

Serbia

Overview of

TOBACCO USE, TOBACCO CONTROL LEGISLATION, AND TAXATION

World Bank Group
Global Tobacco Control Program
Country Brief

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Serbia

Overview of Tobacco Use, Tobacco Control Legislation, and Taxation A Country Brief

Executive summary

Serbia has rather high prevalence of smoking. According to the National Health Surveys, the prevalence of daily smoking among men in 2013 was 33% which was lower than in 2000 (41%), while among women it was almost as high as in 2000 (26%).

Cigarette smoking among adolescents aged 13-15 years old decreased in 2013-2017; however, the use of electronic cigarettes and waterpipe is growing among young people.

To overcome the tobacco epidemic, Serbia became a Party to the WHO Framework Convention on Tobacco Control on May 9, 2006, and implemented some tobacco control policies.

Tobacco taxation policy in Serbia in 2009–2013 was very successful from a public health perspective as it reduced tobacco consumption, in line with the FCTC obligations. Estimated tobacco consumption in the country declined by 33% in four years. The outflow of cigarettes taxed in Serbia to other countries also declined, while the volume of cigarettes, which were smoked but not taxed in Serbia, did not change much after the tax increases. This taxation policy also increased the tobacco excise revenue from 39 billion RSD in 2008 to 84 billion RSD in 2013 (by 44% in real terms).

However, the tobacco industry managed to modify the impact of the tobacco taxes. In 2012-early 2014, it vastly increased its (net-of-tax) part of cigarette price, and this reinforced the taxation impact on tobacco sales as the final retail price increased more than expected. As the growth of the industry profit margins was disproportionately soaring, the industry increased its profits despite the decline of tobacco sales. The main factor behind the cigarette sales reduction in 2012-2014 was the industry pricing tactics, while the excise rate increases were rather moderate. The combined effect of government taxes and industry prices substantially reduced cigarette affordability, and the resulting sales decline exceeded the excise burden growth; so, the government excise revenue decreased. In late 2014, the tobacco industry decreased prices for some brands, and it also contributed to the excise revenue decline in 2014, as ad valorem part of cigarette excise was rather high in Serbia.

After the price decrease, cigarettes became more affordable, and their sales increased in 2015, while they were still lower than in 2013 and in previous years. Tobacco excise revenue also increased in 2015, and it was higher than in 2013, but the industry managed to create a public perception that the temporary decline of the excise revenue in 2014 was caused by “too high” taxes and persuaded the government to adopt a policy of very moderate increases of the tobacco excise rates.

The current tobacco excise policy, which proposes very moderate excise increases in 2017-2020, is not able to either reduce the tobacco consumption or to increase real tobacco excise revenue.

Serbia has a great potential to increase tobacco excise rates, which will be beneficial for both public health and government revenue.

Acknowledgments

This country brief was prepared by a team from the World Bank Group Global Tobacco Control Program led by Patricio V. Marquez, including Konstantin Krasovsky, and Tatiana Andreeva.

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Introduction

The Objective of the Country Brief

This country brief presents an overview of current tobacco control legislation, tobacco use, and taxation policy in Serbia. Data and information were collected from various sources. The brief is intended to serve as the context for complementary assessments on different aspects of tobacco taxation in the country to be shared with government teams and other national and international stakeholders.

Tobacco control policies

Serbia became a Party to the WHO Framework Convention on Tobacco Control on May 9, 2006. Serbia ratified the Protocol to Eliminate Illicit Trade in Tobacco Products on June 30, 2017.

During the breakup of Yugoslavia, Serbia formed a union with Montenegro which dissolved peacefully in 2006, when Serbia re-established its independence. Serbia officially applied for membership in the European Union on December 22, 2009, and received candidate status on March 1, 2012. Following a positive recommendation of the European Commission and European Council in June 2013, negotiations to join the EU commenced in January 2014. Thus, Serbia had to gradually meet all requirements of the relevant EU directives on tobacco taxation.

Although the situation with low adoption of tobacco control measures in Serbia was strongly criticized in 2008 [1], the law on the protection of the population from exposure to tobacco smoke¹ was adopted in Serbia in 2010. Health warnings and some other policies are covered by the Law on Tobacco². As of 2015 [2], tobacco control policies in Serbia were assessed at 24 out of 37 points.

Protect people from tobacco smoke

Healthcare facilities, education facilities including universities, government facilities and public transport in Serbia are completely smoke-free. Outlets (bars, cafés, restaurants, nightclubs, etc.) smaller than 80 square meters can choose whether to ban smoking or not, and outlets larger than this margin are obliged to have separate areas for smokers and non-smokers. Establishment or the patron can be fined for violations; however, no system is in place for citizen complaints and further investigations³.

Offer help to quit tobacco use

Smoking cessation services are available in some health clinics or other primary care facilities, and the health service or the national health insurance fully covers its costs. Nicotine replacement therapy can be purchased over the counter in a pharmacy but is not cost-covered, and no toll-free quit line is available.

Warn about the dangers of tobacco

Health warnings are legally mandated to cover 30% of the front and 40% of the rear principal display area, whereby 12 health warnings are approved by law (Article 77 of the Law on Tobacco). The law also mandates font style, font size, and color for package warnings. However, the health warnings do not include photographs or graphics and are not mandated to appear on each package and any outside packaging and labeling used in the retail sales.

Enforce bans on tobacco advertising, promotion, and sponsorship

Law on Advertising has been in force since May 6, 2016. This Law prohibits all forms of tobacco and tobacco product advertising, including product placement and all these have been applied to the

¹ <http://data.euro.who.int/tobacco/Sites/Legislation.aspx?legislatureID=157>

² http://www.duvan.gov.rs/public/files/Dokumenti/Propisi/Zakoni/ZakonODuvanu/Zakon_o_duvanu5.pdf

³ http://www.euro.who.int/__data/assets/pdf_file/0008/312596/Tobacco-control-fact-sheet-Serbia.pdf

electronic cigarettes, parts of the electronic cigarettes and other products that replace cigarettes or other tobacco products as well⁴.

Total tobacco control expenditures, which may include mass media campaign expenditures, amount to 2 million RSD in Serbia⁵.

Tobacco use in Serbia

Tobacco use among adults

In Serbia and Montenegro in 1994-1995, the prevalence of smoking was estimated to be at the level of 50.9% among men and 33.3% among women [3]. Studies have documented high prevalence of smoking as well as its health consequences [4] including the upward trends of lung cancer among women [5].

Among adults aged 15 years and older, the prevalence of smoking in Serbia was measured during the National Health Surveys (NHS) conducted in 2000, 2006⁶, and 2013 [6]. Current (daily and occasional) smoking prevalence in 2013 was 34.7% (37.9% among men and 31.6% among women). Daily smoking prevalence in 2000 was 33% (40.6% among men, 26.1% among women), then it declined in 2006 to 26.2% (30.7% among men and 22.6% among women). Subsequently, in 2013, it increased to 29.2% (32.6% among men and 26.0% among women). In 2013, daily smoking prevalence among men was much lower than in 2000, while among women it was almost as high as in 2000. In the survey conducted in 2013 [6], smoking was more prevalent among men, older, more educated and more affluent participants.

Based on the data from the 2006 National Health Survey, factors associated with smoking cessation behaviors were analyzed. It was shown that women and more educated smokers were more likely attempting to quit [7].

In 2006, 29.9% of women in Serbia were current smokers, with a higher percentage of smokers in urban areas than in rural. Smoking prevalence was highest among women with secondary (52.0%) and high school (48.9%) education, those divorced (61.3%), those without children (46.0%) [8]; 37.2% of women smoked at some point in pregnancy [9].

A National Survey on Lifestyles of Citizens in Serbia conducted in 2014 among 5385 adults aged 18-64 years measured a smoking prevalence of 39.8% [10].

In 2014-2017, the annual surveys of effects and attitude related to the Law on the protection of the citizens from exposure to tobacco smoke were conducted⁷. The surveys were based on a rather moderate sample of the adult population (about 1,000 each year) while the sample of the NHS-2013 was 13,908. The surveys had different age range and involved participants aged 18 years and above in contrast to the National Health Surveys in Serbia whose participants were aged 15 years and over.

