⁶ Law on smoking protection

⁵⁷ Agency for Foreign Investments and Export Promotion of the Republic of Macedonia, Available at: http://investinmacedonia.com/files/recources_files/2731/AGRO%20web.pdf

⁵⁸ Between anti-smoking policies and tobacco farming subsidies: the case of Macedonia, prepared by Vladimir Lazarevik, Mome Spasovski, Doncho Donev; European Journal of Public Health, Volume 23, Issue 3, 1 June 2013, Pages 354–355, https://doi.org/10.1093/eurpub/cks178

4.2.2 Graphic health warnings

Since the introduction of the first Law on Protection from Smoking in 1995, health warnings have constituted an integral part of tobacco regulation in Macedonia. Articles 41 to 43 of the 2006 Law on Tobacco and Tobacco Products regulate sale of tobacco products and prohibit selling these products without a printed health warning on the pack. These articles also stipulate the detailed standards that printed warnings must meet before packs can be placed on the market. The Law on Tobacco and Tobacco Products introduced graphic health warnings on tobacco packaging on January 24th, 2010.

A supporting directive from the Ministry of Health provided some basic guidelines as to how the law should be implemented, including the specifications of which graphic images of diseased organs should be used.

As recommended in the EU directive 2001/37/EC, Macedonian law requires two health warnings to be printed on tobacco products intended for sale, one general and one additional, on the front and back of each pack. On packs of cigarettes, the general warnings must cover at least 30% of the front of the pack, while the additional warnings need to cover at least 40% of the back. For other packaged tobacco products with a visible surface area of over 75 sq. cm, health warnings covering at least 23 sq. cm must be printed on the front and back of the pack. Warnings should also be printed in a predefined bold black font in a manner that prevents them being covered up or damaged.

Additional health warnings printed on the front of each pack must indicate either the phrase "Smoking kills," or "Smoking seriously damages yours and other people's health". On the back of each pack, one warning from the following list must appear: "Smokers die younger," "Smoking causes lung cancer," "Smoking causes cardiac disease and heart attacks," "Smoking may decrease fertility," "Protect children: Do not let them breathe your smoke," "Smoking is an addiction," "Ask for help, stop smoking," "Let your doctor help you to quit smoking," "Smoking may cause a slow and painful death," or "By stopping smoking you will decrease the risk of serious disease."

4.2.3 Smoking ban

A general ban on smoking in public places, including restaurants and bars, became effective in Macedonia on January 1^{st} , 2010.

Since 2003, the Law on Protection from Smoking has partially prohibited smoking in public places, allowing for separate designated smoking areas to be established in public offices, restaurants and bars. An amendment to the partial public smoking ban was first introduced in 2008 when smoking was prohibited in most public places, including educational institutions and public buildings accommodating small children, young people and students. Health and social institutions, open and closed buildings used to host sporting, cultural or other public events were also included in the amended ban, along with public transportation, sky-lifts and rope railways, spaces used for meetings and gatherings, communal space in apartment blocks and offices, and also waiting rooms and hallways. Hotels can designate up to 30% of their available rooms as smoking rooms, while all other areas in the hotel were subject to the full smoking ban. The full public smoking ban now extends to bars and restaurants.

An establishment in which the public smoking ban is violated can now face a fine of between EUR 2,000 and 4,500, while the facility's manager would have to pay between EUR 500 and 1,000. Finally, any person smoking in a designated non-smoking area, in breach of the respective law, will face a fine of between EUR 150 and 300, or its equivalent value in the local currency (Macedonian Denar). In July 2011, an amendment to the Law on Protection from Smoking further stipulated new fines for business entities, or restrictions of their business operations for between 7 to 15 days.

In early 2018, the newly elected Government of Macedonia enacted amendments to the Law on Protection from Smoking, easing the all-out smoking ban by allowing smoking in specially designated areas and open air terraces. It aims to ease the current strict ban on public smoking, which according to HoReCa establishments in the country has been damaging the hospitality industry.

4.2.4 Tar cap levels

In order to comply with the EU regulations, the tar content in cigarettes was limited to 10mg back in 2009. All of the high-tar cigarettes were subsequently rebranded as midtar products during this process with the tar levels reduced. There are no indications that the current tar cap levels will be subject to any further revisions or significant legislative changes over the forecast period.

Since 2009, article 46 of the Law on Tobacco and Tobacco Products prohibits the use of words and descriptions indicating that a tobacco product is less harmful, for example "light" or "mild" cigarettes.

4.2.5 Marketing and advertising of tobacco

The media advertising of tobacco products is prohibited by the Law on Broadcasting and the Law on Protection from Smoking.

Article 101 of the Law on Broadcasting specifically prohibits advertising tobacco and tobacco products on television, while Article 4 of the Law on Protection from Smoking prohibits any advertising of tobacco products, either directly or indirectly, including the display of tobacco product logos or companies. This same law prohibits other types of commercials in public places, on buildings, on any means of transportation, or any luminous advertisements. Furthermore, umbrellas, ashtrays and similar products that have been branded by tobacco product names are likewise banned from use at the point of sale or in public places.

Retail point-of-sale advertising is not strictly prohibited by law in Macedonia. In fact, it is the only place where cigarette manufacturers can publicly display their products without fear of sanction. Article 4 of the Law on Protection from Smoking further stipulates tobacco products can only be displayed in their original packaging together with any pricing information. Sporting, musical or other public events cannot be sponsored by companies registered or with interests in the production and trade of tobacco products, as it is prohibited under the Law on Protection from Smoking. Also, since 2008, the distribution of tobacco-branded gifts and other promotional activities has been prohibited under the Law on Protection from Smoking. This includes promotional games, lottery draws or any other form of communication with customers, including e-mail and SMS. Tobacco product-related competitions, as well as the distribution of free prizes or gifts related to internet website visits, are also prohibited by law.

