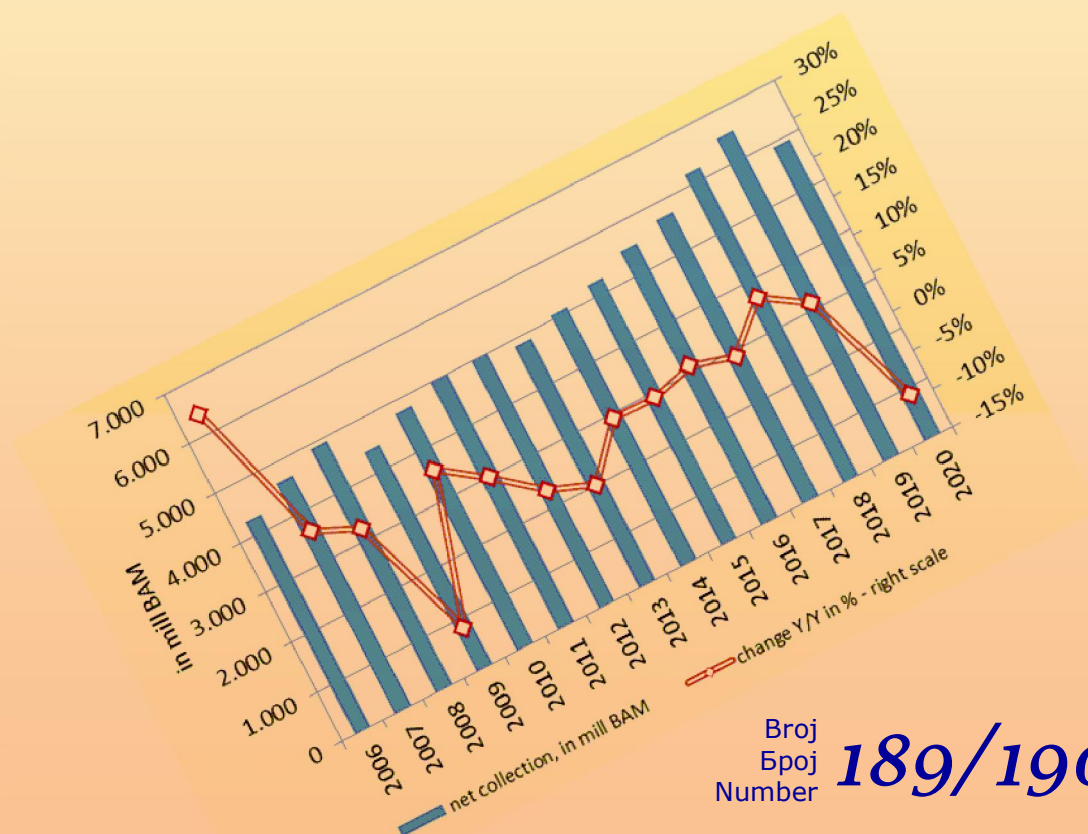




Macroeconomic Unit of the Governing Board of the Indirect Taxation Authority

OMA Bilten

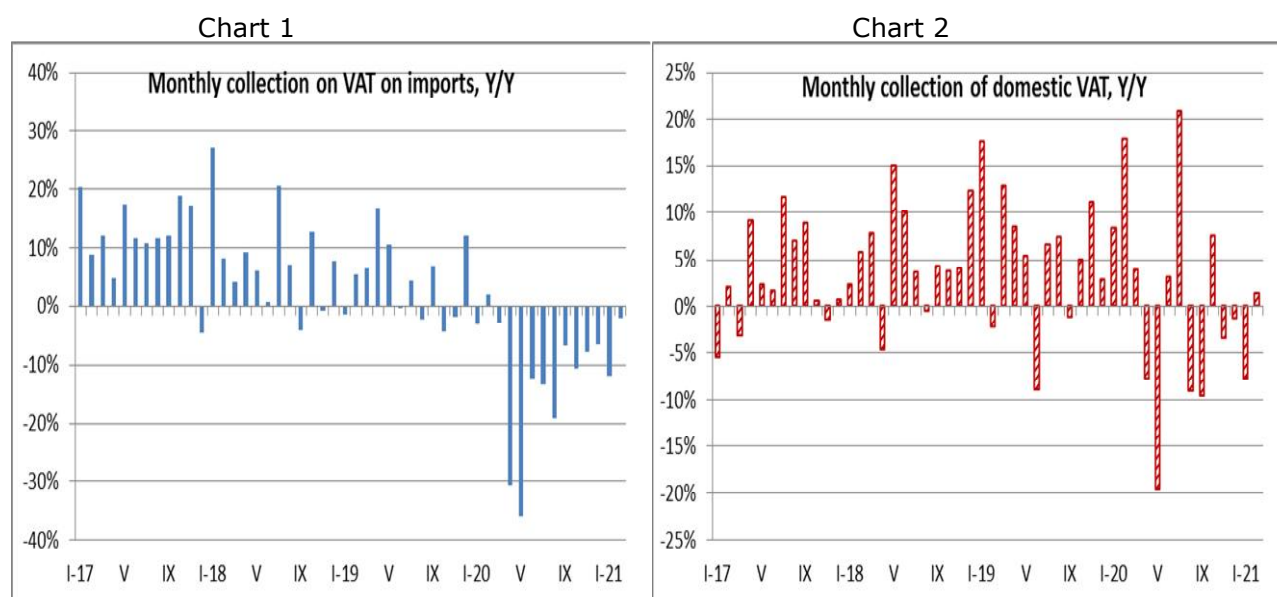


Broj
Број
Number **189/190**

mart/april 2021 – ožujak/travanj 2021 – март/април 2021 – March/April 2021

With this issue

According to the preliminary ITA report on cash flow in February 2021, the net collection of revenues from indirect taxes on the Single Account was lower by 15,7 million BAM or by 3% compared to the same month in 2020. The cumulative net collection for the two months of 2021 was lower by KM 71 million or by 7% compared to the same period in 2020. The decline in the collection of VAT on imports was only 2%, which is the best result since the outbreak of the pandemic in the last year (Chart 1). After three months of negative trends, in January 2021 there was an increase in the collection of domestic VAT by 1,4% (Chart 2). However, export growth has resulted in rapid growth in VAT refund payments, reducing the growth rate of net VAT and total indirect taxes. Delayed positive effects of exports on consumption and revenues from indirect taxes can be expected during the year if the growth trend of exports in 2021 continues.



Nominally, the collection of excises on imported tobacco products in February 2021 was at the level of collection of excises in the same month in 2020, which is also the highest collection in the last six months. Cigarette taxation policy in B&H has not changed since 2019. In that year, the historical maximum in the collection of excise revenues was reached, while in 2020, there was a huge decline. The analysis of the tax policy of tobacco companies, presented in this Bulletin, showed that the main factors of the large drop in revenues in 2020 were: the increase in the lowest retail price of cigarettes, drastic reduction of non-resident consumption, depopulation and COVID-19 pandemic.

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Head of Unit

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Tobacco taxation policy in B&H

(Author: Dinka Antić, PhD)

INTRODUCTORY REMARKS

In April 2018, the Macroeconomic Analysis Unit of the Governing Board of the Indirect Tax Taxation Authority (ITA GB) prepared a comprehensive analysis of the tobacco taxation policy implications in the period from 2009 to 2017.