The surveys did not show substantial changes in smoking prevalence in Serbia in 2014-2017: overall, the prevalence of daily smoking ranged between 31% and 35% (32-39% among men and 27-33% among women). The proportion of former smokers constituted 13-16%.

⁴ http://untobaccocontrol.org/impldb/wp-content/uploads/Serbia_2018_report.pdf

⁵ http://www.who.int/tobacco/surveillance/policy/country_profile/srb.pdf

⁶ <http://www.batut.org.rs/download/publikacije/National%20Health%20Survey%20Serbia%202006.pdf>

⁷ <http://www.batut.org.rs/index.php?content=1597>

According to the published international estimates [11], the age-standardized prevalence of smoking in Serbia increased in 1980-2006: from 25.3% to 35.7% among men and from 20.2% to 24.2% among women. In 2012, it decreased to 31.9% and 22.8% respectively.

Tobacco use among youth

Two series of smoking prevalence surveys among youth were conducted in Serbia: European School Survey Project on Alcohol and other Drugs (ESPAD), and the Global Youth Tobacco Survey (GYTS).

ESPAD surveys were conducted in Serbia in 2008 and 2011⁸ among people aged 15-17 years. Cigarette use during the last 30 days slightly decreased from 21% to 20% and was about 20% for both boys and girls in both surveys.

The Global Youth Tobacco Survey (GYTS) was conducted in Serbia in 2003⁹, 2008¹⁰, 2013¹¹ and 2017¹² (Table 1).

Table 1. Prevalence of current tobacco use (at least once during the last 30 days) among adolescents aged 13-15 years in Serbia, %, GYTS

	2003	2008	2013	2017
Currently used any tobacco product	13,5	10,4	16,0	16,2
<i>boys</i>	12,8	10,8	16,4	16,5
<i>girls</i>	13,7	9,6	15,4	15,9
Currently smoked cigarettes	12,8	9,3	13,0	11,0
<i>boys</i>	12,2	9,3	12,7	10,9
<i>girls</i>	13,1	8,9	13,3	11,2
Ever cigarette smokers	51,8	42,7	40,4	43,2
<i>boys</i>	53,2	41,4	43,0	43,3
<i>girls</i>	50,3	43,3	37,9	43,0
Exposed to tobacco smoke at home	97,7	76,9	63,4	58,9
Had at least one parent who smoked	70,8	65,9		

The comparison of results of GYTS conducted in 2003 [12, 13] and 2008 showed that some decline was already achieved. However, a substantial increase in the prevalence of current smoking was observed between 2008 and 2013. Between 2013 and 2017, the tobacco use patterns have changed: while current cigarette smoking decreased, use of "any tobacco product" almost did not change in both boys and girls. Cigarettes were replaced by other tobacco products. The GYTS-2017¹³ found that 6.2% of adolescents (7.6% of boys and 4.8% of girls) were current users of electronic cigarettes and 9% (9.2% of boys and 8.7% of girls) used to smoke water-pipe.

For comparison, among adults in 2014, lifetime and current e-cigarette use was reported by 9.6 and 2.0%, respectively [14].

On the other hand, ever cigarette smoking among adolescents declined between 2003 and 2008, but was rather stable further.

⁸ http://espad.org/sites/espad.org/files/The_2011_ESPAD_Report_FULL_2012_10_29.pdf

⁹ <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?ID=459>

¹⁰ <https://nccd.cdc.gov/GTSSDataSurveyResources/Ancillary/DownloadAttachment.aspx?ID=460>

¹¹ <http://www.batut.org.rs/download/publikacije/2014gytsSerbiaReport.pdf>

¹² <http://www.batut.org.rs/download/izdvajamo/GYTS%202017%20kljucni%20rezulatasi.pdf>

¹³ <http://www.batut.org.rs/download/izdvajamo/Gyts%202017.pdf>

The percentage of teenagers, who lived in homes where others smoked in their presence, also gradually decreased from 98% in 2003 to 59% in 2017, and this can be considered an indirect indicator of smoking behavior among adults.

Based on the 2013 GYTS data, it was found that, among GYTS-participating countries, Serbia has the highest percentage (89%) of teenagers who have access to purchasing cigarettes [15], and this might be an important factor behind the high prevalence of smoking.

Smoking among health professionals

Global Health Professions Student Survey (GHPSS) was conducted in Serbia in 2005 and 2006. The prevalence of current cigarette smoking was measured in the range of 18-42% in various groups¹⁴.

High prevalence of smoking among Serbian dental students was mentioned as an indicator of the unfavorable situation in the country [16].

Smoking-related mortality

Research conducted by Marinković [17] showed that smoking has been the most influential risk factor for many diseases and premature deaths in Serbia. Marinković used the Peto-Lopez method and established a clear link between tobacco use and population health, estimating that 17% of male mortality and 9% of female mortality were associated with smoking. The research showed the upward trend of smoking-related mortality rates in the last two decades.

Another nationwide study was carried out to analyze cancer mortality in Serbia during 1991–2015 using official deaths statistics [18]. Overall cancer mortality increased between 1991 and 2009 in both men and women, and it has been decreasing since then in both sexes. For almost all major cancers except stomach cancer, cancer mortality in Serbia demonstrated upward trends during the study period. The largest increases were noted in lung cancer among females.

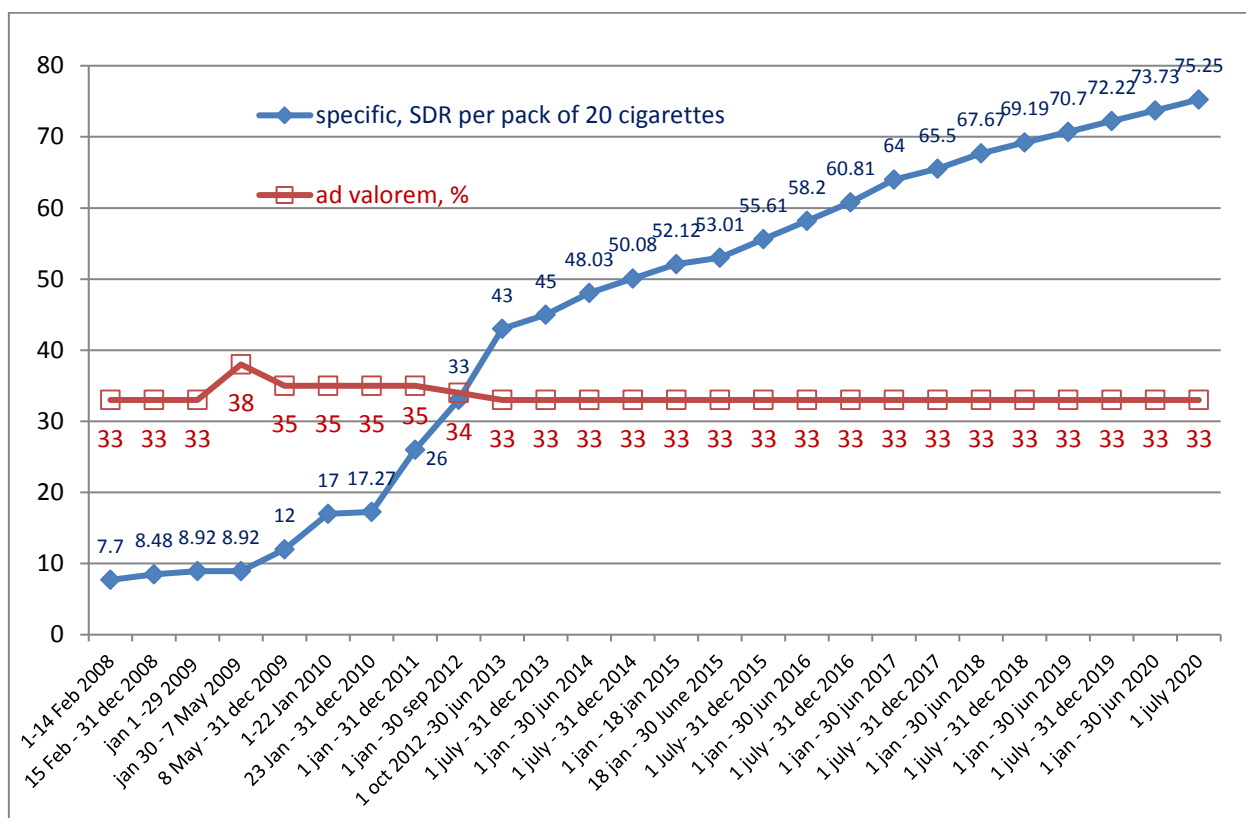
Tobacco taxation policy

Data on excise rates and weighted average prices were taken from the Tobacco Administration site [19]. Serbia has mixed excise tax that includes both a specific tax component and an ad valorem tax component. From 2008, excise rates for cigarettes in Serbia were changed every year, in most years there were several changes (Figure 1). The current legislation already established excise rates for 2018-2020.