4.2.6 Relevant legislation - Excise Law

Excise Law (Official Gazette of the Republic of Macedonia 32/2001, 50/2001, 52/2001, 45/2002, 98/2002, 24/2003, 96/2004, 38/2005, 88/2008,105/2009, 34/2010, 24/2011, 55/2011, 135/2011, 82/2013, 98/2013,43/2014, 167/2014, 188/2014, 129/2015, 154/2015, 192/2015, 23/2016, 31/2016, 171/2017 and 120/2018). The Excise Law regulates tobacco products. Tobacco products that are subject to excise: cigars and cigarillos, cigarettes, tobacco for smoking (finely chopped tobacco for folding cigarettes and another tobacco for smoking). Electronic cigarettes and e-liquids are not regulated with Excise Law or any other law.

Also, the law regulates the retail price. Retail price is the individual price set by the manufacturer or importer as a trading price per piece of cigars, cigarillos and cigarettes and per kilogram for smoking tobacco. In cases when only a price per pack is set, retail price shall be the price arising out of the price per pack and the contents of the pack. Manufacturers or importers shall report the retail price of the tobacco goods to the Customs Administration and publish it in the" Official Gazette of the Republic of Macedonia" prior to releasing the tobacco products into excise-free circulation at such defined prices.

The first significant changes in the Excise Law related to excise rates to tobacco products started in 2013. The amendments of the Excise Law in 2013 allowed changes to the existing excise tax rates imposed on tobacco goods sold in Macedonia, as well as the methodology used to calculate these rates. These changes took effect on July 1st, 2013 and they are to be in effect all the way until 2023.

On July 1st, 2013, the Excise Tax Law was amended and the excise rate on cigarettes was changed to MKD 1.30 per unit and 9% of the retail price for cigarettes (in 2012 the excise was MKD 0.1 per unit and 35% of the retail price), MKD 21.37 and 0% of the retail price for cigars and cigarillos and MKD 1,350 per kg and 0% of the retail price for other smoking tobacco. Finely chopped smoking tobacco was subject to an excise tax of MKD 1,500 and 0% of the retail price.

As of July 1^{st} , 2014 and up to July 1^{st} , 2015, the rates of the specific and minimum excise tax on cigarettes were increased by MKD 0.15 per piece. As of July 1^{st} , 2016 and up to July 1^{st} , 2023, the rates of the specific and minimum excise tax on cigarettes are to increase by MKD 0.20 per piece on July 1^{st} of each year. In 2017, excise tax on cigarettes amounted to MKD 2.053 per piece and 9% of the retail price. In case the combined excise tax (specific and ad valorem) is below the amount of MKD 2.253 per piece, the minimum excise tax in this amount shall apply.

As of July 1st, 2014 and through July 1st, 2023, the rates of the excise tax on smoking tobacco as fine-cut tobacco are to incresae by MKD 50 per kilogram on July 1st of each year. In 2017, excise tax on smoking tobacco as other tobacco amounted to MKD 1,350.00 per kilogram and 0% of the retail price. In 2017, excise tax on smoking tobacco as fine-cut tobacco amounted to MKD 1,650.00 per kilogram and 0% of the retail price.

Excise tax on cigars and cigarillos amounted to MKD 21.37 per piece and 0% of the retail price in 2017.⁵⁹

4.2.7 Other restrictions on tobacco products

There is no formal ban on advertising e-cigarettes, which achieved greater market significance in 2017. In general, e-cigarettes can be used in public spaces as they are not considered tobacco products, although many establishments increasingly include e-cigarettes and vapor products in the no smoking list so these products are increasingly submitted to the same regime regular cigarettes are subjected to.

4.2.8 Use of banderoles

All tobacco products sold in Macedonia carry a "duty paid" mark, or banderole. Maximum unit prices are not set by the government, with manufacturers and importers free to set their own retail prices. Once established, unit prices are then reported to the state agency responsible for tax and excise (The Customs Administration of Macedonia) and published in the Official Gazette. Back in 2010, these responsibilities were transferred from the jurisdiction of the Public Revenue Office and placed under the jurisdiction of the Customs Administration of Macedonia (Customs and Tax Procedures Department).

4.2.9 Illicit trade in Macedonia

The Government of Macedonia is implementing specific activities aimed at suppressing organized crime, including all forms of economic crime and tax evasion. Cigarettes and other excise goods are of particular interest to the Government and its bodies since excise taxes collected from sales of these products are an important contributor to the nation's budget. This is particularly true when it comes to cigarettes, which are the most robust tobacco category. With this in mind, government control and scrutiny are important to curb illicit trade of cigarettes. The Government of Macedonia has advanced in the battle with illicit trade through the measures of its fiscal policy, full fiscalization of the payment system, and financial discipline in the country. Prudent control measures imposed in coordinated actions by the Customs Administration of Macedonia and the Ministry of Interior have yielded good results in reducing illicit trade, 60 which is an improvement for the national budget compared to ten or twenty years ago. 10 One of the most important measures in combating cigarette smuggling and illicit trade is the use of printed excise tax banderoles. The Customs Administration of Macedonia permanently reports in its quarterly and annual reports about successful actions in seizing counterfeit goods.

⁵⁹ Ministry of Finance, Taxes and Duties, https://finance.gov.mk/mk/node/4438

⁶⁰ Kajgana, web portal, https://kajgana.com/sprechen-shverc-na-750-shteki-cigari-od-makedonija-vo-velika-britanija

⁶¹ http://amcham.com.mk/2015/06/26/customs-administration-and-philip-morris-tutunski-kombinat-prilep-signed-a-memorandum-of-understanding/

In comparison with the 1990's and 2000, the illicit trade volume in the last 11 years continues to decline in Macedonia. As shown in Chart 21, trading on the illegal market with tobacco and tobacco products in Macedonia in 2010 was reduced to 8%, being a four-fold reduction compared to 2006. One effect of the reduced illicit trade was the estimated budget revenue increase by 80%. Each in recent years, the Republic of Macedonia undertook a number of activities aimed at reducing cigarette smuggling, and the institutions were exceptionally successful in implementing them. In 2006, the illegal cigarette market in Macedonia accounted for around 30% of the overall sales. That dropped to 6.5% in 2017. According to the Minister of Finance, this decrease in the illicit trade is a confirmation that measures and policies in Macedonia are successful, reflected through increased budget revenues. Reducing grey market trading of cigarettes to 6.5% is lower than the level in many EU Member States. In the region, this percentage is 20%, while globally, it is 12%.