The analysis indicated three possible policy options for tobacco taxation in the following three-year period 2019-2021: (i) maintaining the *status quo*, (ii) adopting a moratorium on excise duty increases in 2019 and (iii) adopting a moratorium on excise duty increases over a longer period (at least 3 years).

The ITA Governing Board has chosen the third option. The proposed amendments to the Law on Excise Duties included the obligation to analyze the implications of the proposed taxation policy at the end of the moratorium period. Due to the parliamentary deadlock regarding the formation of the B&H government after the general elections in 2018, the proposed amendments to the Law on Excise Duties in B&H have not been considered in the Parliamentary Assembly of B&H, while in the meantime the ITA GB adopted decisions on smoking tobacco for 2019, 2020 and 2021 according to the applicable Law.

Although there is no formal obligation for the analysis of tobacco taxation policy, we believe that there is a need for it for several reasons:

First, in 2019, the legal ceiling for excise taxation of cigarettes in the amount of 176 BAM per 1000 cigarettes was reached, thus B&H met the EU standards regarding to the minimum excise duty on cigarettes of 90 EUR per 1000 cigarettes. Second, after a ten-year period of increasing excise duties on cigarettes, which ended with reaching the legal ceiling for cigarette taxation, there have been no changes in the excise policy for cigarettes in the last two years. Third, the COVID-19 virus pandemic had a strong negative impact on the collection of excise duties on tobacco products in 2020, and thus on the collection of indirect taxes, given the weight of revenues from excise duties on tobacco products in the structure of total indirect taxes collected. Fourth, the significance of excise revenues for the total collection of indirect taxes is very high. In 2019, every sixth BAM of the collected indirect taxes came from the consumption of tobacco products. On the other hand, only a few taxpayers, basically importers, pay excise revenues and associated VAT. Since the dynamics of a significant amount of indirect tax revenues depends on the business policies of large multinational tobacco companies, it is necessary to consider their policies at the time of unchanged excise policy and at the time of shocks caused by the COVID-19 virus pandemic. Fifth, cigarette taxation has recently become a top topic in the media. An in-depth analysis of the tobacco products market is needed to take a formal position on this issue.

