ORIGINAL SCIENTIFIC PAPER UDK: 339.543(4-672EU) 336.226.331(497-15)"2007/2017" DOI:10.5937/EKOPRE1806320B Date of Receipt: August 7, 2018

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# CIGARETTE EXCISE TAX POLICY IN THE WESTERN BALKANS: TRENDS, EFFECTS AND CHALLENGES

Politika akciza na cigarete na Zapadnom Balkanu – trendovi, efekti i izazovi

#### **Abstract**

In this paper we analyse the evolution of cigarette excise duties policy in the Western Balkans Countries (WBCs) from 2007 to 2017 and estimate respective fiscal and smoking prevalence outcomes. We also identify key expected changes in the future required to align with the EU directives. Driven by fiscal motives, all WBCs have been increasing the cigarette excise duties rates from 2007 to 2017, which is why the average excise yield soared by 4.1 times, from 15.3 to 58.8 Euro/1,000 pieces of cigarettes. This resulted in nominal rise of cigarette excise duties revenues by 2.5 times. Over the same period, smoking incidence in the WBCs declined on average by approx. 7%. These results suggest that increase in cigarette excise duties in the WBCs had some fiscal effects, while the health effects were mild. In most WBC countries, surge in excise yield was not fully reflected into rise in tax revenues, only part of that underperformance being explained by decline in smoking incidence, while a part of underperformance could potentially be attributed to a widening illicit market. In the most WBCs, except in Albania, structure of cigarette excise duties scheme is aligned with the EU directives, while in all WBCs excise yield being considerably below the EU minimum threshold. Therefore, full harmonisation with the EU directives would imply strong rise in cigarette excise tax burden in the WBCs, on average by 76%. The required increase in excise yield (comparing to 2017) would range from 14% in BIH, 49% in Montenegro, 54% in Serbia, 117% in Albania, to 145% in Macedonia. Lessons learned in the past 10 years suggest that gradual harmonisation of excise duties rates with the EU directives in the WBCs must be accompanied by significant improvement of tax enforcement efficiency. Otherwise, tax harmonisation may fail to meet its economic and health objectives and contribute to further widening of the shadow economy.

**Keywords:** excise duties, taxation of cigarettes, shadow economy, Western Balkans, harmonisation of excise duties in the EU.

#### Sažetak

U ovom radu se analiziraju trendovi u politici akciza u državama Zapadnog Balkana (ZB), od 2007. do 2017. godine i procenjuju se njeni fiskalni efekti, kao i trendovi u pogledu broja pušača. U radu se takođe identifikuju najznačajnije buduće promene koje će biti neophodne u ovom domenu, kako bi se akcizna politika uskladila sa direktivama EU. Vođene fiskalnim motivima, sve zemlje ZB su u period od 2007. do 2017. godine znatno povećavale stope akciza na cigarete, tako da je akcizni prinos u proseku povećan 4,1 puta, sa 15,3 na 58,8 evra na hiljadu cigareta. U istom periodu, relativni broj pušača je opao u proseku za 7%. Ovi rezultati ukazuju da je povećanje akciza na cigarete imalo određene fiskalne efekte, dok su efekti na rasprostranjenost upotrebe cigareta bili skromni. U većini zemalja ZB, znatan rast akciznog prinosa nije se u celosti odrazio na rast poreskih prihoda, pri čemu se samo deo odstupanja može objasniti padom broja pušača, dok bi se deo neobjašnjenog odstupanja mogao objasniti rastom sivog tržišta cigareta. U svim zemljama ZB, osim u Albaniji, struktura akciza na cigarete je usklađena sa EU direktivama, ali je istovremeno u svim zemljama ZB akcizni prinos znatno manji od minimuma propisanog direktivom. Stoga, potpuna harmonizacija sa direktivama EU bi implicirala snažan rast akciznog opterećenja na ZB, u proseku za 76% (u odnosu na 2017), pri čemu bi taj rast bio u rasponu od 14% u BiH, 49% u Crnoj Gori, 54% u Srbiji, 117% u Albaniji, i 145% u Makedoniji. Iskustvo iz prethodnih 10 godina ukazuje na to da bi postepeno usklađivanje stopa akciza sa direktivama EU u zemljama ZB trebalo da bude praćeno značajnim unapređenjem efikasnosti naplate akciza. U suprotnom, harmonizacija sa pravilima EU ne bi obezbedila punu realizaciju odgovarajućih ekonomskih i zdravstvenih ciljeva i mogla bi doprineti daljem širenju sive ekonomije u ovom domenu.

Ključne reči: akcize, oporezivanje cigareta, siva ekonomija, Zapadni Balkan, harmonizacija akciza u EU.

#### Introduction

Actual EU excise duties rules suggest that cigarettes could not be considered as a product for which the main aim of the fair competition - "the best quality at the lowest price" - could be valid any more. The term "quality" is not applicable due to health harmfulness of cigarettes consumption, while the regulation is pushing up the "lowest" price to discourage consumption. This is a result of a broader scope of tobacco control initiatives, comprehensively formalised within the WHO Framework Convention on Tobacco Control (FCTC)<sup>1</sup>. It was developed to provide an international legal instrument to combat tobacco consumption and exposure to tobacco smoke. Within measures aimed at reducing demand for tobacco, it "especially encourages price and tax measures, as effective means to reduce demand for tobacco. These include tax increases that result in an increase of the sales price of tobacco products."2 Hence, it may be concluded that, from the FCTC and EU regulation perspective, consumption of cigarettes has negative effects, while its reduction has positive welfare impact per se.