In 2013 and 2015, the Macedonian Customs Administration and the major tobacco company in the country, Tutunski kombinat Prilep, signed a Memorandum of Understanding defining mechanisms and methods of cooperation to prevent and combat illegal production, sale and smuggling of tobacco products.⁶⁵

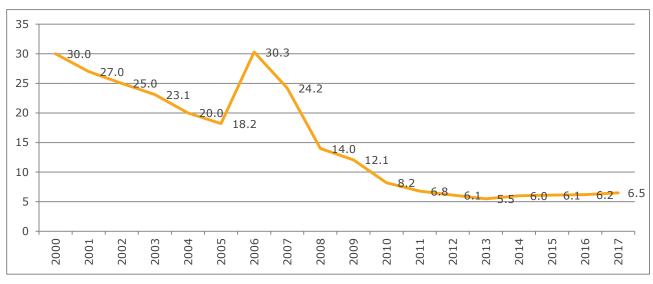


Chart 21: Illicit cigarette market share (2000 - 2017)

Source: Ministry of Finance of the Republic of Macedonia, Macedonian Customs Administration, IMEX data estimates

Macedonia has ratified the Protocol to Eliminate Illicit Trade in Tobacco Products on January 8^{th} , 2014 along with 53 other countries. Of these, 15 are EU countries. Additionally, the protocol has been ratified by countries in the region, such as Montenegro, Turkey as well as the EU Commission.

⁶² Ministry of Finance, https://www.finance.gov.mk/en/node/1817

⁶³ IMEX DATA dooel estimate based on multiple sources; Customs Administration of Macedonia;

⁶⁴ Ministry of Finance, https://www.finance.gov.mk/en/node/1817

⁶⁵ Customs Administration of Macedonia

Cross-border cigarette trade remains significant, as unit prices of cigarettes sold in Macedonia remain among the lowest compared to most in the immediate neighborhood. According to reports by the Customs Administration, illicit white and domestically-produced tax avoided products, as well as cigarette smuggling, continues to persist as seen in the number of actions conducted to seize illicit trade of cigarettes and smoking tobacco. The latter is now less of an issue because unit prices of most cigarettes abroad, including those in the immediate neighborhood, are now much higher than the domestic cigarettes sold in Macedonia.

Based on the reports of the Customs Administration of Macedonia, Chart 22 shows the volume of illicit cigarettes and smoking tobacco seized during the period 2013-2017:

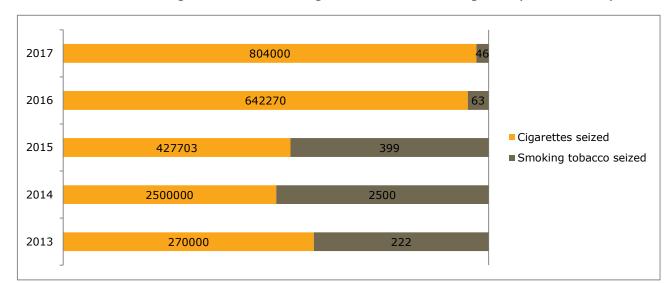


Chart 22: Illicit cigarettes and smoking tobacco seized in kilograms (2013 - 2017)

Source: Customs Administration of Macedonia

4.3 Taxation and Excises

4.3.1 Tobacco products taxation

In Macedonia, tobacco products taxation includes VAT and excise taxes (specific excise and ad valorem). All tobacco products are subject to these taxes, with the exception of smokeless tobacco. The sale of smokeless tobacco is prohibited under the Law on Tobacco and Tobacco Products.

Customs duties are not applied on cigarettes imported from the major suppliers of cigarettes, because Macedonia has signed bilateral and multilateral Free Trade Agreements, such as the EU Stabilization and Association Agreement (SAA), European Free Trade Agreement (EFTA) and Central European Free Trade Agreement (CEFTA).⁶⁷

⁶⁶ http://www.customs.gov.mk/index.php/mk/informacii-mk/vesti-mk/321-1250

⁶⁷ Invest in Macedonia, http://www.investinmacedonia.com/why-macedonia/trade-agreements

According to the data obtained from the Ministry of Finance, VAT levied on tobacco products in Macedonia is set at 15.25% of the retail price.

The different excise taxes for imported and domestic tobacco products, which were observed as WTO-inconsistent during the accession process, were equalized over a three-year transition period and completed by 2007. Excise taxes on tobacco products are in conformity with GATT Article III requirements.⁶⁸

Chart 23 gives an overview of the tax structure as percentage of weighted average price of cigarettes in Macedonia. The data shows that until 2012, ad valorem excise had a dominant share in the cigarettes price, while starting from 2013, specific excise taxes have become the dominant share in the price.

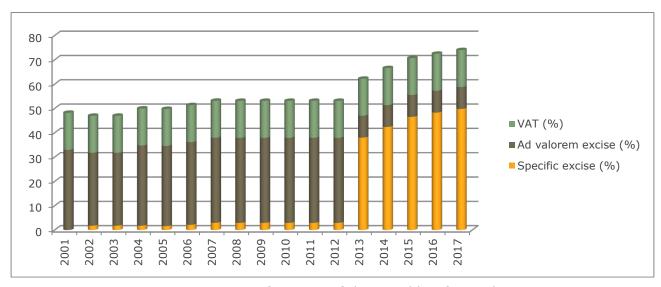


Chart 23: Cigarettes tax structure (% of weighted average price)

Source: Ministry of Finance of the Republic of Macedonia

In 2017, a specific excise on cigarettes was MKD 2.053 per piece, while an ad valorem rate was 9% of the retail price. In case the combined excise (specific and ad valorem) is below the minimum excise (which is MKD 2.253 per piece), then the minimum excise shall apply.⁶⁹

⁶⁸ TRADE POLICY REVIEW REPORT BY THE SECRETARIAT THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA, World Trade Organization, 2013