The ad valorem excise rate was increased from 33% to 38% in January 2009, but already in May 2009, it was decreased to 35%. Since October 2012, it has been 33% again.

¹⁴ <https://nccd.cdc.gov/GTSS>

Figure 1. Cigarette taxes in Serbia in 2008-2020.



The specific excise rate for cigarettes was regularly increased, and in 2019 it was 9-fold higher than in 2008. In 2009, the minimum specific excise tax was introduced (Table 2), which is paid when the sum of specific plus ad valorem excise is lower than the minimum excise. The minimum specific excise tax is defined as 100% of the total excise tax for cigarettes having the price of the most popular brand (in 2009-2011) or for cigarettes with prices equal to the weighted average price (from 2012). The minimum specific excise tax for fine-cut tobacco and pipe tobacco is calculated in a similar way (Table 2).

Table 2. Minimum specific excise rates for cigarette fine-cut tobacco and pipe tobacco (in RSD)

	25 July 2009	29 July 2010	12 Feb 2011	29 July 2011	Jan 2012	July 2012	4 Feb 2013	02 Aug 2013	Jan 2014	30 July 2014	1 Feb 2015	8 Aug 2015	8 Feb 2016	15 Aug 2016	29 July 2017	25 Nov 2017	07 July 2018	23 Feb 2019
Per pack of 20 cigarettes	38,25	47,02	57,5	61	71	74,21	91,94	100,9	109,5	117,3	120,0	120,2	127,9	133,4	138,9	140,4	147,3	256,2
Change of minimum cigarette excise, %		22,9	22,3	6,1	16,4	4,5	23,9	9,7	8,5	7,2	2,3	0,1	6,4	4,3	4,1	1,1	4,9	5,4
Fine-cut tobacco, per 1 kg	2275	1925	1925	1925		1967	2528	2774	3284	3519	3901	3906	4477	4670	4862	4914	5157	5433
Pipe tobacco, per 1 kg	3780		3850	3850		3919	4207	4173	4462	4395	4602	4594	4914	4860	5188	5188	5431	5825

The minimum specific excise tax on cigarettes increased by 249% in 2009-2016: by 163% in 2010-2013 but only by 54% in 2014-2019. The minimum specific tax for fine-cut tobacco increased in 2009-2019 by 139% and for pipe-tobacco by 54%.

The excise for fine-cut tobacco is ad valorem with the minimum specific floor. Ad valorem rate for fine-cut tobacco was increased from 33% in 2008 to 35% in 2009, 37% in 2013, 39% in 2014, 41% in 2015, and 43% from 2016.

For cigars and cigarillos, specific excise duty was levied at the level of RSD 15.5 per piece which was increased to RSD23.26 per piece in 2016.

In 2015, the excise for heated tobacco products was set per 1 kg of tobacco mixture with a rate equal to 40% of the minimum excise rate for cigarettes of the weighted average price.

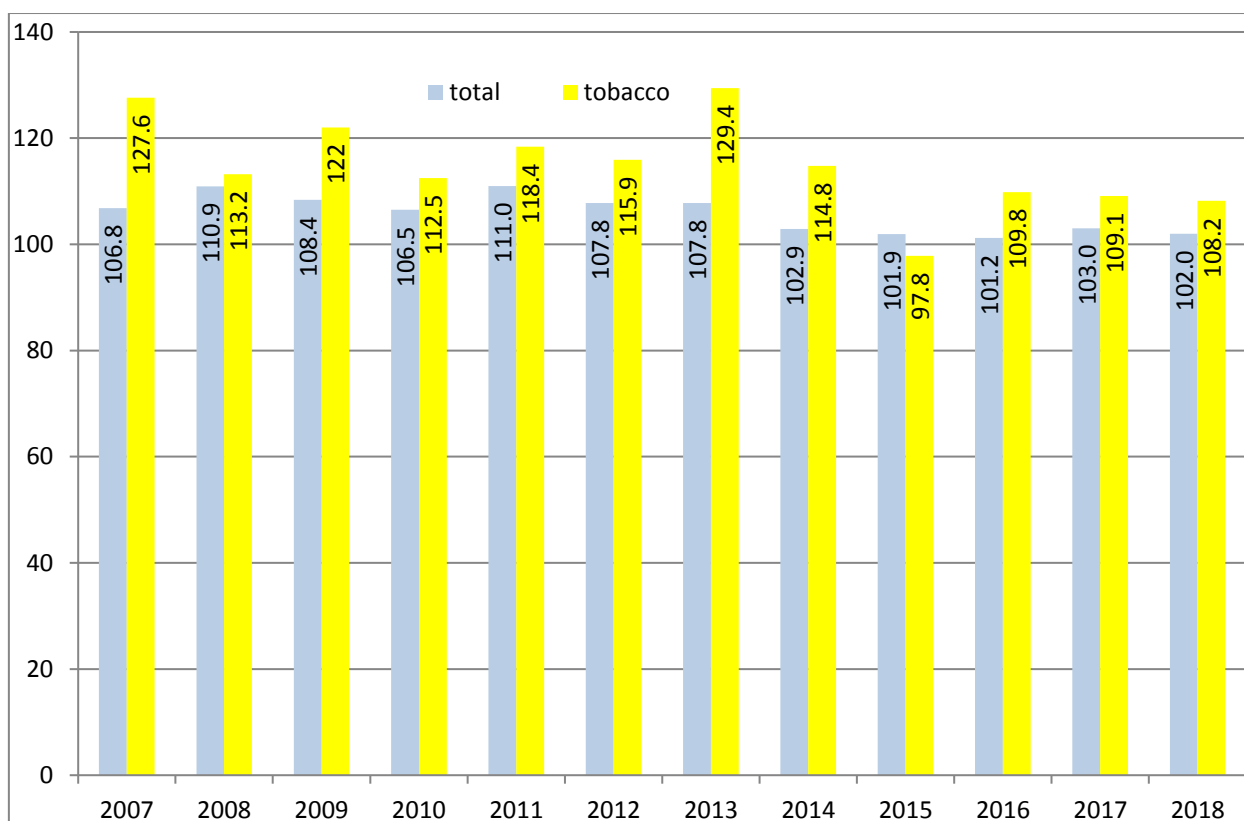
In 2015, the excise tax on liquids for electronic cigarettes was set at the rate of 4RSD per 1 ml (Article 14a of the Law on Excises¹⁵). The rate was increased to 4.06 RSD in 2016 and to 4.24 RSD in 2018.

The VAT rate in Serbia is 20% starting from October 1, 2012, whereas earlier it was 18%.

Tobacco prices

Tobacco consumer price growth has been above inflation since 2007 (Figure 2), except for 2015, when the tobacco prices even decreased. For six years combined (2009-2014), the consumer price index (CPI) for tobacco was 280%, while the CPI for all items was 153%. So, over this period of time, real (inflation-adjusted) tobacco prices increased by 83%. For 2016-2018, the combined real cigarette prices increased by 22%.

Figure 2. Consumer Price Index (CPI) for all items and tobacco products in Serbia in 2007-2018 (previous year = 100).



Source: Statistical Office of the Republic of Serbia (NIS) [20].

In 2009-2011, the Ministry of Finance published prices of the most popular price category (MPPC) cigarettes. Starting from 2012, they calculated and published the weighted average prices (WAP) for cigarettes (Table 3).