The WBCs<sup>3</sup> started economic transition later than the other Central and Eastern European (CEEs) countries. As part of economic consolidation, a majority of these countries introduced the coherent excise duties systems in the early 2000s. Since the onset of the world economic crisis, these countries have been facing a widening fiscal deficit. For political economy reasons, these countries were usually more prone to tackle the fiscal deficit using the revenue instruments, rather than cutting the expenditures. High smoking prevalence, political economy factors and wider, European trend of rising tobacco taxes, have incentivized WBCs to use tobacco excise taxes as an important instrument in improving fiscal sustainability. In addition to that, WBCs

are in different phases of the EU accession process, which makes the respective EU directives on tobacco taxation a relevant benchmark for redesign of their tax systems in the mid run. Empirical literature on the impact of excise tax hikes on tax revenues in developed countries provides intuitive results, meaning that increase in tax rates is usually associated with the proportionate increase in tax revenues, adjusted for behavioural response in terms of consumption patterns (Chaloupka, 2017). However, in the countries with relatively weak formal institutions and widespread informal practices, reduction in actual consumption is not the only behavioural response to increase in tax rates.

Tobacco excise revenues in the WBCs amount to approximately 2% of GDP, which is far above the EU-28 average (0.6% of GDP), as well above the CEE average (approximately 1.1% of GDP), although some indicators of tax burden are below the minimum threshold stipulated by the EU. This is to a large extent explained by significantly higher smoking prevalence in the WBCs than in the EU member states. Widespread use of tobacco products and high fiscal relevance of tobacco products' taxation makes the issue of cigarette excise duties relevant, both from economic, health and welfare perspective. In spite of that, empirical literature on excise duties in the WBCs is scarce. The aim of this paper is to provide a comprehensive overview and analysis of changes in the cigarette excise tax policy in the WBCs in the past decade, to evaluate respective fiscal and health effects and to identify key changes that would have to be implemented in order to align the national practices in these countries with the EU directives, thus setting the scene for evaluation of impact of tax harmonisation on future fiscal and health objectives.

The results suggest that from 2007 to 2017, on average WBCs increased cigarette excise duties yield by approx. 4.1 times, while the tax revenues rose by 2.1 times and the smoking incidence declined by 7%. These results may suggest that in the meanwhile, part of supply has been shifted to the shadow economy. Our results also indicate that harmonisation with the EU directives would imply significant increase in the excise yield in the WBCs, by 76% on average. In order to mitigate the incentives for further shift of supply to the informal sector, due to rising

<sup>1</sup> FCTC entered into force in 2005 and currently is accepted by 180 countries. http://www.who.int/fctc/cop/about/en/

<sup>2</sup> The summary of the intention of Article 6 of the FCTF, http://www.who. int/fctc/about/WHO\_FCTC\_summary\_January2015.pdf?ua=1&ua=1

In this paper WBCs include Albania (ALB), Bosnia and Herzegovina (BIH), FYR Macedonia (MKD), Montenegro (MNE) and Serbia (SRB). Territory of Kosovo, as defined by the Resolution 1244 of the UN Security Council, has its own cigarette excise policy, but is not included into the analysis due to unavailability of reliable and complete data on relevant indicators.

tax burden, in parallel to gradual alignment with the EU directives, the WBCs should make significant efforts on improvement of tax enforcement efficiency.

The rest of the paper is structured as follows. Section 2 provides overview of evolution and current state of harmonised cigarette excise duties rules in the EU. Section 3 provides empirical insight into the evolution of institutional framework and fiscal outcome of cigarette taxation in the WBCs from 2007 to 2017. The same section also provides benchmark analysis of the cigarette taxation institutional framework in the WBCs in 2017 with the EU directives. Section 4 provides gap analysis and concludes.

# Harmonisation of cigarette excise tax policy in the EU: Literature review and institutional framework

#### Literature review

Creation of the single market in the EU was one of the driving forces of convergence of national tax policies in the member states. This is explained by simultaneous impact of several mechanisms: i) stronger incentives for tax competition between the member states (facilitated by the four basic freedoms); ii) imposed policy coordination from the supra-national (EU) level; and iii) learning effect - facilitated exchange of knowledge and information on comparative policies (Holzinger and Knill, 2005). This is in accordance with the findings of Genschel and Jachtenfuchs (2009) that frequency of legislative acts on tax issues surged over time, especially since formation of the single market. Although, taken in total, convergence in tax policy has been captured, empirical literature indicates different patterns with regards to convergence of direct and indirect taxes. Namely, Kemmerling (2010) finds that direct taxation in the EU is still predominantly shaped by domestic politics and preferences, while international competition and diffusion has made significant impact on indirect taxes, which is why convergence in terms of indirect taxation was very strong. This means that creation of the single market and closer integration of the EU member states accelerated strong convergence of VAT and excise duties, which is explained by the role of learning and use of the EU

as a 'legitimatory' argument for increase in consumption taxes. Literature also suggests that tax harmonisation in the EU promoted convergence across the countries on rising tax rates, while convergence on falling tax rates was much weaker (Kato, 2003).