⁶⁹ Ministry of Finance, taxes and duties, https://finance.gov.mk/mk/node/4438

Table 2: Total Tax burden on cigarettes 2001-2017 (excise + VAT)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Specific excise (value in MKD per stick)	0	0.04	0.04	0.04	0.04	0.07	0.1	0.1	0.1	0.1	0.1	0.1	1.3	1.45	1.65	1.85	2.05
Ad valorem excise (%)	33	30	30	33	33	34	35	35	35	35	35	35	9	9	9	9	9
VAT (as a % of retail price)	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25
Total Tax Burden, as a % of Price of BOSS	48.25	47.0	47.0	50.0	49.9	51.4	53.2	53.2	53.2	53.2	53.2	53.2	62.3	66.6	70.8	72.5	74.0
Excise burden % of price	33	31.8	31.8	34.8	34.6	36.2	38	37.9	37.9	37.9	37.9	37.9	47	51.4	55.5	57.3	58.8
Price of BOSS cigarettes	45	45.0	45.0	45.0	50.0	65.0	67.6	68.4	68.4	68.4	68.4	68.4	68.4	68.4	71.1	76.8	82.5

As proxy for prices of cigarette products, we use the price of Boss cigarettes. This is one of the few brands included in the tobacco price index and it is the only price of cigarette products published by the SSO. The price of Boss cigarettes displays high correlation with the CPI tobacco price index confirming that it is a good indicator for the dynamics of the average cigarette price.

As evident from the Table 2, the tax burden on price of cigarettes has been increasing. The most significant increase in the total tax burden was realized in 2013.

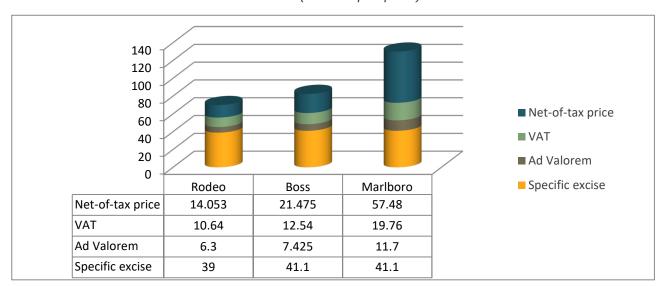


Chart 24: Proportions of VAT and excises in the price of Rodeo, BOSS and Marlboro cigarettes in 2017 (in MKD per pack)

Source: State Statistical Office and Ministry of Finance of the Republic of Macedonia

Among the three brands presented in Chart 24, Marlboro has the highest net-of-tax price (and hence, highest profit), but only slightly higher tax (in MKD per pack) relative to the other two brands.

The analysis shows there is a room for increasing the price by increasing the excise burden on cigarettes, especially on the economy and standard price bands, in order to be closer to premium brands and to limit the space for downwards substitution from the premium to the standard brands. This will have positive health benefits (reduced consumption) and at the same time achieve positive financial effects to the national budget.

4.3.2 Tobacco products Excise Revenues

Chart 25 shows a significantly increasing trend of the excise revenues between 2000 and 2017. The main contributing factors are improved collection of excise revenues by the Ministry of Finance and implementation of tobacco control measures by the Customs Administration.⁷⁰

⁷⁰ Ministry of Finance, https://finance.gov.mk/mk/node/1814

200.0 171.0 179.0 180.0 147.6 160.0 131.4 140.0 111.3 120.0 93.3 73.0 75.2 75.9 ^{82.0} 100.0 80.0 35.3 37.1 38.9 41.7 50.3 55.2 60.0 40.0 20.0 0.0 2005 2010 2012 2013 2015 2016 2017 2011 2001

Chart 25.Tobacco Products Excise Revenues 2000 - 2017 (in mill. EUR)

Source: Ministry of Finance of the Republic of Macedonia

According to Chart 26, tobacco products excise revenues in 2017 was 6.1% of the national budget and 1.8% of GDP. Between 2000 and 2017, the percentages of these revenues in the national budget and GDP have doubled. Hence, the tobacco products excise revenues are a significant contributor to the national budget.

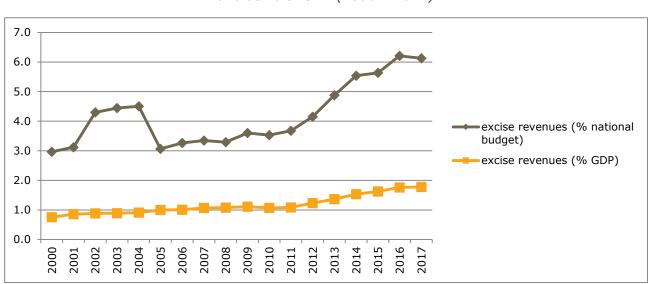


Chart 26: Tobacco products excise revenues as % of national budget and as % of GDP (2000 - 2017)

Source: Ministry of Finance of the Republic of Macedonia

4.3.3. Impact of cigarette taxation on the price of cigarettes

Chart 27 and Chart 28 show that the excise burden, total tax burden and price of cigarettes have a parallel trend. This trend may suggest that tobacco producers pass all increase in excises to final consumers. This assumption is confirmed by historical evidence. For example, as presented in Table 1, the cumulative increase of the price of one pack of Boss from 2004 to 2017 is 37.5 MKD per pack, whereas the cumulative increase in effective excise rate for the same period is around 34 MKD per pack, which is in line with the assumption that producers do translate tax increases to final consumers.