The document presents an analysis of trends in the tobacco products market and in the collection of excises in the period 2009-2021, with a focus on the period of unchanged policy in excises on cigarettes and the implications of the COVID-19 virus pandemic on trends in 2020. At the end of the document, conclusions, comments and certain recommendations on the direction of the policy of taxation of tobacco products in B&H are presented.

THE EVOLUTION OF TAXATION POLICY

The basic legal framework of the current policy of taxation of tobacco products is the Law on Excise Duties in B&H¹ - (hereinafter: the "Law"), which has been in force since July 1, 2009. In the field of taxation of tobacco products, amendments to the Law were made on August 1, 2014.²

1996-2004

In accordance with the constitutional responsibilities, the policy of excise duties on tobacco products until 1 of January 2005 was entirely under the jurisdiction of the Entities and Brcko District. In the period up to 2000 the Federation of B&H (FB&H) was applying a complex system of taxation of tobacco products. The excise duty on cigarettes was paid in the range from 0,22 DEM to 2,30 DEM per pack, with domestic cigarettes being taxed by the lowest excise duty rate. Differentiated taxation was also applied to tobacco, so that on domestic tobacco it was paid 7,50 DEM/kg, and for the imported 15 DEM/kg. A similar system was applied in the Republika Srpska (RS) as well. Imported cigarettes were taxed in the range from 0,60 to 1,00 DEM/pack, while domestic cigarettes were taxed in the range from 0,10 to 0,20 DEM/pack. The process of internal harmonization of indirect taxation³ in the field of excise duties started in 2000, when both Entities harmonized the taxation of tobacco products and abolished differentiated taxation of imported and domestic tobacco products. Tobacco products were taxed by *ad valorem* excise duty amounting to 35% of the retail price with no sales tax. By acquiring fiscal autonomy, Brcko District has also since 2002 prescribed an identical rate of excise duty on tobacco products.

2005-2009

The reform of the indirect tax system included the transfer of jurisdiction for excise duty policy from the entity level to the level of B&H. However, the specific decision-making within the Governing Board of the ITA, allowed the Entities, over veto of the Minister of Finance, to keep control of the excise policy.⁴ In relation to the harmonized excise policy of the Entities, a unique Law of Excise Duties in B&H, which entered into force on 1 of January 2005, has brought an increase in excise duty rate from 35% to 49% of the retail price with no sales tax on all tobacco products. The significant increase in the rate of excise duty, together with the other positive effects of unique collection of indirect taxes to the collection efficiency, brought the enormous growth in revenues from excise duties of 47%. The introduction of VAT was expected to bring a reduction of retail prices for tobacco products due to the fact that the VAT rate of 17% was lower than the rate of sales tax. However, it did not happen. In 2006, revenues from excise duties increased by 12,6% compared to 2005, while the growth rates in 2007 and 2008 amounted 8,8% and 4,5%, respectively.

2009-2014

Application of the new Law on Excise Duties has begun on July 1, 2009. New Law on Excise Duties in the field of cigarette taxation introduces elements of the structure of rates from the EU. Complex rate of cigarette taxation in B&H involves the application of the *ad valorem* excise duty in the amount of 42% of the retail price of cigarettes and the specific excise duty per pack of cigarettes. Although, at first glance, it can be concluded that there has been a nominal reduction of the excise rate, *de facto* there was no change in the rate, but just a different calculation of excise duty which ultimately gives the same excise burden.⁵ Another new element is the introduction of the category of the minimum excise duty on all cigarettes as of 2010, which is

¹ „Official Gazette of B&H“ No. 49/09.

² „Official Gazette of B&H“ No. 49/14.

³ More about the motives and results of the process of internal harmonization of indirect taxes in B&H can be found in OMA Bulletin No 102, www.oma.uino.gov.ba.

⁴ Ibid.

⁵ Until July 1, 2009, the base for the calculation of excise duty was the retail price without VAT, while from July 1, 2009 it was changed to the retail price including VAT.

linked to the category of the 'most popular price of cigarettes'⁶, as the reference brand for the application of the minimum excise duty rate. The introduction of the minimum excise duty should have prevented the occurrence of dumping at the lower price cigarette groups. Tying the minimum excise duty for the most popular price category implies the collection of guaranteed revenues from excise duties on all brands of cigarettes whose retail price is lower than the most popular brands. The third element of harmonization with the EU standards was the harmonization of the minimum excise duty with the minimum excise duty in the EU in the amount of 64⁷ EUR or 126 BAM per 1000 cigarettes. Harmonization process is ensured by the continuous annual increase of the specific excise duty, provided that the increase can not be less than 0,15 BAM/pack.