Transition from communist to market-based economic model and preparations for the EU accession encouraged greater reliance of the CEE countries on indirect taxes (Appel, 2011). This was an attractive policy option also because indirect taxes are more difficult to evade, which makes them a relatively reliable source of revenue (Heimann, 2001). In that respect, through the pre-accession reforms, the CEE countries have introduced the VAT model already applied in the Western Europe – the first one to introduce VAT was Lithuania (1992) and the last one Serbia (2005). This has also narrowed the gap in terms of the VAT rates in the Western and Eastern Europe. By 2003, the average VAT standard rate in the candidate countries was only by 0.02 points below the EU average (Appel, 2011).

Almost simultaneously, CEE countries have been adapting their excise duties systems to the Western European standards, reflected in the EU directives. Studies suggest that already by the end of 1990s, the CEE countries (except for the WBCs) achieved the EU-level excise tax rates for all products except tobacco (Martinez-Serrano and Patterson 2003). It took a few more years (until 2009) to fully harmonise the taxation of tobacco products in the CEE with the EU directives. In order to meet the EU requirement of a 57% tax minimum, the cost of cigarettes for the most popular brand should have increased by about 85%. This is why the candidate countries attempted to negotiate a transitional period, although the old member states were rather tough on that issue, fearing cross-border tax arbitrage. Therefore, all new member states (which joined the EU in 2004 and 2007), except for Slovenia and Malta, negotiated transitional arrangement for taxation of cigarettes by 2007 (Czech Republic), 2008 (Hungary) and 2009 (other new member states). It is also noted that Bulgaria and Romania, which joined the EU in 2007, managed to negotiate the transitional period for harmonisation of excise tax on cigarettes of 2 years only, while for the states which joined the EU in 2004, the transitional period was ranging from 3 to 5 years.

This suggests that after the first wave of enlargement, the EU member states became increasingly restrictive in negotiating transitional regimes.

#### Institutional framework

Adoption of common rules of excise taxation in general, and excise taxation of cigarettes in particular, was the integral part of indirect tax harmonisation in the European Economic Community (EEC) since the beginning of the integration process.

The first directive on taxes other than turnover taxes, which affect the consumption of manufactured tobacco, was adopted in 1972 [7, p. 3]. It has established a mandatory tax base structure as a mix of specific and ad valorem component, specified the tax base for ad valorem excise as maximum retail selling price and mandated that the rate of the ad valorem (ADV) and the amount of the specific excise duty (SPC) must be the same for all cigarettes. It also asked member countries to refrain from subjecting manufactured tobacco to any tax other than the excise and the value added tax.

The first directive regulating approximation of excise burden on cigarettes was adopted in 1992 [8, p. 8]. It mandated that the incidence of excise duty (specific plus ad valorem duty excluding VAT) must not be less than 57% of the retail selling price (inclusive of all taxes) for cigarettes

of the price category most in demand (most popular price category - MPPC), and established a mechanism for the European Commission to propose further approximation of tobacco excises in the EEC.

The objectives of excise tax policy on cigarettes in the EU could be grouped in the two main categories: economic and public health protection. The economic objectives are related to proper functioning of the internal market and cover two main areas: i) securing of fiscal revenues attribution to the country of consumption and ii) enabling level playing field for market players, including a fair competition. The health-related objectives are aimed at decreasing affordability of the product, i.e., to increase the retail sales prices via tax increases, thus reducing the consumption of the product that can cause serious harm to consumers' health. In that respect, the common excise tax structure and base, as well as minimum excise incidence are mostly introduced to achieve internal market related objectives. On the other hand, a minimum share of the specific component, minimum yield and minimum excise tax, which were introduced in later stages, are predominantly seen as tools to attain health-related objectives. The chronology of changes in mandatory rules regarding the minimum excise tax burden on cigarettes is presented in Table 1.

Development of excise duties directives in the EU, presented in Table 1, suggests that since the year 2002,

Table 1: Evolution of the EU cigarette excise tax policy regarding minimum excise tax burden

Directive	Mandatory rule description							
1992/79/EEC [8, p. 8]	Excise incidence (INC), at that time defined as the share of total excise tax in MPPC, cannot be less than 57%. No other rules.							
1995/59/EC [9, p. 40]	ntroduces:							
	• Share of specific component (SSC), which is the share of specific excise in total tax (excise + VAT), cannot be lower							
	than 5% and cannot be more than 55% of total tax (applied to MPPC);							
	• Countries can levy the <i>Minimum excise tax</i> (MET), which is a lump-sum amount that must be paid on a fixed							
	quantity of cigarettes. MET is limited to 90% of the total tax (applied to MPPC).							
2002/10/EC [4, p. 26]	Introduces Excise yield (YLD) rule, defined as a monetary amount of total excise paid on 1,000 cigarettes (applied on MPPC):							
	not less than EUR 60 per 1000 cigarettes until 1 July 2006;							
	not less than EUR 64 per 1000 cigarettes as of 1 July 2006;							
	New rules redefine limitation on MET, requiring that it should not exceed excise duty levied on MPPC.							
2010/12/EU [5, p. 1]	Sets the WAP instead MPPC as a referent price which indirectly increases the necessary excise duty level to achieve							
	minimum INC rule;							
	Changes the SSC range in favour of the specific component:							
	SSC range until 31 December 2013: not less than 5% and not more than 76.5%;							
	• SSC range as of 1 January 2014: not less than 7.5% and not more than 76.5%.							
	Increases INC and YLD, as of 1 January 2014:							
	INC minimum increased to 60% of WAP							
	YLD minimum increased to EUR 90 per 1000 cigarettes regardless of price.							
	Removes all limitations on MET.							

the EU policy has been getting more oriented on increase of excise incidence and yield, as well on refinement of the specific component range, which implies that evolution of harmonised excise tax policy in the EU is increasingly driven by the health-related objectives.