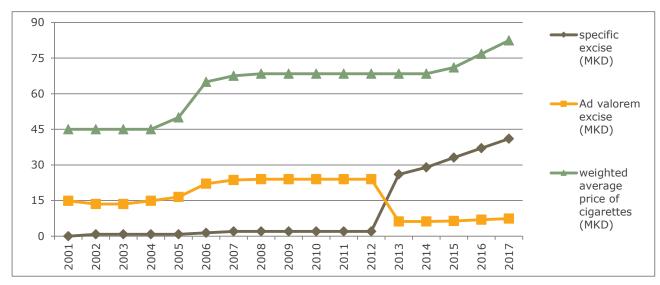


Chart 27: Trend of specific excise, ad valorem excise and price of cigarettes

Source: Ministry of Finance of the Republic of Macedonia; State Statistical Office of Macedonia

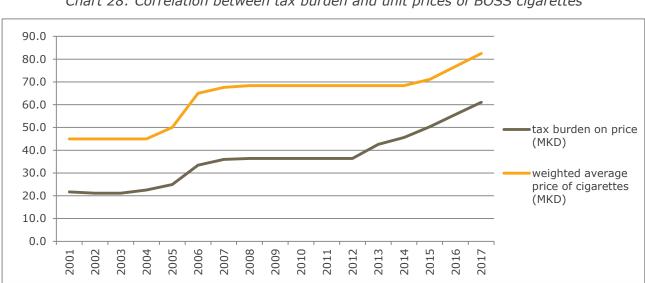


Chart 28: Correlation between tax burden and unit prices of BOSS cigarettes

Source: Ministry of Finance of the Republic of Macedonia; State Statistical Office of Macedonia

5. ELASTICITY OF TOBACCO PRODUCTS

The aim of this analysis is to explore the key factors that affect the aggregate demand for tobacco products in Macedonia. Given data limitations, we focused only on the demand for cigarettes, as data on other tobacco products are not available. Following the mainstream theoretical framework and empirical approaches, the analysis first estimates the price elasticity of demand, and then calculates the likely effect of an increase in excise duty rates on the prices of cigarettes, consumption of cigarettes and the excise revenues.

We estimate the consumption model by using the Autoregressive Distributed Lag (ARDL) method using time-series data from 2002 to 2012. The ARDL method is a more appropriate approach for a short time series such as ours. The dependent variable is consumption of **cigarettes packs per household** (taken from the Household Consumption survey conducted and published by the State Statistical Office (SSO)). As the explanatory variables in the model, we used **tobacco price index** as a proxy for prices of cigarettes (this index is one of the twelve sub-indices of the CPI by Classification of Individual Consumption according to Purpose, calculated and published by the SSO) and **real average wages** as a proxy for disposable income.

The ARDL model was estimated with one lag for the dependent variable and no lags for the independent variable (i.e. ARDL(1 0 0)) on the basis of the information criteria (Akaike and Bayesian information criterion were both employed). This model gives us only the long-run price and income elasticities. In order to obtain the short-run elasticities, we estimated the ARDL models with a larger number of lags, despite the small number of observations. However, the results were not stable, as in most cases we could only perform the bound test. In those cases where we were able to perform the bound test, it indicated no level relationship. Moreover, some of the models had diagnostic problems (no serial correlation hypothesis was rejected at the conventional level of statistical significance), and the estimated coefficients were counterintuitive, including the obtained sign and magnitude. Therefore, we decided to continue with ARDL(1 0 0) model, as suggested by the information criteria, and estimated only the long-run elasticities. In addition, given the addictive nature of smoking, we expected the effects of prices and income on smoking to be larger and more significant in the long-run.

In line with the theory and findings in other empirical studies, the results show that the price elasticity of demand for cigarettes is around -0.4, implying that 10% increase in prices of cigarettes leads to a decline in consumption of cigarettes by 4%. The income coefficient was estimated to be -0.2, implying that a 10% increase in income leads to a decline in consumption of cigarettes by 2%. The negative sign on income elasticity is counterintuitive, but is likely due to a very short time-series used in the analysis.

Additionally, our research results showed that adoption of the Law on protection from smoking in 2010, when smoking was prohibited in all public indoor areas, had significant negative impact on consumption of cigarettes (i.e. decreased the demand for cigarettes, ceteris paribus). This confirms the fact that tobacco control policies can be important determinants of tobacco consumption.

The estimates of the long-run price elasticity (ARDL model) were used to simulate the possible impact of higher excises and consequently higher cigarette prices. Three scenarios were prepared – scenario 1, 2 and 3—that assumed 10%, 30% and 50% increase in cigarette prices, respectively. According to the simulations, cigarette consumption will decline between 3.7% and 18.7%, and the government will receive higher excise tax revenues between 14.2% and 56.7% (or additional revenues in the range of 25.4 to 101.6 million Euros). This simulation shows a positive effect of higher excise taxes in terms of revenue and lower consumption. The results are given in Table 2.

Additionally, we included the income effect in order to see what will be the likely impact on the consumption of cigarettes and excise tax revenues. To that end, we used the estimated long-run income parameter (ARDL model) and we assume that income will grow with the forecasted real GDP growth rate (World Economic Outlook Database).

The decline in consumption is higher because the income coefficient was estimated to be negative (decline in the range of 4.2% to 19.2%). As in the first simulation, because of increase in tax rates, government excise revenues will increase with a similar rate as in the first simulation (increase in the range of 13.7% to 55.9% or 24.5 to 100 million Euros).

Table 3. Effects of increase in cigarette price and income to consumption of cigarettes and tax revenues

		Effective excise, in denars, per pack (0.9% from the retail price + per cigarette excise)	Average income, assumed to grow with the forecasted rate of GDP, in denars	Decline in consumption because of price increase, in % (calculated by using estimated long-run price easticity of -0.375)	Decline in consumption because of income increase, in % (calculated by using estimated long-run income easticity of -0.158)	Consumption of cigarettes, per capita	Excise tax revenues (million of denars)
2017	82	48	22925			2,704	11,011
Scenario 1	91	57	23567	-3.7	-0.4	2,591	12,518
Scenario 2	107	75	23567	-11.2	-0.4	2,388	15,148
Scenario 3	124	93	23567	-18.7	-0.4	2,185	17,165
increase in %							
Scenario 1	10.0					-4.2	13.7
Scenario 2	30.0					-11.7	37.6
Scenario 3	50.0					-19.2	55.9

SUMMARY

The Republic of Macedonia is perhaps a unique example of implementation of a dual policy, having in place a restrictive smoking ban in accordance with EU regulations, and at the same time high agricultural subsidies that are aimed at stimulating tobacco production, which certainly should be subject of further investigation.⁷¹

What is also evident is that in Macedonia, the baseline of smoking prevalence among the population has basic social determinants that should be considered when planning targeted intervention programs in addition to existing restrictive measures, should the country want to reduce the tobacco epidemic.