Other tobacco products (cigars, cigarillos, smoking tobacco) are taxed only by *ad valorem* excise duty in the amount of 42% of the retail price, including taxes.

2014-2019

The continuous increase in the excise duty on cigarettes has widened the gap between the tax burden on cigarettes in relation to the tax burden on substitutes - smoking tobacco, which remained at the same level as in 2009. The differentiated taxation policy has led to a strong substitution of cigarettes with smoking tobacco, first branded and then unbranded from the black market. The decline in excise revenues on tobacco products in 2013 of 4,1% was a signal for a thoroughly redefined policy of taxation of tobacco products in B&H. The redefined tobacco product taxation policy was expected to eliminate the inconsistent cigarette taxation policy that led to the erosion of excise revenues and distortions in the tobacco market (strengthening the black market, smuggling and illegal cigarette production). At the same time, the process of redefining the excise policy should have served to continue the process of harmonizing the standards of taxation of tobacco products with current EU standards. Given the scope of tax evasion in the tobacco market, which occurred in 2011 and culminated in 2013, it can be said that the first goal of the new excise policy was also the primary goal, while the second goal was to develop a technical platform for the implementation of measures of the new excise policy in B&H.

The new taxation policy of tobacco products has been applied as of August 1, 2014, and includes the following:

- taxation of smoking tobacco by specific excise duty;
- linking the increase in the excise burden on smoking tobacco to the increase in the excise burden on cigarettes;
- determining the minimum excise duty on cigarettes according to the weighted average price of cigarettes and
- continuation of the process of harmonization of the excise burden on cigarettes with the EU standards

New technical standards in the taxation of tobacco products include:

- harmonization of the scope of taxation with the prescribed scope in the EU, in terms of the type of tobacco products and definitions;
- introduction of the weighted average price of cigarettes as a reference price for determining the minimum excise duty instead of the 'most popular price category of cigarettes', and
- increase of EU minimum standards, of which the most important for B&H is the nominal minimum excise duty on cigarettes in the amount of 90 EUR per 1000 cigarettes.

According to the provisions of Article 21a Paragraph (2) of the Law, the specific excise duty is increased every year by at least 0,15 BAM per package, until the total excise duty contained in the

⁶ The acronym for this category in the EU is MPPC - *Most Popular Price Category*

⁷ The standard has been in force in the EU until December 31, 2013. From January 1, 2014 the minimum excise duty on cigarettes in the EU is 90 EUR.

retail price of cigarettes with the lowest price reaches 176 BAM per 1000 pcs. The starting point for calculating the minimum excise tax is the weighted average retail price (WAP) of cigarettes, which is calculated on the basis of ITA data on issued excise stamps for cigarettes in the second half of the previous fiscal year and the first half of the current fiscal year (Article 21b of the Law). The minimum excise duty on cigarettes is calculated as a percentage of WAP, with the legal minimum being 60% of WAP. Excise duty on smoking tobacco is determined as a percentage of the minimum excise duty on cigarettes expressed per 1000 cigarettes, with the legal minimum being 80% of the minimum excise duty on cigarettes (Article 21d of the Law).

2020-2021

The legally prescribed minimum excise duty on cigarettes of 176 BAM per 1000 pieces was reached in 2019, which completed the process of harmonization with the minimum excise duty in the EU. In practice, this meant that as of 2020 there is no increase in the specific excise duty on cigarettes (i.e. the rate from 2019 will be maintained), while the amount of excise duty on smoking tobacco, given the calculation methodology, depends on the dynamics of the retail cigarette prices.

Review of excise rates on tobacco products

Ad valorem (proportional) excise duty:

- cigarettes: 42% of the retail price (taxes included)
- cigars and cigarillos: 42% of the retail price (taxes included).

Ad valorem excise duty, which has been calculated on smoking tobacco in the amount of 42% of the retail price (taxes included), was abolished on August 1, 2014. The specific excise was increased by the decisions of the ITA GB every year by the legal minimum of 0,15 BAM per pack (or 7,50 BAM per 1000 pieces) of cigarettes (Table 1).

Table 1: Specific excise duty on cigarettes (2009-2021)

	1.7.2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BAM/box	0,15	0,30	0,45	0,60	0,75	0,90	1,05	1,20	1,35	1,50	1,65	1,65	1,65
BAM/1000 pieces	7,50	15,00	22,50	30,00	37,50	45,00	52,50	60,00	67,50	75,00	82,50	82,50	82,50

Due to the structure of the market where the cheaper categories of cigarettes have been dominating, and because of the calculation method which takes into account a set of data from two fiscal years (second half of the previous year and first half of the current year), and is applied in the next fiscal year, the minimum excise has no protective character in terms of collection of a guaranteed level of excise revenue.