Excise taxation of cigarettes is currently regulated by the Council Directive on the structure and rates of excise duty applied to manufactured tobacco adopted in 2011 (Tobacco Tax Directive) which codifies earlier directives regulating tobacco excises by assembling them into a single act [6, p. 24]. The Tobacco Tax Directive for cigarettes requires<sup>4</sup>: i) mixed tax structure (both specific and ad valorem excise component must exist); ii) the base for the ad valorem excise must be the retail selling price; iii) share of specific component should be in the range from 7.5% to 76.5% of total tax (VAT included); iv) excise incidence should not be less than 60% of WAP; and v) excise yield should not be less than EUR 90 per 1000 cigarettes irrespective of retail selling price. It also allows, but not mandates, member states to levy MET.

# Cigarette excise tax policy in the WBCs: Evolution of institutional framework and fiscal relevance

WBC countries are not EU member states, but rather candidates and potential candidates for EU membership. Most of these countries have commenced the EU accession process in the early 2000s, so that nowadays Montenegro and Serbia are candidate countries that have commenced the chapter negotiations with the EU, while Albania and Macedonia are the candidate countries that have not yet commenced official negotiations on the accession. Bosnia and Herzegovina is the potential candidate country.

In 2004, 2007 and 2013, countries neighbouring the WBCs (Croatia, Slovenia, Bulgaria, Romania and Hungary) entered the EU, which has also triggered the alignment of their tax policies with the EU directives. Accession of the neighbouring countries to the EU and the progress of the WBC countries at the EU accession process make the EU-level harmonised institutional framework for

In that respect, in this section the evolution of the cigarette excise tax policy in the WBCs and its impact on fiscal and health-related outcomes are presented and discussed. The analysis encompasses the timeline from 2007 to 2017. All indicators of excise tax burden are based on WAP, while all growth rates of monetary terms are calculated based on their Euro values. Mapping that gap is important, as the harmonised tax policy rules at the EU level are still seen as the framework for the forthcoming changes of excise tax policy in the WBCs. The WBC data sources for tax rates were national legislation, for GDP - national statistical offices, for national currency exchange rate vs. EUR - national central banks, for excise tax revenues - national authorities or authors' estimation based on available official public data and/or industry data on sales volumes and WAP, and for smoking incidence - the World Health Organization. Data on EU countries are sourced from the Eurostat and EU official websites.<sup>5</sup>

#### Albania

Excise duties structure in Albania is relatively simple, as it has introduced only the specific tax rate. Starting from 2007, cigarette excise duties have been increased four times - in 2009, 2011, 2014 and 2017. As a result of such dynamics, the specific tax rate in 2017 was by 2.5 times (350%) higher than in 2007. In addition to that, the existing cigarette excise tax plan for the period 2017-2020 envisages tax increases in each year, of approx. 6% on average.

As a result, excise yield in 2017 was more than 2.5 times higher than in 2007, amounting to EUR 41.4 per 1,000 cigarettes. Consequently, the fiscal relevance of

indirect taxes relevant also for the WBC countries. These, together with fiscal issues, are some of the drivers behind the significant reform of cigarette taxation legislation in the WBC countries, which took place in the last 10 years. Excise tax reforms in the WBCs have had a considerable impact on their fiscal stance, but also on the efficiency and structure of the local markets.

<sup>4</sup> Further details on excise tax harmonisation in the EU, see: [1, p. 239-244].

<sup>5</sup> The data for smoking incidence presented for the year 2007 are in fact WHO estimations for 2005, since the WHO estimation for 2007 is not available.

Indicator Unit 2007 2008 2009 2010 2011 2014 2015 2016 2017 % RSP Ad valorem t.r. Specific t.r. EUR/000 16.4 16.4 18.1 18.1 25.2 25.2 25.2 39.3 39.3 39.3 41.4 Minimum e.t. EUR/000 44.7 Incidence % WAP 33.3 31.2 33.7 32.6 38.1 34.7 33.9 47.1 43.7 45.2 Yield EUR/000 16.4 16.4 18.1 18.1 25.2 25.2 25.2 39.3 39.3 39.3 41.4 Share of specific comp. % of total tax 66.6 65.2 66.9 66.2 69.6 67.6 67.0 73.9 72.9 72.4 73.1

138.8

138.9

139.6

138.0

Table 2: Albania - cigarette excise tax policy 2007-2017

Source: Authors' calculations.

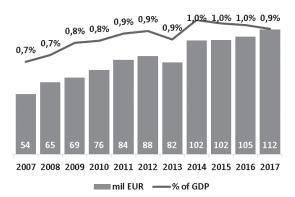
FX Rate

Figure 1: Albania – cigarette excise tax revenues

121.8

123.8

EUR/ALL



Source: Authors' calculations.

cigarette excise duties increased considerably, from 0.7% of GDP in 2007 to 0.9% of GDP in 2017.

In parallel to a strong increase in tax incidence, formal volume of sales of cigarettes declined by 18%, while the smoking incidence dropped by 9%, amounting to 29.9% of 15+ population in 2016. Decline in sale of cigarettes was steeper than decline of smoking incidence, while rise in excise tax revenues was slower than the increase in the tax rates, which may suggest that in this period, illicit trade was widening.