¹⁵ http://www.duvan.gov.rs/public/files/Dokumenti/Propisi/Zakoni/Zakon_o_akcizama.pdf

Table 3. Prices for tobacco products in Serbia (in RSD)

	Most popular price category (MPPC)				Weighted average price (WAP)											
	From 25/07 2009	From 29/07 2010	From 12/02 2011	From 29/07 2011	1/01: 30/06 2012	1/07: 31/12 2012	1/01: 30/06 2013	1/07: 31/12 2013	1/01: 30/06 2014	1/07: 31/12 2014	1/01: 30/06 2015	1/07: 31/12 2015	From 1/01 2016	From 29/07 2017	From 07/07 2018	From 23/02 2019
Cigarettes per pack of 20	75	85	90	100	121,2	148,3	169,3	186,2	203,7	203,1	195,7	208,6	217,3	227,0	241,4	256,2
MPPC-WAP price change, %		13,3	5,9	11,1	21,2	22,3	14,1	10,0	9,4	-0,3	-3,6	6,6	4,2	4,5	6,4	6,1
Fine-cut tobacco, per 1 kg	6500	5500	5500	5500	5620	5886	6163	6559	6711	6455	7735	8154	8621	8949	9389	10624
Pipe tobacco, per 1 kg	10800		11000	11000	1119	1137	1127	1144	1127	1122	1120	1142	1130	1206	1263	1354
					6	1	9	0	0	5	6	8	2	4	0	6

In 2009-2011, the MPPC for a pack of 20 cigarettes increased from 75 to 100 RSD or by 33%. In 2012-2016, the WAP for 20-cigarette pack increased from 121.22 RSD to 217.29 RSD or by 79% in four years. However, after a sharp increase in 2012-2013, in late 2014 – early 2015, the WAP decreased.

In June and November 2014, transnational tobacco companies (BAT, JTI, and PMI) operating in Serbia reduced prices for some of their brands¹⁶. The declared reason for the price reduction was a dramatic drop in both production and sales in the past two years. However, prices were mainly reduced for mid-price brands¹⁷. The pricing policy of the tobacco industry was different in various periods under consideration. In 2009-2011, tobacco industry almost did not change its (net-of-tax) part of the price (Table 4) for cigarettes of the most popular price category despite rather high inflation (see Figure 2). Over those years, the specific tax was increased by 117%, while the cigarette price increased only by 33%. The excise share in the cigarette price increased from 51% to 61%.

Table 4. Components of weighted average price for a pack of 20 cigarettes, RSD

	Retail price	Excise tax			Excise share, %	VAT	net-of-tax price
		specific	ad valorem	Total			
Price of the most popular price category							
2009	75	12	26,25	38,25	51,0	11,44	25,31
2010	85	17,27	29,75	47,02	55,3	12,97	25,01
2011	100	26	35	61,00	61,0	15,25	23,75
Weighted average price							
1/01:30/06 2012	121,22	33	41,21	74,21	61,2	18,49	28,51
1/07:31/12 2012	148,30	38	50,42	88,42	59,6	22,62	37,26
1/01:30/06 2013	169,27	43	55,86	98,86	58,4	28,21	42,20
1/07:31/12 2013	186,16	45	61,43	106,43	57,2	31,03	48,70
1/01:30/06 2014	203,68	48,03	67,21	115,24	56,6	33,95	54,49
1/07:31/12 2014	203,08	50,08	67,02	117,10	57,7	33,85	52,14
1/01:30/06 2015	195,69	53,01	64,58	117,59	60,1	32,62	45,49
1/07:31/12 2015	208,62	55,61	68,84	124,45	59,7	34,77	49,40
From 1/01/2016	217,29	58,2	71,71	129,91	59,8	36,22	51,17
From 29/07 2017	226,96	65,5	74,90	140,40	61,9	37,83	48,74
From 7/07/2018	241,41	69,19	79,67	148,86	61,7	40,24	52,32
From 23/02/2019	256,16	70,7	84,53	155,23	60,6	42,69	58,23

¹⁶ <http://www.novosti.rs/vesti/naslovna/ekonomija/aktuelno.239.html:576104-Cigarete-skuplje-10-dinara>

¹⁷ Drop in cigarette prices because of weak sale. Ninamedia, 27 November 2014

<http://www.ninamedia.rs/en/clipping/news/2014/11/27/za-paklicu-do-50-dinara-manje/>

Over subsequent years, the tobacco industry greatly increased its (net-of-tax) part of the price in the weighted average price. From January 2012 to July 2014, the net-of-tax price increased from 28.51 RSD to 54.49 RSD per 20-cigarette pack or by 91% (Table 3). Specific excise rate increased only by 46% in that period of time and while the ad valorem excise rate was not changed, in monetary terms ad valorem excise increased by 63%. So pricing policy of the tobacco industry was the main factor of cigarette price increase in 2012-2014.

Despite the excise tax increases in 2012-2014 (see Figure 1), the excise share in the weighted average price of cigarettes decreased from 61.2% in early 2012 to 56.6% in early 2014. This happened because the industry increased the net-of-tax price faster than the government increased the excise rate. In late 2014 – early 2015, the net-of-tax price decreased, but then, it started to increase again (Table 3). In early 2016, it was 21% higher than in early 2013, while the inflation rate for three years (2013-2015) was 13%. So, the price reduction in 2014 was well-prepared by the previous pricing policy. In the long-term, the industry did increase its part of the price.

In 2015-2017, the tobacco industry kept the net-of-tax price rather stable: about 50 RSD per pack, while in 2018 and 2019, this price increased by almost 20% (Table 4), while the inflation for two previous years was just 5%. The excise share in the average cigarette price exceeds 60% since 2017 and the total tax share (excise + VAT) is above 75%.

Tobacco affordability

The Guidelines for implementation of Article 6 of the WHO FCTC [21] recommend: *“When establishing or increasing their national levels of taxation Parties should take into account – among other things – ... changes in household income, to make tobacco products less affordable over time in order to reduce consumption and prevalence”*. In the Guidelines, “affordability” means price relative to per capita income.

In the current analysis, a modified tobacco affordability index (TAI) [22] is used to estimate the changes in tobacco affordability in 2008–2017. TAI is calculated as the percentage annual change in nominal average income per capita divided by the tobacco price increase: $TAI = (\text{income increase}/\text{consumer price index tobacco} - 1) * 100$. A negative TAI value means that tobacco became less affordable, and tobacco consumption is expected to decrease. For the TAI calculations, we used the Statistical Office data on household nominal monthly average income per capita and the annual CPI for tobacco products. For control, we also used as income proxy the World Bank indicator “Annual percentage growth rate of GDP per capita based on constant local currency”¹⁸. As the GDP change is expressed in constant (adjusted for the effects of price inflation) local currency, the price indicator is also expressed in real (inflation-adjusted) terms. In this case, the TAI is calculated as GDP annual change divided by (inflation-adjusted) tobacco price increase minus 100: $(\text{GDP growth} * \text{CPI_all_items} / \text{CPI_tobacco} - 100)$.

The results of the Tobacco Affordability Index estimation are presented in Table 5.

Both methods to estimate the TAI revealed that tobacco affordability greatly declined in Serbia in 2008-2014. The affordability reduction was much greater in 2012-2014. However, in 2015, tobacco became more affordable due to the tobacco price reduction. In 2016-2018, tobacco affordability decreased, but the reduction was not high and could hardly have a substantial impact on the tobacco consumption.

¹⁸ <http://data.worldbank.org/indicator/NY.GDP.PCAP.KD.ZG>

Table 5. Tobacco affordability in Serbia in 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CPI (all items) (previous year =100)	110,9	108,4	106,5	111,0	107,8	107,8	102,9	101,9	101,1	103,0	102,0
CPI (tobacco) (previous year =100)	113,2	122	112,5	118,4	115,9	129,4	114,8	97,8	109,8	109,1	108,2
Income change (previous year =100)	107,8	110,9	101,5	110,9	100,1	108,9	102,5	103,1	105,8	104,5	105,2
TAI-income	-4,8	-9,1	-9,8	-6,3	-13,6	-15,9	-10,7	5,5	-3,7	-4,2	-2,8
Annual percentage growth rate of GDP per capita based on constant local currency (previous year =100), <i>World Bank database</i>	105,8	97,3	101	102,2	99,5	103,1	98,6	101,3	103,3	102,4	
TAI-GDP	3,7	-13,5	-4,4	-4,2	-7,5	-14,1	-11,6	5,5	-4,8	-3,3	

Source: Statistical Office of the Republic of Serbia (NIS) [20].