Table 2: Minimum excise duty on cigarettes

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
BAM/1000 pieces	0,80	1,08	1,65	1,82	2,09	2,00	2,23	2,42	2,60	2,86	3,04	3,25
BAM/1000 pieces	40,00	54,00	82,50	91,00	104,50	100,00	111,50	121,00	130,00	143,00	152,00	162,50

Note: In the period from 2010 to 2014, the minimum excise duty on cigarettes was determined on the basis of the most popular price category of cigarettes

Table 3: Excise duty on smoking tobacco

	1.8.2014	2015	2016	2017	2018	2019	2020	2021
BAM/kg	78,00	80,00	89,20	96,80	104,00	114,40	121,60	130,00

ANALYSIS OF THE TOBACCO PRODUCTS MARKET

Trends in the period 2009-2014

New Law on Excise Duties in B&H, which has been force as of July 1, 2009, brought the initial introduction of a specific excise tax on cigarettes in the amount of 0,15 BAM per pack. The increase in taxes in the structure of the retail price (specific excise tax + the corresponding part of VAT) expectedly brought an increase in retail prices, although tobacco companies have tried to mitigate the "tax shock" on prices by shifting the additional tax at the expense of their profits. However, given the low price before taxation, there was not a lot of maneuver space to ease rising prices, especially by the domestic tobacco industry. Although the new Law was adopted in the midst of the global economic crisis, the cigarette market could have absorbed the continuous rise of the tax in prices (excise duty + VAT) all until 2013. The largest growth in the cigarette market value⁸ was recorded in 2010 (18,2%) but then there was a sharp slowdown in 2011 and 2012 (6,4% and 2,4% respectively). By 2013 the market of smoking tobacco was negligible, but then it increased by as much as 350%. The reason for this was exceeding the "endurance threshold" of consumers, who have avoided the further rise in the excise burden, and consequently, in retail prices of cigarettes, by shifting their consumption to the rolling of cigarettes from tobacco. The extent of substitution of cigarettes with tobacco was much larger than it was showed by data on growth of smoking tobacco market, because the market of illegal unbranded tobacco from domestic production and smuggling has exploded⁹. Such developments have devalued the government's intentions to achieve health policy goals through increasing taxation of cigarettes. However, as the reason for such a sharp drop in the consumption was not consumers' giving up smoking, but switching to rolled cigarettes from smoking tobacco, mostly of poor quality, health policy objectives in terms of reducing smoking were not only met but were completely derogated.

It was normal to expect that the process of harmonization of excise duties with the minimum EU standards would bring a drop in cigarette consumption. However, the gap between the tax burden on cigarettes and smoking tobacco has widened every year as a result of a differentiated policy of tobacco taxation and harmonization of excise duties on cigarettes with the EU minimum standards, therefore creating incentives for consumers to shift from industrially produced cigarettes to manually rolled cigarettes. It can be assumed that during the increase in retail prices, the first who give up cigarette consumption are the consumers with the lowest incomes, while structural changes occur in the structure of other consumers. Consumers from the middle-income group are shifting to cheaper cigarettes, while high-income consumers are retaining the consumption of expensive cigarettes due to their status. Therefore, **it can be concluded that the price elasticity of cigarette consumption is not a homogeneous category and that it largely depends on the structure of consumers.** There is a polarization between domestic (mostly cheaper) and imported (mostly more expensive) cigarettes in B&H. The fact that the consumption of domestic cigarettes in 2013 fell by as much as 28,9% compared to 2012, and imported by 16,8% indicate the conclusion that the process of substituting cigarettes with tobacco has hit the domestic tobacco industry to a greater extent due to higher attrition of consumers with lower incomes.

In the first years of the observed period, the increase in excise rates ensured growth in total excise revenues regardless of the drop in consumption. At the beginning, high growth rates in revenues from excise duties were recorded, particularly in 2010, when revenues increased by 37,1% due to lower base for comparison. As of 2011, the growth has been slowing down and a decrease of 4,1% was recorded in 2013.