## Bosnia and Herzegovina

Cigarette excise tax structure in BIH is mixed. Its ad valorem rate is the highest in the WBCs, and among the highest compared to the EU member states. The specific excise has been increasing each year since 2009, when the major excise tax policy change took place. Apart from the strong tax hike, simultaneously increasing ad valorem tax rate by 42.3% and introducing specific excise, BIH has designed the tax plan that envisaged continuous

Figure 2: Albania – yield, smoking incidence and sales of cigarettes

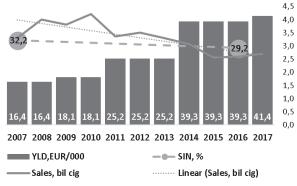
140.1

137.3

135.2

133.0

140.2



Source: Authors' calculations.

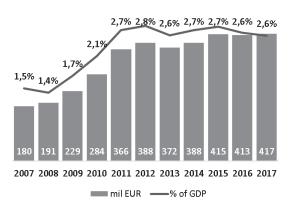
increase in the specific component by approx. 3.8 EUR per thousand of cigarettes effective as of the beginning of the respective year until excise yield reaches the EU minimum requirement.

As a result of the one-off sharp increase in the ad valorem rate as well as of continuous growth of the specific tax, over the sample period excise yield increased more than 6.5 times, triggering a rise in absolute amount of tax revenues from cigarette excise duties by more than 2.3 times. In 2017, cigarette excise tax revenues in BIH amounted to 2.6% of GDP, which was by 1.1% of GDP higher than in 2007.

Although rise in cigarette excise tax revenues was strong (2.3 times), it was much slower than the rise in yield (6.5 times). At the same time, legal sales of cigarettes are sharply declining from 2010, so in the period 2010-2017 the registered volume of sales of cigarettes dropped by more than 50%, although the smoking incidence declined by approximately 7.5%. These results suggest that strong increase in cigarette excise tax burden was associated with a widening illicit trade of cigarettes, both internally

Indicator	Unit	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ad valorem t.r.	% RSP	29.5	29.5	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.0	42.1
Specific t.r.	EUR/000	-	-	3.8	7.7	11.5	15.3	19.2	23.0	26.8	30.7	34.5
Minimum e.t.*	EUR/000	-	-	-	20.5	27.6	42.2	46.5	53.4	51.3	56.7	60.9
Incidence	% WAP	29.5	29.5	49.1	55.3	59.3	62.9	65.4	67.0	69.1	70.5	72.0
Yield	EUR/000	12.7	13.0	26.4	31.8	39.4	46.1	53.5	61.7	68.4	75.8	82.8
Share of specific comp.	% of total tax	0.0	0.0	11.2	19.1	23.4	27.0	29.3	30.7	32.4	33.5	34.7
FX Rate	EUR/BAM	1.91	1.91	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96

Figure 3: BIH – cigarette excise tax revenues



Source: Authors' calculations

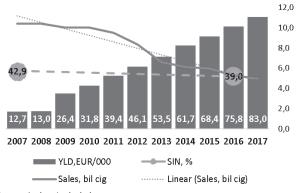
and externally. As the tax burden in BIH is higher than in the neighbouring countries, it also creates incentives for cross-border tax arbitrage.

In an attempt to prevent further deterioration of excise tax revenues, BIH authorities recently recommended<sup>6</sup> freezing cigarette excise tax at the 2018 level for the period 2019-2021. The illegal market, busted due to tax-driven legal cigarettes price increases, has been marked as the main cause of revenue deterioration. However, there is no official estimation of the size of informal market, neither in BIH nor in other WBC countries.

# Macedonia

Macedonia applied a mixed cigarette excise structure, consisting of specific and ad valorem tax. The major change in excise tax policy took place starting from 2013.

Figure 4: BIH – yield, smoking incidence and sales of cigarettes



Source: Authors' calculations.

Namely, in 2013 Macedonia lowered ad valorem tax rates and increased specific tax. At the same time, Macedonia introduced the minimum excise tax and set a plan for increases in specific excise. Starting from 2013, specific tax rates are increased every year. The last revision of the tax plan, adopted in 2016, envisages continuous increases of specific excise by 3.3 EUR per thousand of cigarettes in each year, until July 2023.

As a result, the excise yield (based on WAP) in 2017 was by 2.3 times higher than in 2007, reaching 39.4 Euro per 1,000 cigarettes. During the same period, in nominal EUR terms excise tax revenues increased even more – by 2.8 times, thus amounting to 1.8% of GDP (in 2017). This makes Macedonia different than other WBCs, in which revenues grew at a slower pace than excise yield.

In the same period, cigarette sales decreased by 22%. However, as there are no data available in the WHO database on smoking incidence in Macedonia, it is not possible to derive a conclusion on the evolution of the shadow economy in trade of cigarettes in that country.

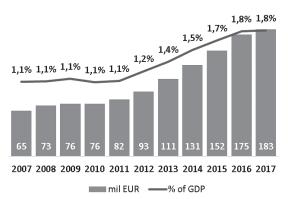
<sup>\*</sup> Being defined as 60% of officially declared WAP, which is lower than actual WAP, in BIH MET is ineffective, meaning that the lowest price cigarettes at the market pay excise higher than prescribed MET.