Tobacco production

According to the FAO database [23], annual raw tobacco production in Serbia decreased from 11,000 tons in 2006-2007 to about 8,000 tons a year in 2013-2016, and the area harvested for tobacco decreased from 8,043 hectares in 2007 to about 5,000 hectares in 2012-2016. In 2017, 7,173 tons of tobacco were produced on 5,069 hectares¹⁹.

The Serbian cigarette market is highly concentrated and can be regarded as an oligopoly consisting of large international players [24]. All of these companies took over domestic tobacco producers over a decade ago. As of 2016, Philip Morris was leading in cigarette production in Serbia with a 38% retail volume share, followed by JT International with a 20% share, British American Tobacco, which accounted for 17% of retail volume sales, and Reemtsma (Imperial Tobacco) with 9% of sales. There was only one domestic manufacturer in 2016, Monus, with a 5% retail volume share. Croatian producer Rovita, currently owned by British American Tobacco, was ranked fifth with an 8% retail volume share as estimated in the Euromonitor report [25].

Since 2000, the number of employees in cigarette manufacturing in Serbia has been severely reduced [26]. The tobacco manufacturing industry was never very labor intensive since the highest share of total employment in the country was 0.19% in 2000, and it reduced to 0.06% of total employment in 2017. In 2017, 1259 persons were employed in tobacco manufacturing²⁰.

Tobacco sales

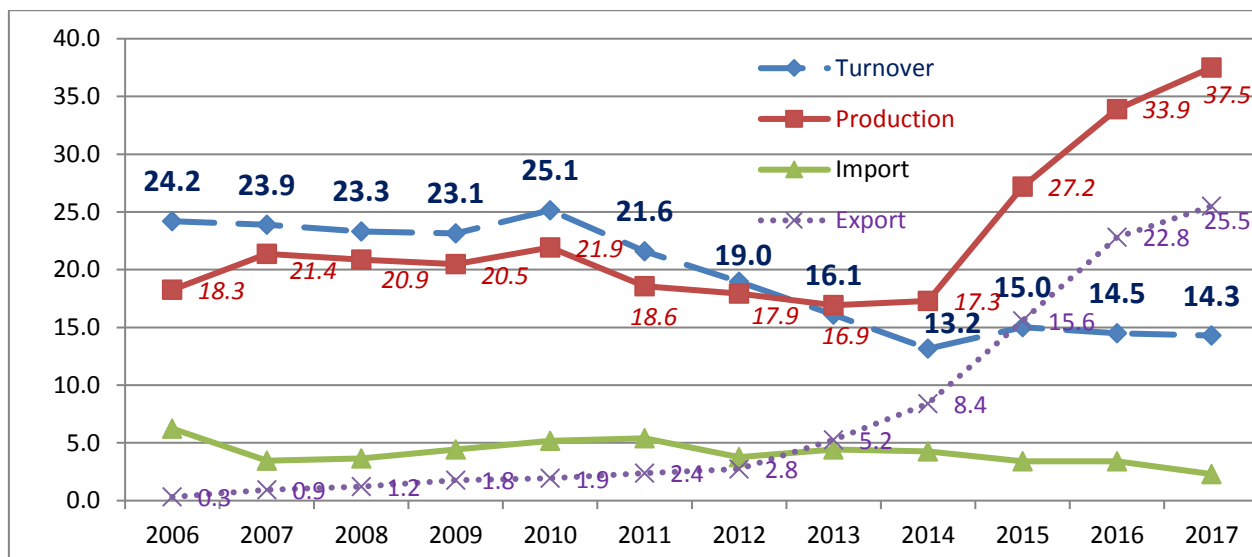
Sales of smoking tobacco, cigars, and cigarillos in Serbia constitute about 2% of the total tobacco products market [19, 25], so we consider only cigarette sales. However, data on cigarette sales in Serbia are not consistent. Some sources report sales in cigarette sticks, while other sources - in tons. Euromonitor data [25] on cigarette sales in 2012-2015 differ in the reports published in 2016 and 2017: in 2016 report they reported that 10.3 billion cigarettes were sold in 2015, while in the next year report this figure was 14.5 billion cigarettes.

¹⁹ <http://publikacije.stat.gov.rs/G2018/PdfE/G20182051.pdf>

²⁰ <http://publikacije.stat.gov.rs/G2018/PdfE/G20182051.pdf>

Data on cigarette turnover (production + import – export) were taken from the FCTC country reports²¹, UN database²², and the national statistics reports. We compared the data from various sources and checked them by the data on taxable sales using available data on tobacco tax revenues and excise rates. Our calculations of cigarette turnover (production + import – export) are presented in Figure 3.

Figure 3. Cigarette turnover in Serbia in 2006-2017 (in billion cigarettes)



The cigarette turnover was rather stable in 2006-2010; in 2011-2014, it declined by about 3 billion cigarettes every year, but then increased in 2015. Cigarette production was rather stable in 2011-2014 despite the turnover decline and then substantially increased in 2015-2017 due to a sharp increase in cigarette export from Serbia.

Cigarette smuggling

The tobacco industry usually claims that the decline in cigarette sales is caused by an increase in cigarette smuggling. Goran Pekez, director of corporative affairs and communication for the Western Balkans, with Japan Tobacco International, said that illegal trade is the biggest factor on the market: "*Illegal trade always gets bigger when there's an unrealistic increase of the excise burden*"²³. The Euromonitor also claimed [25] that many cigarette smokers are switching to illegal tobacco and it was the main factor of the observed decrease of licit cigarette sales in recent years.

However, according to the estimates presented in the Euromonitor reports, illicit annual sales in Serbia decreased from 1.52 billion cigarettes in 2008 to 1.32 billion cigarettes in 2011 and then returned to the previous levels (about 1.5 billion cigarettes a year) in 2014-2016 [25]. The illicit sales measured as the number of cigarette sticks did not change much over those years. However, Euromonitor reported "*illegal trade booming in 2015*" as they estimated the share of illicit cigarettes growing from 5.1% in 2010 and 12.6% in 2015. But in 2016 they estimated that the share of illicit cigarettes constituted 9.7%. Such substantial changes are partly caused by great underestimation by the Euromonitor of licit cigarette sales in 2015. When only percentage shares are presented, it looks like smuggling did increase after the tax hikes. It is a popular misleading math trick used by the tobacco industry to exaggerate the scope of the

²¹ FCTC implementation database. Serbia <http://untobaccocontrol.org/impldb/serbia/>

²² <http://data.un.org/Search.aspx?q=cigarettes>

²³ Independent.mk. Roads of Tobacco Smugglers Went through Serbia and Croatia. June 12, 2015, <http://www.independent.mk/articles/18527/Roads-of-Tobacco-Smugglers-Went-through-Serbia-and-Croatia>

illicit cigarette trade problem showing illicit cigarette market share rather than the absolute number of illicit cigarettes [27] which typically decreases in such cases.

The KPMG studies (projects Star and Sun²⁴), which were commissioned by Philip Morris International and other tobacco corporations, estimated both kinds of illicit cigarette sales in the EU countries: inflow (smuggling INTO the country from other countries) and outflow (smuggling OUT OF the country to other countries). The KPMG does not report estimates of the inflow into Serbia. The KPMG estimates of cigarette outflow from Serbia to other countries are presented in Table 6.