There is certain evidence that tobacco use is largely associated with adult mortality rates, which could be prevented and greatly reduced if widespread cessation of smoking is implemented. In the Republic of Macedonia, data on tobacco smoking is not regularly collected, although Macedonia is ranked among one of the top five countries globally in reported smoking rates, including a 40% smoking rate among health professionals.⁷²

The economic literature suggested that a real and permanent price increase corresponds to a decrease on demand approximately twice as large in the long-run as compared to the short-run.⁷³

The results from other analyses conducted in the field of elasticity of demand show that on average in Europe, smoking consumption decreases 5% for a 10% increase in the real price of cigarettes, which strongly supports an inverse association between price and cigarette smoking.⁷⁴

The results from our analysis support the inverse relation between price and consumption of cigarettes. In line with the theory and findings in other empirical studies, the results show that the price elasticity of demand for cigarettes is around -0.4, implying that 10% increase in prices of cigarettes leads to a decline in consumption of cigarettes by around 4%. The income coefficient was estimated -0.16, implying that 10% increase in income leads to a decline in consumption of cigarettes by 1.6%.

⁷¹ Social determinants of smoking in the population of the Republic of Macedonia–results from a nested case-control study Dance Gudeva Nikovska, Mome Spasovski, Dragan Gjorgjev, Jovanka Karadzinska Bislimovska, Rozalinda Isjanovska, Fimka Tozija

⁷² ibid

⁷³ How important are tobacco prices in the propensity to start and quit smoking? An analysis of smoking histories from the Spanish National Health Survey, prepared by López Nicolás, A Health Econ. 2002 Sep; 11(6):521-35.)

⁷⁴ Price and cigarette consumption in Europe, by S Gallus, A Schiaffino, C La Vecchia, J Townsend, and E Fernandez, The effects of a rise in cigarette price on cigarette consumption, tobacco taxation revenues, and of smoking-related deaths in 28 EU countries-- applying threshold regression modeling, by Chun-Yuan Yeh, Christian Schafferer, Jie-Min Lee, Li-Ming Ho and Chi-Jung Hsieh, BMC Public Health 2017

Estimates of the long-run price and income elasticity were used to simulate possible effects from the increase in cigarette excises (as planned in the Law on Excises) on prices of cigarettes, consumption of cigarettes and tax revenues. According to the simulation, a 50% increase in the per pack price of cigarettes will lead to decline in consumption of cigarettes per capita by 19.2% (or 519 cigarettes per capita) and increase government excise revenues by 55.9% (cumulative increase of 6 billion MKD or 100 million Euros).

RECOMMENDATIONS

Since the WHO recommended benchmark is a minimum of 70% of retail price to be devoted to excise tax, and currently in Macedonia the excise tax is 58.8%, it is important to note that there is a space for increasing the excise taxes in order to increase the price of cigarettes.

Implementation of the excise tax changes should be extended beyond 2023 with the aim of further reduction of the smoking prevalence. There is still sufficient space to increase excise duty in order to increase the price of cigarettes as a tool to discourage smoking.

Our results show that price policy and other tobacco control policies are clearly effective in reducing the consumption of cigarettes. However, they also suggest that the planning of tobacco control policies should highlight the harmful effects of all tobacco products on health, besides just cigarettes. In addition, tobacco control policies should be further strengthened.

When planning the tobacco tax policy, the government should take into account the direct impact tax increases have on price. Only drastic increases in price of tobacco products can lead to actual decrease in the affordability of tobacco products, and at the same time decrease tobacco consumption.

APPENDIX 1

Smokeless tobacco

Smokeless tobacco remains off limits to domestic consumers. This is due to legislative restrictions for tobacco products. No smokeless tobacco brands are sold in Macedonia, as the sales and distribution of chewing tobacco are prohibited due to health concerns. While smokeless tobacco is set to remain off limits to local consumers from 2018 to 2022, the heated tobacco segment is expected to begin developing and gaining greater market share as early as 2019 and 2020, having in mind that in many neighboring countries such as Serbia, Bulgaria, and Romania, sales of heated tobacco products has already started several years ago. The new Excise Law now allows import and sales of heated tobacco, which is a new type of product still not available on the local market⁷⁵

Electronic cigarettes and vapor products

In 2017, most of the electronic cigarettes and other vapor devices sold in Macedonia belong to the first-generation of disposable "cig-a-likes" as well as to the newly launched rechargeable versions. Products belonging to the latest generation (e-cigarette tank) are increasingly popular and available on the market both from online retailers and retail sales distribution channels, such as kiosks and independent franchises selling vapor products and various smoking accessories.

The vapor products segment in 2017 consists primarily of open vaping systems (charging and vaporizing) and e-liquids. Heated tobacco is not yet available on the local market. E-liquids which also declined in retail value terms reached current retail sales value of EUR 390,000 in 2017.⁷⁶

Electronic cigarettes improved their market presence in Macedonia in 2017 with sales values remaining fairly miniscule compared to the tobacco products. Nonetheless, current sales volume of electronic cigarettes in Macedonia does not pose any direct threat to tobacco consumption in 2017, as the vast majority of smokers remain loyal to the traditional forms of tobacco, with only a small number of smokers turning to vapor devices as substitutes. A small but growing number of online merchandisers advertise and sell electronic cigarette varieties, which are mostly "cig-a-likes," or more precisely rechargeable "cig-a-likes." These consist of a starter kit, priced generally in the range of EUR 32 to EUR 65. The kit contains rechargeable batteries, diffusers, a battery charger and several nicotine cartridges. Replacement cartridges are priced EUR 1 to EUR 3 on average.⁷⁷

⁷⁵ Faktor news web portal, https://faktor.mk/vladata-dozvoli-uvoz-i-prodazba-na-nov-tip-cigari