Management Board of Indirect Taxation Authority (ITA) of BIH adopted recommendations to freeze excise tax at the level in 2018 prepared by ITA specialist and external experts in May 2018; https://www.nezavisne. com/ekonomija/trziste/UIO-BiH-usvojio-zabranu-na-povecanje-akcizena-cigarete/479566.

Table 4: Macedonia – cigarette excise tax policy 2007-2017

Indicator	Unit	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ad valorem t.r.	% RSP	35.0	35.0	35.0	35.0	35.0	35.0	9.0	9.0	9.0	9.0	9.0
Specific t.r.	EUR/000	1.6	1.6	1.6	1.6	1.6	1.6	21.1	23.6	26.9	30.1	33.4
Minimum e.t.	EUR/000	-	-	-	-	-	-	24.4	26.8	30.1	33.4	36.6
Incidence	% WAP	38.7	38.4	38.4	38.3	38.3	38.3	51.7	54.0	55.5	56.2	58.6
Yield	EUR/000	17.2	18.2	18.5	18.6	18.9	18.8	25.6	28.3	32.1	35.9	39.4
Share of specific comp.	% of total tax	6.8	6.4	6.3	6.2	6.2	6.2	63.8	65.0	65.7	66.1	67.2
FX Rate	EUR/MKD	61.2	61.4	61.2	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5

Figure 5: Macedonia - cigarette excise tax revenues



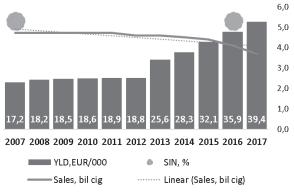
Source: Authors' calculations.

## Montenegro

Montenegro has a mixed cigarette excise tax structure. Until 2011 ad valorem was dominant, while since 2012 the specific component started increasing in its relative significance. In a response to a widening fiscal deficit at the beginning of the world economic crisis, a large cigarette tax increase happened in 2009, when ad valorem tax was increased by 35%, while specific tax was five-folded. The next excise tax hike took place in 2011, when ad valorem tax was increased by 2 pp and the specific tax rate was doubled. Since then, specific tax rates are being significantly increased annually, while from 2015 the ad valorem tax rate is being slightly lowered. According to the tax plan, specific tax rates should further increase by 33.3% in 2018. Strong rise in excise tax rates in Montenegro is an attempt of the government to narrow the fiscal deficit, caused by strong rise in government expenditures, mostly due to investments in highway infrastructure.

As a result of numerous tax hikes, cigarette excise yield in 2017 was 6 times higher than in 2007, while nominal revenues increased 4.3 times. In relative terms,

Figure 6: Macedonia – yield, smoking incidence and sales of cigarettes



Source: Authors' calculations.

tax revenues from cigarette excise duties rose 2.6 times, from 0.5% of GDP in 2007, to 1.3% of GDP in 2017. However, since 2013 fiscal revenues and yield post diverging trends. Excise tax revenues growth is slowing down, while excise yield is strongly growing. Thus in 2017 cigarette excise revenues were by 20% higher than in 2013, although excise yield rose by 53%. As the smoking incidence in 2016 is at the same level as it was in 2007 (approx. 46%)<sup>7</sup>, diverging trends in tax revenues and excise yield may suggest strong widening of the shadow economy in trade of cigarettes in Montenegro, although there are no formal empirical evaluations of the size of the shadow economy in this field.

The 2018 specific excise duties in Montenegro are increased by 33.3%, while the respective tax revenues decreased by 33% in the first quarter of 2018 compared with the same period of 2017<sup>8</sup>. This may also suggest that the strong rise in tax burden in the country with weak tax enforcement institutions and long tradition in development of informal channels of tobacco products

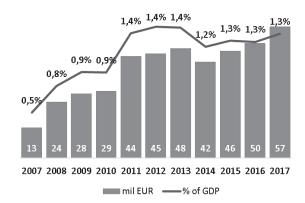
<sup>&#</sup>x27;SIN data for Montenegro in WHO database exist only for 2016.

<sup>8</sup> http://www.upravacarina.gov.me/rubrike/aktuelnosti/149759/Pregled-naplate-phrihoda-Uprave-carina.html

Table 5: Montenegro – cigarette excise tax policy 2007-2017

Indicator	Unit	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ad valorem t.r.	% RSP	26.0	26.0	35.0	35.0	37.0	36.0	35.0	35.0	34.0	33.0	32.0
Specific t.r.	EUR/ 000	1.0	1.0	5.0	5.0	10.0	15.0	17.5	19.0	20.0	22.0	30.0
Minimum e.t.	EUR/000	-	-	-	-	-	36.3	42.5	46.1	48.9	51.7	60.4
Incidence	% WAP	28.5	28.2	45.0	44.3	52.0	56.0	57.6	57.4	56.2	56.2	57.0
Yield	EUR/000	11.4	12.7	22.5	23.8	34.7	42.0	44.6	48.8	50.6	53.4	68.4
Share of specific comp.	% of total tax	5.8	5.2	16.8	15.8	22.5	28.4	30.7	30.5	30.8	32.1	34.3
FX Rate	EUR/EUR	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Figure 7: Montenegro – cigarette excise tax revenues



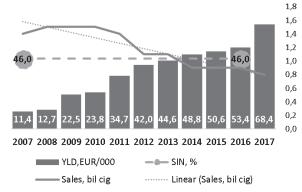
Source: Authors' calculations.

trade, creates incentives for shift of supply from the formal into informal economy. These incentives are magnified by the fact that the larger neighbouring countries (Albania and Macedonia) apply lower tax burden on cigarettes, which creates incentives for cross-border tax arbitrage.