Table 6. Estimates of cigarette smuggling out of Serbia to other countries, billion cigarettes (KPMG)

	2009	2010	2011	2012	2013	2014	2015	2016
<i>Austria</i>	0,08	0,10	0,08	0,14	0,1	0,03	0,14	0,14
<i>Bulgaria</i>	0,25	0,29	0,2	0,17	0,09	0,06	0,02	0,02
<i>Hungary</i>	0,12	0,19	0,10	0,14	0,06	0,03	0,04	0,03
<i>Romania</i>	0,07	0,95	0,75	0,69	0,4	0,11	0,12	0,09
<i>Slovenia</i>	0,01	0,04	0,02	0,03	0,03	0,03	0,02	0,04
Total (5 countries)	0,53	1,57	1,15	1,17	0,68	0,26	0,34	0,32
Croatia	na	na	na	0,07	0,05	0,09	0,02	0,04
Switzerland		na	na	na	0,07	0,05	0,07	0,04
Total (7 countries)	0,53	1,57	1,15	1,24	0,80	0,40	0,43	0,40

According to the KPMG estimates, cigarette smuggling from Serbia to Austria, Bulgaria, Hungary, Romania, and Slovenia greatly increased in 2010 but then declined, especially in 2013 and 2014, while in 2015 it increased again.

Cigarettes from Serbia are also smuggled to Bosnia and Herzegovina²⁵, as cigarettes are more expensive there.

In 2015-2017, according to the official Kyrgyz customs reports²⁶, about 3.7 billion cigarettes were imported from Serbia to Kyrgyzstan in three years, but Serbian cigarettes are almost absent on the Kyrgyz market. It was reported²⁷ that these cigarettes were transferred to Russia through Kazakhstan via duty-free shops. In 2017, according to Nielsen estimates²⁸, smuggled Serbian cigarette brand *Fast* held 0.29% of the total Russian market (about 750 million cigarettes).

Tobacco consumption

According to the American Medical Association estimates [11], in 2006-2012 annual cigarette consumption in Serbia decreased from 22.8 billion cigarettes to 18.15 billion cigarettes, which was caused both by the decline of numbers of smokers and of mean daily cigarette consumption by an average smoker.

²⁴ KPMG study on the illicit cigarette consumption in the EU. In: Philip Morris International [website]. Lausanne: Philip Morris International; 2016 (http://www.pmi.com/eng/tobacco_regulation/illicit_trade/Pages/all_previous_kpmg-studies.aspx)

²⁵ <https://www.blic.rs/vesti/republika-srpska/ilegalni-poslovi-u-pogranicnom-podrucju-hercegovina-postala-raj-za-sverc-cigareta/fjw07cv>

²⁶ <http://www.customs.kg/index.php/ru/custstat/tabform/139-sravdan/1751--2017>

²⁷ <https://www.pravda.ru/society/04-12-2017/1358317-tobacco-0/>

²⁸ <https://ria.ru/society/20171220/1511300539.html>

According to the annual household surveys, conducted by the Statistical Office [20], nominal expenses of households on tobacco increased in 2008-2015 almost two-fold (Table 7).

Table 7. Household tobacco expenditures, RSD, monthly average per capita

	2008	2009	2010	2011	2012	2013	2014	2015
Tobacco consumption expenses, RSD	391	424	439	502	563	604	648	730
Change of tobacco expenses, previous year = 100		108,3	103,6	114,4	112,1	107,3	107,4	112,5
<i>CPI tobacco, previous year = 100</i>	<i>113,2</i>	<i>122,0</i>	<i>112,5</i>	<i>118,4</i>	<i>115,9</i>	<i>129,4</i>	<i>114,8</i>	<i>97,8</i>

Source: Statistical Office of the Republic of Serbia (NIS) [20].

In 2009-2014, the per capita household tobacco expenses increased by 66%, while average tobacco prices increased by 180%. In those years, the increase in tobacco expenses was smaller than CPI for tobacco products. This could be caused both by quitting smoking by some smokers and the decrease in numbers of cigarettes smoked daily by those who continued smoking. As a result, total tobacco consumption by the population has substantially decreased. In 2015, the increase in tobacco expenses was higher than CPI for tobacco products, and this could indicate that tobacco consumption increased in 2015.

In general, we can summarize that the annual cigarette consumption in Serbia (taking into account both cigarette inflow and outflow) was about 24 billion cigarettes in 2006-2010 and then it declined to about 16 billion cigarettes in 2013-2017 – by 8 billion cigarettes or by 33%.

Tobacco excise revenues

According to the Bulletins issued by the Ministry of Finance²⁹, tobacco excise revenue in Serbia increased annually starting from 2005 (Table 8) but declined in 2014. We used the data on cigarette turnover (Figure 3) to calculate the average annual excise burden as revenue/turnover.

Table 8. Tobacco excise revenue and average annual excise rates

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Tobacco excise revenue, billion RSD	19,0	26,1	34,4	39,3	50,6	60,8	69,2	76,4	83,8	77,6	90,3	91,8	99,1	99,5
Turnover, billion cigarettes			23,9	23,3	23,1	25,1	21,6	19,0	16,1	13,2	15,0	14,5	14,3	
Average excise per 20-cigarettes pack, RSD			28,8	33,7	43,7	48,3	64,1	80,6	104,1	117,9	120,4	126,9	138,9	
<i>Average excise increase, %</i>				<i>17,2</i>	<i>29,6</i>	<i>10,5</i>	<i>32,6</i>	<i>25,8</i>	<i>29,1</i>	<i>13,3</i>	<i>2,1</i>	<i>5,5</i>	<i>9,4</i>	

Source: Ministry of Finance Bulletins.

In 2005-2010, the tobacco excise revenue increased three-fold, while tobacco sales were rather stable. In 2010-2013, the tobacco sales decreased by 36% but the revenue continued to increase as the average excise increased more than 2-fold: from 48 RSD per pack in 2010 to 104 RSD in 2013 or by 56 RSD. However, specific excise per pack increased only by 28 RSD (from 17 to 45 RSD – see Figure 1). Ad valorem excise rate even decreased from 35% in 2010 to 33% in 2013.

The main factor of total excise increase was the pricing policy of the tobacco industry. The net-of-tax part of the cigarette price greatly increased in 2012-2013 (see Table 3). Ad valorem excise was more than half

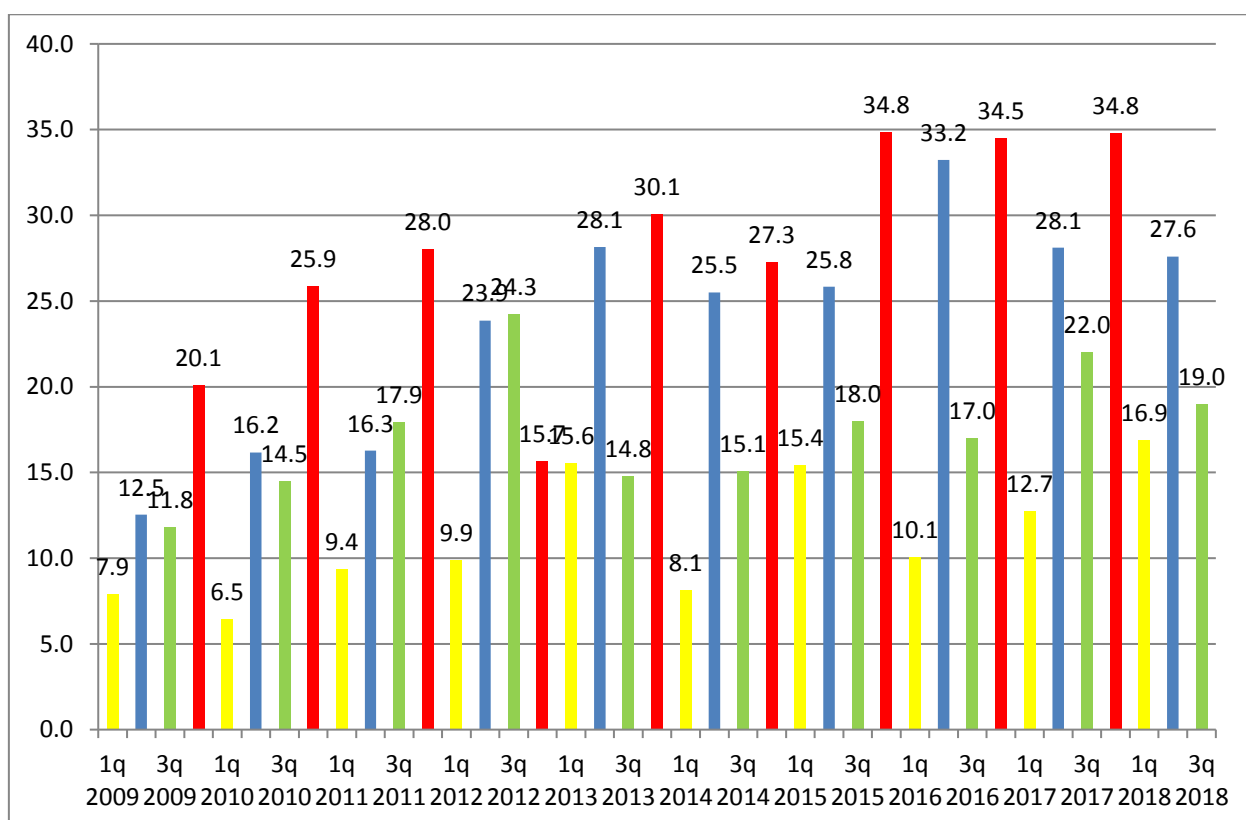
²⁹ Ministry of Finance, Republic of Serbia. Bulletin Public Finances <http://mfin.gov.rs/pages/issue.php?id=1568>