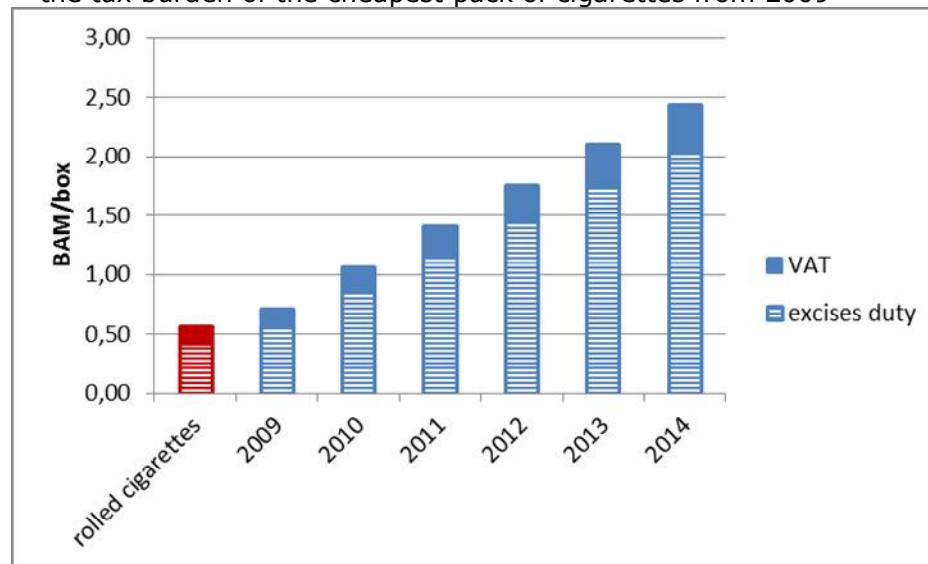
Differentiated taxation of cigarettes and tobacco, at the expense of cigarettes, was the main reason for the losses of revenues from excise duties. In the first years the gap in the tax burden was not so significant for consumers to give up from cigarettes and to shift to the consumption of

⁸ The total value of cigarettes, including taxes, according to the data on issued excise stamps.

⁹ More in Antić, D., 2014. „Trends in collection of revenues from excise duties on tobacco: from the revenue "boom" to tax evasion". *MAU Bulletin* No. 104/2014.

smoking tobacco. However, as rates on excise duties were increasing only on cigarettes and not on smoking tobacco, the gap in the tax burden was getting bigger. Chart 1 shows the simulation of the tax burden on cigarette pack obtained from 1 kg of tobacco (taking into account the norms of manual cigarette production) and the pack of the cheapest industrially manufactured cigarettes which cost 1 BAM at the time of entry into force of the new Law on Excise Duties (July 1, 2009).

Chart 1. Simulation of the tax burden of a pack of cigarettes obtained from 1 kg of tobacco and the tax burden of the cheapest pack of cigarettes from 2009



The continuous increase in the specific excise duty on cigarettes has brought a strong increase in the tax burden on cigarettes, which is further increased due to increased VAT and *ad valorem* excise duty, since the increased specific excise duty increases every year the basis for calculating VAT and excise duty in retail prices. Since the excise burden on tobacco remained unchanged throughout the period, the gap between the tax burden on tobacco and cigarettes grew from year to year. In 2014 total taxes included in the pack of the cheapest cigarettes were almost five times higher than in the pack of cigarettes obtained by rolling smoking tobacco.

The trends in the period from 2014 to 2021

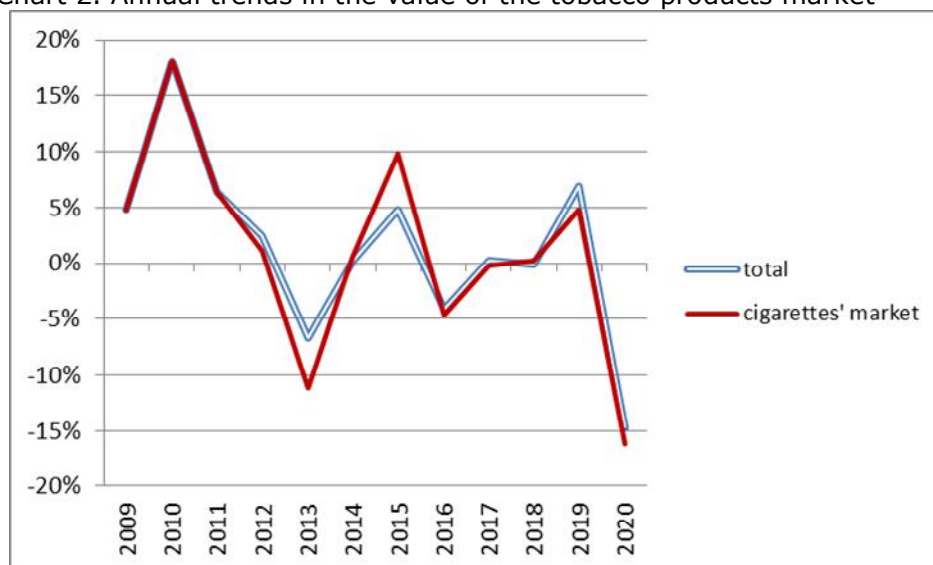
Harbingers of significant changes in the tobacco market occurred immediately after the adoption of the amendments to the Law on Excise Duties and prior to their entry into force (1 August 2014). The introduction of the specific excise duty has increased the tax burden on kilogram of tobacco by 212%, and total tax burden (excise duty + VAT) by 184%. The drastic increase in the excise burden on tobacco has encouraged stockpiling of both branded taxed tobacco and non-taxed unbranded tobacco. After the entry into force of amendments to the Law there were significant positive changes in all segments of the analysis. However, the positive effects of the amendment to the Law in terms of revenue growth were exhausted as early as 2016, and the next two years, revenue growth was minimal. A significant increase in the collection of excise revenues was achieved in 2019 due to the strong growth in the cigarette's consumption of non-residents, while, with the appearance of the COVID-19 virus pandemic, a catastrophic decline in excise revenues was recorded.