# Serbia

The cigarette excise structure in Serbia is mixed, with a prevailing ad valorem component. The cigarettes excise burden has been increasing each year over the whole sample period, mostly through the increase of specific tax. In 2009 ad valorem rates also increased from 33% to 35%, but in

Figure 8: Montenegro – yield, smoking incidence and sales of cigarettes



 $Source: Authors'\ calculations.$ 

2012 it was reverted back to 33%. The single largest tax hike took place in 2011, in a response to a widening fiscal deficit, when the increase of the specific rate brought to the overall increase of the tax rate by 46%.<sup>9</sup>

Serbia has multi-year tax plans of cigarette excise increases, starting from 2003, usually envisaging increase in the specific tax twice a year, in January and July. Minimum excise tax was introduced in 2005. Current tax plan adopted at the end of 2016 and ending with July 2020 sets annual increases of specific tax of approx. 1.3 EUR per thousands of cigarettes.

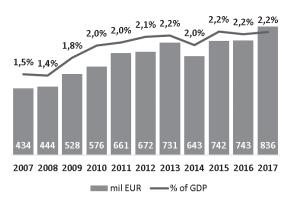
Table 6: Serbia – cigarette excise tax policy 2007-2017

Indicator	Unit	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Ad valorem t.r.	% RSP	33.0	33.0	35.0	35.0	35.0	33.0	33.0	33.0	33.0	33.0	33.0
Specific t.r.	EUR/000	3.4	4.8	6.3	8.2	12.4	18.9	19.6	20.8	22.9	25.0	27.6
Minimum e.t	EUR/000	13.9	15.0	17.5	22.3	29.2	33.4	44.0	48.6	49.4	54.0	58.6
Incidence	% WAP	40.3	42.8	48.2	51.4	57.3	59.5	56.5	58.9	58.6	59.6	59.7
Yield	EUR/000	18.9	20.9	22.9	25.7	32.0	42.4	47.2	47.2	52.3	56.0	61.8
Share of specific comp.	% of total tax	13.2	17.0	20.8	24.6	30.7	34.8	32.1	34.3	34.0	34.9	35.0
FX Rate	EUR/RSD	79.2	88.6	95.9	105.5	104.6	113.7	114.6	120.6	121.6	123.5	118.5

Source: Authors' calculations

<sup>9</sup> Further details on institutional framework for excise duties in Serbia see in [2, p. 367-384]

Figure 9: Serbia – cigarette excise tax revenues

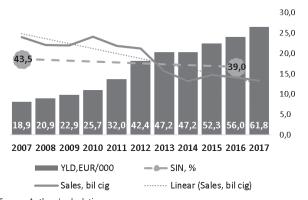


Over the period (2007-2017), excise yield increased by 3.3 times, while revenues almost doubled, reaching 2.2% of GDP in 2017. In the same period, cigarettes sales through formal channels decreased by 44% - in particular in 2013 and 2014. Thus, in 2014 sales of cigarettes was by 45% lower than in 2012, which resulted in an absolute fall in revenues in this year in spite of tax rates increase. Decline in formal sales of cigarettes was considerably stronger than decrease in smoking incidence, which dropped by approx. 10% over the whole period. Such trends may indicate that in the meanwhile, the illicit cigarette market strongly emerged.

#### Excise tax indicators in 2017: WBCs vs. EU rules

The analysis of evolution and institutional framework for cigarette excise tax policy in the WBCs in 2017, summarised in Table 7, provides several important insights. First, all WBCs, except Albania, already apply the mixed structure, i.e. both specific and ad valorem excise duties rates are charged, as stipulated by the EU directives. Second, share

Figure 10: Serbia – yield, smoking incidence and sales of cigarettes



Source: Authors' calculations.

of specific tax rate in the total tax rate in all WBCs fall within the range stipulated by the EU directives. Third, except Albania, all WBCs have introduced the minimum excise tax, although according to the EU directives it is not mandatory, but rather an option. Fourth, in terms of excise incidence, only Bosnia and Herzegovina and Serbia comply with the minimum threshold (60% of weighted average price), Macedonia and Montenegro being close to this threshold, while excise incidence in Albania being still far below the limit imposed by the EU directives. Fifth, excise yield in all WBCs is far below the minimum threshold imposed by the EU directives, the closest to the threshold being Bosnia and Herzegovina, while all other WBCs are far below in this respect. The results also suggest that the fiscal relevance of the cigarette excise duties in all WBCs is above the EU average, ranging from 1% of GDP in Albania, to 2.6% of GDP in Bosnia and Herzegovina.

These results suggest that the main challenge in future harmonisation with the EU rules in all WBCs will be the achievement of minimum yield requirement, as it will imply considerable increase in excise tax burden (from

Table 7: Excise tax indicators – WBC countries vs. EU rules (2017)\*

Indicator	EU rule	ALB	BIH	MKD	MNE	SRB
Mixed structure	mandatory	no	yes	yes	yes	yes
Share of specific component range	7.5%-76.5%	73%	35%	67%	34%	35%
Minimum excise tax	optional	no	yes	yes	yes	yes
Excise incidence (%WAP)	min 60%	45%	72%	59%	57%	60%
Yield (EUR/000 pcs)	min 90	41	79	37	60	59
Tax revenues (% GDP)	no rule (mean: 0.9% of GDP)	1.0%	2.6%	1.8%	1.3%	2.2%

Source: Authors' calculations.