of the total excise, so the price rise substantially increased the total excise rate and revenue. The situation changed in late 2014 when the tobacco industry reduced its part of the price. The price reduction decreased the ad valorem excise in money terms and the total excise burden and it was the most obvious factor of the tobacco excise revenue decline in 2014.

However, a more important factor of the revenue decline in 2014 was the forestalling: in anticipation of tax increases, the manufacturers or importers may attempt to take advantage of the current or lower tax and increase production or stock of products [21]. After increasing the taxable sales just before the tax increase, the industry has to decrease taxable sales for several months after the tax increase as their stocks are full with cigarettes for which excise tax has already been paid. In such a situation, revenue graphs look like waves: up-wave before the excise increase and down-wave after the tax increase.

The Bulletin 'Public Finances'³⁰ reports monthly data on tobacco excise revenue. We calculated quarterly revenue for 2009-2018. Taking into account that, first, the excise rate was usually changed from January 1 or July 1 (see Figure 1), second, revenue is usually paid based on sales of the previous month (e.g. revenue in January is paid from sales in December previous year) with excise rate effective for this previous month, we calculated quarterly revenue in the following way: 1st quarter – revenue in February, March, and April; 2nd quarter – revenue in May, June, and July; 3rd quarter – revenue in August, September, and October; 4th quarter – revenue in November, December and January next year. The results are presented in Figure 4.

Figure 4. Quarterly tobacco excise revenue in Serbia in 2009-2018 (in billion RSD).



The pattern of quarterly revenue in 2013-2018 is very similar: a sharp increase in the second and fourth quarters, before the next increase of specific excise rate effective from January 1 and July 1 each year (see Figure 1). The pattern is different in 2012 because both the specific excise rate and the VAT rate was

³⁰ Ministry of Finance, Republic of Serbia. Bulletin Public Finances <http://mfin.gov.rs/pages/issue.php?id=1568>

increased from October 1, 2012, and we see high revenue in the 3rd quarter of 2012 and the decline in the 4th quarter of 2012, while in the 1st quarter of 2013 the revenue is higher than in the 1st quarter of all other years.

The annual revenue in 2014 was 7.2 billion RSD lower than in 2013 (see Table 7) and the difference in revenues between the 1st quarter of 2013 and 2014 is 7.5 billion RSD. So, the observed decline in annual revenue in 2014 was mainly caused by the revenue difference in the first quarter. The change of excise increase schedule from October 2012 to January and July 2013 caused an artificial increase in taxable cigarette sales in the 1st and the 4th quarters of 2013 and their sharp reduction in the 1st quarter of 2014. Forestalling, caused by this schedule change, was the main factor of the revenue decline in 2014. Cigarette price reduction in late 2014 also contributed to the revenue decline, while to a lesser extent as the average excise tax in 2014 was 13% higher than in 2013 (see Table 7). But as the cigarette turnover in 2014 decreased by 18%, the tobacco excise revenue in 2014 was lower than in 2013.

After the forestalling-driven decrease in taxable cigarette sales in 2014, they increased in 2015. Tobacco price reduction in late 2014, which increased cigarette affordability in 2015 (see Table 4), also stimulated sales growth. This sales growth was the main factor of the revenue increase in 2015, as the average excise rate increase was very small (Table 7). The moderate revenue increase in 2016 and 2017 was caused by a moderate increase in excise rates in those years.

Discussion

In the period under consideration, Serbia regularly increased the excise burden for tobacco products trying to follow both FCTC and EU recommendations. As has already been shown [28], the process of joining the EU results in significant increases in excise taxes and prices, and declines in affordability. However, the impact of tobacco taxes on tobacco prices and tobacco consumption can be modified by the industry's response to the tax increase [29, 30]. Over the observed period, several types of tobacco industry responses were practiced in Serbia.

In **2009–2011**, both specific and ad valorem excise rates were increased. However, the industry kept its (net-of-tax) part of the price relatively low, so the tobacco affordability reduction was not sufficient to decrease tobacco consumption. Tobacco revenue substantially increased, partly due to the increase in cigarette outflow from Serbia to other countries.

In **2012 - early 2014**, the specific excise rate was being increased on a regular basis, while ad valorem excise was decreased. Tobacco companies changed their pricing policy: they used tobacco tax increases as an opportunity for a coordinated price increase that leads to prices rising by more than the amount of the tax. Substantial increase of final retail prices greatly reduced tobacco affordability and tobacco consumption (including cigarette outflow) gradually decreased. Paradoxically, by raising prices the industry engineered a greater decrease in cigarette consumption than the increase in taxes alone [29]. In 2012 and 2013, the increase in average excise was high enough and the tobacco excise revenue continued to grow despite the decrease in the taxable cigarette sales. However, the average excise increase was mainly driven by the industry pricing policy and not by the rises in tax rates.

In **late 2014**, the tobacco industry reduced prices for some cigarette brands and this resulted in decreased ad valorem excise tax revenues in monetary terms. The decrease in taxable sales in 2014 was rather sizable, and it was caused by the combined effect of forestalling and the decline of cigarette consumption inspired by considerable price increases in the previous years. The specific excise rate increase in 2014 was much lower than in previous years and it was not able to compensate for the decline in taxable sales, so tobacco excise revenue in 2014 decreased.

The industry profits apparently had the opposite trends. In 2012, the industry net turnover (net-of-tax price x sales, see Table 3 and Figure 3) was: 33/20 RSD x 19 billion cigarettes = 31 billion RSD. In 2014, the respective figures were 53/20 RSD x 13 billion cigarettes = 50 billion RSD. The tobacco industry pricing tactics increased the industry profits despite the cigarette sales reduction, while the governmental revenue declined.

When cigarettes and other tobacco products become less affordable, tobacco consumption in any country usually declines. Three main factors can change the tobacco affordability: (1) tobacco taxes; (2) tobacco industry's (net-of-tax) prices (margins); (3) population income and inflation [31]. When affordability declines only due to the last two factors, tobacco tax revenues will also decline as volumes of taxable products decrease. In such a situation, the tobacco tax hike should be elevated enough to ensure that tobacco revenue increases when tobacco sales decrease, as in many other countries such as Ukraine [32].

In **2015**, cigarette prices in Serbia were lower than in 2014, and cigarettes became more affordable. Cigarette consumption, household tobacco expenditures and cigarette outflow from Serbia to other countries increased and the cigarette turnover was higher in 2015 than in 2014 (see Figure 3). The turnover increase was the main factor in tobacco excise revenue augmentation, as the specific excise rates (see Figure 1 and Table 1) almost did not change.

In 2016-2018, the tobacco excise revenue increased by 10%, while the minimum excise rate increased by 23%, and tobacco prices increased by 30% over three years. The cigarette turnover gradually decreased to 14.3 billion cigarettes in 2017.

Tobacco taxation policy conducted in Serbia in 2009-2014 decreased total (licit + illicit) cigarette consumption in the country from about 24 billion cigarettes in 2006-2010 to about 16 billion cigarettes in 2013-2017 – by 8 billion cigarettes or by 33%. However, it had little effect on the smoking prevalence in Serbia. Such a situation is not unique. Research conducted in countries like Canada, Mexico, Turkey, and the Republic of Korea [30], found little impact of the price increase on smoking prevalence but did find that higher prices significantly reduce cigarette consumption.