The value of the market of tobacco products

Large tax evasion in 2013 led to the decline in value of the cigarette market by 11,2%. At the same time, due to the shift of smokers to brand tobacco, value of the legal market of tobacco has quadrupled. That these were already significant amounts is shown by the fact that the substitution of cigarettes with branded tobacco mitigated the effects of the reduction of the cigarette segment at the rate of 11,1%, so that the decline in the value of the total tobacco market was 6,7% (Chart 2).

The new excise policy, which has been in force since August 1, 2014, has brought a turnaround in just five months. According to data for 2014, the value of the cigarette market increased by 0,7%, while the value of the tobacco market fell by 6,8%, due to large purchases before the entry into force of amendments to the Law. Due to developments in the tobacco segment, the total market for tobacco products in 2014 increased by a modest 0,3% compared to 2013. Positive trends have continued in 2015, as a reflection of the new excise policy measures. Despite the growth of specific excise duties on cigarettes and specific excise duties on tobacco, the total market increased by 4,8%, reaching the level of 2011, but not of 2012. The analysis of the structure of the tobacco products market indicates that the growth of the cigarette segment amounted 9,9%, while the tobacco segment fell by as much as 81%, falling at level of 2012 in nominal terms. Although the value of the domestic cigarette market in 2015 increased by as much as 24,5%, it was still far below levels from 2011 and 2012. On the other hand, the value of the imported cigarette market exceeded the previous maximum from 2012, although it grew at a more moderate rate of 5,3%.

Chart 2. Annual trends in the value of the tobacco products market



The growth of the tobacco products market can be explained by the cumulative effect of three factors:

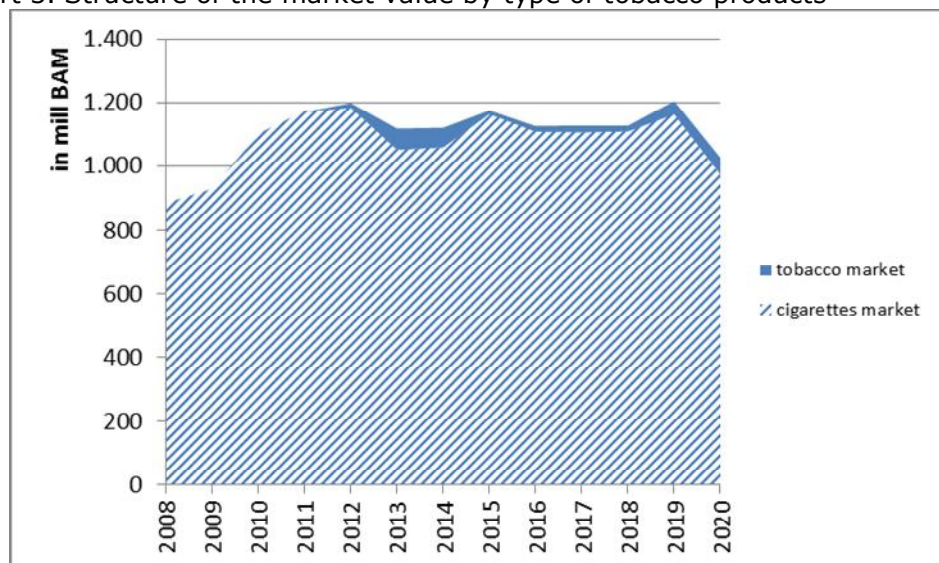
- measures of the new excise policy,
- operational measures of the ITA and other state and entity institutions to combat smuggling, and illegal production and sale of cigarettes, and
- increase in aggregate consumption as part of B&H recovery after the global economic crisis.