<sup>\*</sup> Excise tax indicators are calculated as prescribed by actual EU rules, which means that yield presented in Table 7 is based ether on minimum price at the market or is equal to minimum excise tax.

14% in Bosnia and Herzegovina, to 143% in Macedonia). Albania, Macedonia and Montenegro will have to make an effort to comply also with the incidence criteria, which will be particularly challenging for Albania. As the most of WBCs already comply with the mixed structure criterion, no changes in that respect will be required, except in Albania, which will have to introduce ad valorem rate.

# **Conclusions**

The main common feature of excise tax policy in the period 2007-2017 in all WBCs was the constant increase of cigarettes excise tax, mostly channelled through its specific component. At the same time, all WBCs also had tax plans for future increases of cigarette excises in 2017, which was favourable from a predictability point of view. Consequently, excise yield in all WBCs in 2017 was substantially higher than in 2007 (on average, by 313%), the lowest rise being in Macedonia and the strongest rise in Montenegro (Table 8). Increase in excise incidence was also significant, the average increase in WBCs amounting to 76%, BIH being the country with the strongest rise in incidence. Consequently, cigarette excise tax revenues (stated in Euro) in WBCs on average rose by 168% from 2007 to 2017, the largest increase being posted in Montenegro.

Results also suggest that rise in revenues was notably lower than the increase in tax rates in all WBCs, except in Macedonia and, to a certain extent, in Albania. This was a consequence of a substantial drop in registered sales of cigarettes in Bosnia and Herzegovina, Montenegro and Serbia, drop in sales in the last two countries being particularly strong in 2012 and 2014. Decline in registered sales of cigarettes in all WBCs was stronger than decrease in smoking incidence. This insight suggests that decline in registered sale of cigarettes may be the consequence

of behavioural reaction of consumers to rising prices, in terms of the volume of consumed cigarettes, but also may indicate shift of supply into the informal sector. It is the matter of further empirical research to evaluate the size of these two effects.

The main challenge in future harmonisation with the EU requirements in all WBCs will be to reach the minimum yield requirement. As shown in Figure 11, harmonisation with the EU minimum yield would require increase in the excise tax yield on cigarettes, ranging from 14% in Bosnia and Herzegovina, to 49% in Montenegro, 54% in Serbia, all up to 117% in Albania and 145% in Macedonia. On average, WBC countries would need to increase the excise tax yield by 76%, in order to reach the EU minimum yield.

Experience from the previous rounds of EU enlargement suggests that the EU is becoming increasingly restrictive in allowing for transitional derogations, meaning that the WBCs may be expected to close a majority of the gap before joining the EU. As the WBCs are at the different phases of EU accession, some of them being expected to join the EU sooner than others, full harmonisation of excise regimes in these countries with the EU directives, would create strong incentives for cross-border arbitrage and tax evasion. Therefore, in parallel to gradual increase in the excise rates, these countries should be working effectively on improvement of efficiency of tax enforcement institutions, in order to mitigate the risk of widening the shadow economy.

Both health and economic (fiscal) effects of excise duties depend on the cigarette consumption reaction to change in price due to taxation. In the last decade, strong increase in the cigarette excise tax rates in all WBCs was associated with only mild decline in smoking prevalence, while the fiscal effects in the most of these countries,

Table 8: Change in excise tax burden, revenues, cigarettes' sales and smoking incidence from 2007 to 2017 (in %)

	ALB	BIH	MKD	MNE	SRB	WBC mean
Excise incidence	36%	144%	52%	100%	48%	76%
Excise yield	152%	551%	129%	500%	227%	312%
Excise revenues	106%	132%	180%	329%	93%	168%
Sales of cigarettes	-18%	-52%	-22%	-43%	-44%	-36%
Smoking incidence	-8%	-8%	n/a	0%	-10%	-7%

Source: Authors' calculations.

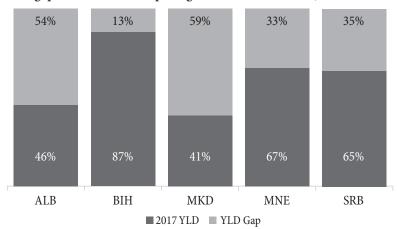


Figure 11: Yield gap in the WBCs comparing to the EU minimum (% of EU minimum yield)

although positive, are considerably lagging behind the scale of tax hikes. Modest impact of tax hikes on smoking behaviour may be the consequence of specificities of cultural and other institutional arrangements in the WBCs. On the other hand, underperforming revenue effects of increase in the tax rates, may to some extent be the consequence of a widening illicit cigarettes market. Presence of the illegal cigarettes market, a part of its devastating impact on fiscal and health objectives, has much broader and very serious negative social consequences, as it represents a fertile soil for organised crime and corruption.

As WBCs progress in the EU accession process, they would have to gradually increase cigarette excise duties yield. In order to make the tax harmonisation beneficial, both from economic (fiscal) and health point of view, the WBCs would have to put a significant amount of effort on development of efficient tax enforcement capacities. Otherwise, without considerable leap in terms of tax collection and enforcement efficiency, harmonisation of tax rates with the EU directives may imperil both fiscal and health objectives.

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