The tobacco taxation policy in Serbia contributed to the health objectives aimed at reducing tobacco consumption. However, there is an apparent perception that tobacco revenue decline in 2014 was caused by the huge rise of illicit cigarette sales, which were inspired by “too high” excise rates. This speculation probably affected the governmental tobacco excise policy. So, very small excise increase was planned for 2017 and future years. Such a policy of small excise increases is not able to either reduce tobacco consumption or to increase tobacco excise revenue.

Serbia has the sovereign right (within gradually meeting EU obligations) to determine and establish its taxation policies, including the level of tax rates to apply, and the structure and system of tobacco taxes, taking into account national circumstances to achieve public health, fiscal and other objectives.

In 2019, the specific excise rates for cigarettes in Serbia were lower than in the neighboring EU countries³¹ and Bosnia and Herzegovina (Table 9).

31

http://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/excise_duties/tobacco_products/rates/excise_duties-part_iii_tobacco_en.pdf

Table 9. Excise rates and price of cigarettes in Serbia and neighboring countries in 2019

	Specific excise per 1000 cigarettes		Minimum specific excise per 1000 cigarettes		Ad valorem excise,	VAT	Weighted average price (WAP) per pack of 20 cigarettes		Total tax (VAT + excise)
	local currency	euro	local currency	euro	%	%	local currency	euro	% in the final price
North Macedonia ³²	2253	37	2453	40	9	18	95	1,54	71,7
Montenegro ³³	na	30	na	54,5	32	19	2,3	2,30	74,1
Bosnia and Hercegovina ³⁴	82,5	42	143	73	42	17	5,2	2,65	88,3
Serbia^{35 36}	3535	30	7762	66	33	20	256,16	2,17	77,3
Croatia	335	41	755	102	34	24	24,88	3,35	80,2
Slovenia	na	71	na	111	23	22	3,51	3,51	81,3
Romania	372,73	80	469	101	14	19	15,86	3,40	77,0
Bulgaria	109	56	177	91	25	20	5,02	2,57	85,1
Hungary	18200	56	31195	97	24	27	1119	3,46	77,8

**As there are no official weighted average cigarette prices in North Macedonia and Bosnia and Herzegovina, the price of mid-priced brands (West for North Macedonia and Winston for Bosnia and Herzegovina) were used in place of the WAP.*

The ad valorem excise rate in Serbia was lower than in Bosnia and Herzegovina and Croatia, but higher than in other countries. Average cigarette prices were higher in all neighboring countries, except North Macedonia. The excise rate for e-cigarette liquids in Serbia is rather low – RSD 4.24 (=0.036 euro) per ml, while this rate is 0.9 euro in Montenegro and 0.18 euro in Slovenia. The excise policy towards e-cigarettes should be reconsidered in Serbia in line with the World Bank recommendations [33] as the prevalence of e-cigarette use by young people in the country is very high.

Serbia has already adopted the legislation on cigarette excise increase in 2018-2020 (see Figure 1). Specific excise rate should increase from 65.5 RSD in July 2017 to 74.5 RSD per pack of 20 cigarettes in July 2020: by 9 RSD or by 14% in three years. Such an increase of specific tax by itself will increase the final retail price by only 13.5 RSD or by 6%, which is not enough to reduce tobacco affordability and tobacco consumption in Serbia. Such excise policy can hardly increase tobacco excise revenue in real terms as well.

It was claimed³⁷ that in late 2016 the excise taxes on cigarettes have been increased in Serbia with an explanation that they should be harmonized with the excise rates in the EU. However, the rate proposed for 2020 (specific rate 74.5 RSD per pack and ad valorem rate 33%) are able to ensure the minimum EU level (90 euro per 1000 cigarettes) only if the WAP increases from current 220 RSD to 450 RSD per pack, which is only possible if the industry increases the net-of-tax price three-fold (from current 51 RSD to 153 RSD per pack).

³² <http://www.customs.gov.mk/images/documents/zakoni/zakon-akcizi/ZakonZaAkcizitePrecisten2018.pdf>

³³ <http://www.upravacarina.gov.me/rubrike/akciza/189839/Obavjestenje-o-izmjenam-i-dopunama-Zakona-o-akcizama-SL-list-CG-br-55-18-od-01-08-2018-g.html>

³⁴ <http://www.sluzbenilist.ba/page/akt/ccg4ohz4nh78h77gKVt7E=>

³⁵ <https://www.mfin.gov.rs/pages/article.php?id=13709>

³⁶

<https://www.mfin.gov.rs/UserFiles/File/podzakonski%20akti/2019/Odluka%20o%20iznosima%20prosecnih%20pnderisanih%20maloprodajnih%20cena%20i%20minimalnih%20akciza%20na%20duvanske%20preradjevine.pdf>

³⁷ Branimir Rajšić. Serbian Parliament Adopts Changes To Tax Laws. 18/01/2017 <https://www.karanovic-nikolic.com/knviews/Pages/2017/01/18/Serbian-Parliament-adopts-changes-to-Tax-Laws.aspx>

A simple tax model illustrates the possible impact of increased excise tax rates on tobacco consumption and revenue. In 2020, Serbia has an opportunity to change its cigarette excise rates in the following ways:

- Increase specific excise from 70.7 RSD to 90 RSD per pack of 20 cigarettes (by 27%);
- Increase the minimum specific excise from 155.23 RSD to 190 RSD per 20 cigarettes (by 19%) irrespective to the WAP, as the tobacco industry effectively reduced the minimum specific excise rates in 2015 by the price manipulation;
- Keep the ad valorem excise for cigarettes at 33%.

The average excise yield would be about 9,500 RSD (=80.5 euro) per 1000 cigarettes, which will still be lower than in the EU countries. This would increase the average cigarette excise tax by about 22% compared with 2019, and the average price would increase to 295 RSD (= 2.4 euro, similar to prices in Bosnia and Herzegovina) per pack of 20 cigarettes or by 18%, provided that net-of-tax part of the price increases only by 2%.

If the taxable sales in 2019 decrease to 13 billion cigarettes (1.5 billion less than in 2016-2017) the tobacco excise revenue will be almost 124 billion RSD (average excise 9,500 RSD x 13 billion cigarettes), 24% more than in 2018. The current excise taxation policy is only able to increase revenue to about 111 billion RSD (average excise 7,762 RSD x 14.3 billion cigarettes), provided that there is no reduction in cigarette consumption in 2019, which contradicts the public health interests.

Conclusions

Tobacco taxation policy in Serbia in 2009–2013 was very successful from a public health perspective as it contributed to the health objectives aimed at reducing tobacco consumption, in line with the FCTC obligations. Estimated tobacco consumption in the country declined by 33% in four years. The outflow of cigarettes taxed in Serbia to other countries also declined, while the number of cigarettes, which were smoked but not taxed in Serbia, did not change much after the tax increases. This taxation policy also increased tobacco excise revenue from 39 billion RSD in 2008 to 84 billion RSD in 2013 (by 44% in real terms).

However, the tobacco industry managed to modify the impact of tobacco taxes. In 2012-early 2014, it vastly increased its (net-of-tax) part of the price and this reinforced the taxation impact on tobacco sales as the final retail price increased more than expected. As the growth of the industry profit margins was disproportionately soaring, the industry increased its profits despite the decline of tobacco sales. The main factor of cigarette sales reduction in 2012-2014 was the industry pricing tactics, while the excise rate increases were rather moderate and eventually the government revenue decreased as sales decline exceeded the excise burden growth.

In late 2014, the tobacco industry decreased prices for some brands pretending that the companies had “price war”, while the tobacco industry in Serbia as in most other countries is an oligopoly. Cigarettes became more affordable in 2015 and their sales increased, while sales were still lower than in 2013 and in previous years.

The current tobacco excise policy, which proposes very moderate excise increases in 2017-2020, is not able to either reduce tobacco consumption or to increase real tobacco excise revenue.

Serbia has a great potential to increase tobacco excise rates, which will be beneficial for both public health and governmental revenue.

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