⁷⁶ IMEX DATA dooel based on sources: (Central Registry of Macedonia, State Statistical Office of Macedonia MAK-STAT database)

⁷⁷ IMEX DATA dooel based on sources: (Central Registry of Macedonia, State Statistical Office of Macedonia MAK-STAT database)



Most consumers in Macedonia purchase e-cigarettes through the internet retailing channel. Some tobacco specialists sometimes offer electronic cigarettes in addition to regular products. By 2017, several specialist stores for e-cigarettes were operational on various locations in the Macedonian capital, Skopje, and some of the larger towns nationwide.⁷⁸

In 2017, the Umbrella Corp doo⁷⁹operates with electronic cigarettes and other vapor products with an estimated value share of 34%. Umbrella Corp doo owes its strong market position to the well-developed local distribution network, which has a nationwide reach.⁸⁰ The company operates several specialized outlets and kiosks selling vapor devices under the Umbrella Corp Ltd owned brand names. The Chinese company, Shenzhen Joyetech Co Ltd,⁸¹ ranks second with an estimated value share of 31% in 2017. Besides the two leading market players, electronic cigarettes and other vapor products are highly fragmented into many small and obscure market players. Their total market share ranges between 22% in e-liquids to up to 49% in the open vaping systems, charging and vaporizing devices segment in 2017.⁸²

⁷⁸ IMEX DATA dooel, Tobacco in Macedonia report, Cigarettes in Macedonia report, Euromonitor

⁷⁹ Umbrella corporation MKD, https://umbrellashop.mk/

⁸⁰ IMEX DATA dooel Skopje based on sources: Central Registry of Macedonia, State Statistical Office of Macedonia MAK-STAT database)

⁸¹ https://www.joyetech.com/

⁸² IMEX DATA dooel Skopje based on sources: Central Registry of Macedonia, State Statistical Office of Macedonia MAK-STAT database)

APENDIX 2

POLICY DIALOGUE

The main objective of the policy dialogue is to raise awareness of the tobacco consumption issue and to open discussion among stakeholders other than WHO, Institute of Public Health and Ministry of Health. Further, the aim is to contribute to a well-informed health and fiscal policy decisions.

We are witnessing a lack of National tobacco control strategy and creation of excise policy by the Ministry of Finance without taking into consideration other relevant policy makers' perspectives.

While tobacco companies use the corporate social responsibility as a way to divert the attention of policymakers' attention from the tremendous mortality rate that smoking creates, the government rarely discusses the implementation of tax policy measures to reduce smoking. In addition, the creation of evidence based tobacco control policy will enable opening a process of policy dialogue in the country and initiating actual changes of the tobacco excise policy. This increase in cigarette excise taxes is a "double win," since it raises additional revenues and discourages smoking.

The Ministry of Finance is a key stakeholder responsible for preparation of tax legal framework and tax policy. The Customs Administration is directly competent to implement Excise Law. The Ministry for Health, Institute for Public Health and other relevant institutions are practically powerless in creating the excise policy. The Agency for Youth and Sport, WHO, Institute for Public Health and relevant CSOs are keen to support policy changes that would result in health policy improvements. The EU Delegation in Macedonia can be also influential stakeholder in regards to tobacco taxation policy changes.

Moreover, the policy dialogue can help stakeholders see problems from each other's perspectives, improving understanding of the impact that policies and programs can have on various groups.

REFERENCES

- Ministry of Finance of the Republic of Macedonia
- Ministry of Agriculture, Forestry and Water Economy of the Republic of Macedonia
- Ministry of Economy of the Republic of Macedonia
- Ministry of Health of the Republic of Macedonia
- State Statistical Office of the Republic of Macedonia
- Central Registry of Macedonia
- National Bank of the Republic of Macedonia
- Institute for Public Health
- Center for public health Skopje
- WHO World Health Organization
- Customs Administration of the Republic of Macedonia
- Tax administration of the Republic of Macedonia
- Chamber of Economy of Macedonia
- Scientific Tobacco Institute Prilep, Republic of Macedonia

CITATIONS

- 1. The World Bank in Republic of Macedonia, http://www.worldbank.org/en/country/macedonia
- 2. Territorial and natural priorities of Macedonia important factor for tobacco production development, prepared by Romina Kabranova and Zlatko Arsov, Faculty of Agricultural Sciences and Food, University 'Ss. Cyril and Methodius', Skopje, Macedonia
- 3. The tobacco sector in The Republic of Macedonia Competitiveness analysis, prepared by Emelj Tuna
- 4. Cooperation Centre for Scientific Research Relative to Tobacco Tobacco production in Macedonia (2016)
- 5. Competitiveness analysis of the tobacco sub-sector in the Republic of Macedonia, prepared by Emelj Tuna, Nenad Georgiev, Marina Nacka, Faculty of Agricultural Sciences and Food, University 'Ss. Cyril and Methodius', Skopje, Macedonia
- 6. http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/MakStat__ Zemjodelstvo__RastitelnoProizvodstvo/175_RastPro_Reg_ZitaIndustr_ mk.px/?rxid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef
- 7. Quantitative Genetic Investigations on Some Important Traits in Tobacco Varieties and their Diallel One-Way and Back-Cross Generations, prepared by Ana Korubin Aleksoska; Scientific Tobacco Institute Prilep, Republic of Macedonia, SSN 0494-3244 Тутун/Тоbacco, Vol. 66, No 7-12, 3-11, 2016 UDC: 633.71-152.75:575.113.2(497.775)"2014/2015" Original Scientific paper
- 8. http://www.mchamber.org.mk/(S(xgcoarju44rdtw55irgb203n))/default. aspx?mId=73&IId=1&smId=14
- 9. STATE OF TOBACCO PRODUCTION IN THE REPUBLIC OF MACEDONIA, prepared by Kiril Filiposki, Mile Peshevski, Dragić Živković, Blaze Filiposki, UDK 663.97(497.7)
- 10.Biznis Info-https://bi.mk/privrshuva-otkupot-na-tutunot-vo-bitol/ (2013)
- 11. State Statistical Office, statistical yearbook 2017

- 12.http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/?rxid=84dcf0ce-9408-4bcf-bcd7-2027a0857118
- 13.http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=50&rbrObl=14
- 14.http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=14&rbrObl=23
- 15.http://www.stat.gov.mk/PublikaciiPoOblast.aspx?id=8&rbrObl=19
- 16.http://www.mrt.com.mk/node/39925
- 17. Annual report for 2006, National Bank of Republic of Macedonia
- 18.http://www.crm.com.mk/DS/
- 19.http://www.balkaninsight.com/en/article/biggest-croatian-tobacco-company-sold-to-british-buyers (2015)
- 20.https://sitel.com.mk/nova-marlboro-ponuda-proizvedena-vo-makedonija-0
- 21. State Statistical Office, Statistical yearbook, (MAK STAT database)
- 22. Central Registry of Macedonia, http://www.crm.com.mk/DS/
- 23.http://www.stat.gov.mk/PrethodniSoopstenijaOblast.aspx?id=108&rbrObl=26
- 24.http://makstat.stat.gov.mk/PXWeb/pxweb/mk/MakStat/search/?searchquery= %u0443%u0432%u043e%u0437+%u0438%u0437%u0432%u043e%u0437&r xid=46ee0f64-2992-4b45-a2d9-cb4e5f7ec5ef
- 25.https://faktor.mk/vladata-dozvoli-uvoz-i-prodazba-na-nov-tip-cigari
- 26.https://www.telegraph.co.uk/travel/maps-and-graphics/world-according-to-tobacco-consumption/
- 27.Global Journal of Medicine and Public Health; http://www.gjmedph.com/uploads/O3%20-Vo3No4.pdf;
- 28.http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final. compressed.pdf
- 29.http://www.healthdata.org/sites/default/files/files/research_articles/2014/ JAMA_Smoking_prevalence_and_cigarette_consumption_in_187_ countries_1980-2012.pdf;
- 30.https://www.rferl.org/a/balkans-serbia-montenegro-macedonia-bosnia-smoking-bucks-global-trend/28822326.html
- 31.http://www.stat.gov.mk/PublikaciiPoOblast_en.aspx?id=2&rbrObl=13
- 32.https://ec.europa.eu/info/food-farming-fisheries/key-policies/commonagricultural-policy/cap-glance_en
- 33.http://iph.mk/wp-content/uploads/2018/06/GYTS-publikacija-en-2016-finale.pdf
- 34.http://iph.mk/wp-content/uploads/2016/12/ESPAD-izvestaj-final-final. compressed.pdf
- 35.https://www.slobodenpecat.mk/makedonija/ne-se-trga-zabranata-tuku-se-dozvoluva-pushene-vo-najlon-terasite/
- 36.http://www.ohridnet.com/vesti/makedonija/11084-ugostitelite-baraat-izmeni-vo-zakonot-protiv-pushenje
- 37.THE HARMFUL EFFECTS OF TOBACCO USE A CHALLENGE FOR INTERSECTORAL COOPERATION AT A LOCAL LEVEL IN THE REPUBLIC OF MACEDONIA, prepared by Elena Kjosevska
- 38.Law on ratification of the Framework Convention of Tobacco Control of the World Health Organization Official Gazette of the Republic of Macedonia No 68,2006
- 39.Law on smoking protection
- 40. Agency for Foreign Investments and Export Promotion of the Republic of

- Macedonia, Available at: http://investinmacedonia.com/files/recources_files/2731/AGRO%20web.pdf
- 41.Between anti-smoking policies and tobacco farming subsidies: the case of Macedonia, prepared by Vladimir Lazarevik, Mome Spasovski, Doncho Donev; European Journal of Public Health, Volume 23, Issue 3, 1 June 2013, Pages 354–355, https://doi.org/10.1093/eurpub/cks178
- 42. Ministry of Finance, Taxes and Duties, https://finance.gov.mk/mk/node/4438
- 43. Ministry of Finance, https://www.finance.gov.mk/en/node/1817
- 44.https://kajgana.com/sprechen-shverc-na-750-shteki-cigari-od-makedonija-vo-velika-britanija
- 45.http://amcham.com.mk/2015/06/26/customs-administration-and-philip-morristutunski-kombinat-prilep-signed-a-memorandum-of-understanding/
- 46.Macedonian Customs Agency 2014; 2015.http://www.customs.gov.mk/index.php/mk/informacii-mk/vesti-mk/321-1250
- 47. Institute of Public Health. Global Youth Tobacco survey. Report, Skopje 2016
- 48. Social determinants of smoking in the population of the Republic of Macedonia results from a nested case-control study, prepared by Dance Gudeva Nikovska, Mome Spasovski, Dragan Gjorgjev, Jovanka Karadzinska Bislimovska, Rozalinda Isjanovska, Fimka Tozija
- 49. How important are tobacco prices in the propensity to start and quit smoking? An analysis of smoking histories from the Spanish National Health Survey, prepared by LópezNicolás, A Health Econ. 2002 Sep; 11(6):521-35.)
- 50. Price and cigarette consumption in Europe, prepared by S Gallus, A Schiaffino, C La Vecchia, J Townsend, and E Fernandez,
- 51. The effects of a rise in cigarette price on cigarette consumption, tobacco taxation revenues, and of smoking-related deaths in 28 EU countries--applying threshold regression modeling, prepared by Chun-Yuan Yeh, Christian Schafferer, Jie-Min Lee, Li-Ming Ho and Chi-Jung Hsieh, BMC Public Health 2017

Acknowledgement

The Analytica think tank is funded by the University of Illinois in Chicago (UIC), the Institute for Research and Health Policy, to conduct economic research on tobacco taxation in Republic of Macedonia. UIC is a key partner of the Bloomberg Philanthropies Initiative to Reduce Tobacco Use. The views and opinions expressed in this document cannot be attributed to, nor do they represent, the views of the UIC, the Research and Health Policy Institute, or the Bloomberg Philanthropies.