The effects of the new excise policy measures were exhausted as early as 2016. A new increase in the specific excise tax has brought stagnation, and then a decline in the value of the legal market for tobacco products. The value of the cigarette market in 2016 decreased by 4,7% compared to 2015, and by 6% compared to 2012, when the market value was at its maximum (Chart 3). In

2017 and 2018, the total value of the tobacco products market stagnated, and in 2019 it grew by a rate of 6,9%. In the market structure, the cigarette component grew by 4,8%, while the smoking tobacco component grew by as much as 133%. This indicates the shift of tobacco companies towards smoking tobacco, in order to attract the lower income population from the black market of tobacco.

The appearance of the COVID-19 virus pandemic did not have a serious impact on the policies of tobacco companies, as it was expected to be a passing phenomenon. Thus, in the first four months of 2020, both market components grew, cigarettes by 13,5% and smoking tobacco by 35,3%. However, the restrictive measures introduced in B&H regarding the movement of citizens and the functioning of the economy, as well as the locking of the EU member states, had a negative impact on the consumption of the domestic population and the consumption of non-residents (diaspora, tourists, cross-border traffic). Tobacco companies have drastically reduced their placements on the market, which has resulted in a strong contraction in the tobacco products market. Although a certain easing of measures was expected in the summer season, this did not happen, but, on the contrary, Europe was faced with a new, even bigger, wave of pandemics in the fall of 2020. The entry restrictions in B&H have been removed late, resulting in a smaller inflow of non-residents at the end of the year. At the end, the value of the tobacco products market in 2020 decreased by 14,8% compared to 2019 (Chart 2), with the cigarette component decreasing by 16,2%, and the smoking tobacco component increasing by 24,5%. The growth of the regular tobacco market indicates a change in the business policies of large international tobacco companies. In the years of intensified tax evasion (2013, 2014), the domestic tobacco industry made a shift towards higher sales of tobacco, and now the same policy has been taken over by importers, after the reduction of domestic capacities.

Chart 3. Structure of the market value by type of tobacco products



Pre-tax price

The increase in the cigarette market after the changes in the Law has brought an improvement in the sales price structure, in terms of pre-tax price (which, in addition to the cost price, also includes profit / margin), despite the increase in tax burden (Chart 4). However, already the next increase in the specific excise duty on cigarettes in 2016 brought a significant drop in the pre-tax price, in nominal terms to the level of 2014, while in the next two years there were no significant changes compared to 2016, despite two increases in the specific excise duty on cigarettes. The pre-tax price has been decreasing as of 2019, by 9,6% in 2019, and by 2,3% in 2020. Basically,

in the year of the pandemic, the decline in government revenues (from excise duties) was nominally much larger than the decline in tobacco companies' revenues.

A comparison with 2008, which is the last year before the reform of the tobacco taxation policy and harmonization with the EU standards, shows that the pre-tax price has fallen to its historical minimum. Compared with 2008, tobacco companies have *de facto* lost 2/3 of their revenues (Chart 5). However, the domestic industry is more affected than importers. The losses of domestic industry in 2020 compared to 2010 reach up to 85,6% of revenues, while the losses of importers are about 60% of revenues.

Chart 4. Structure of the tobacco products market value

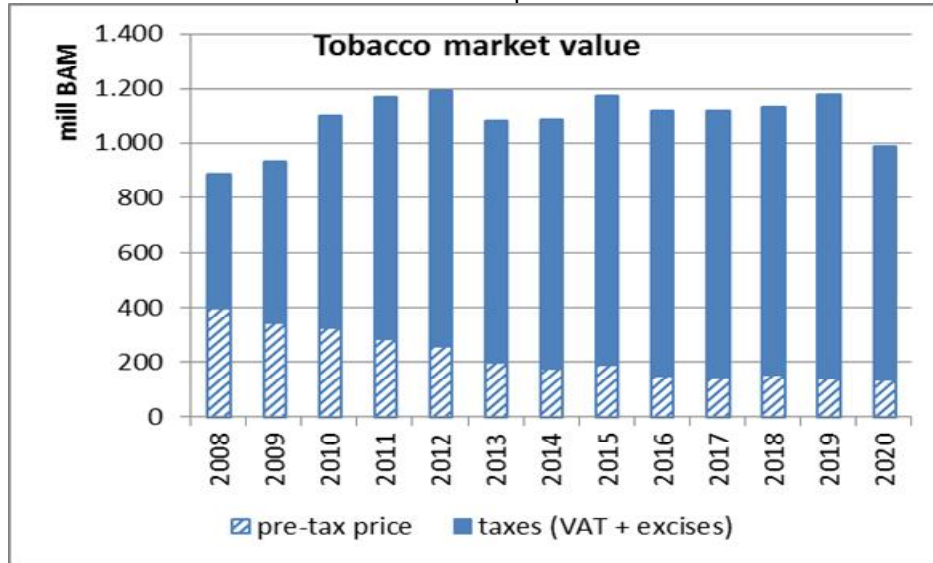
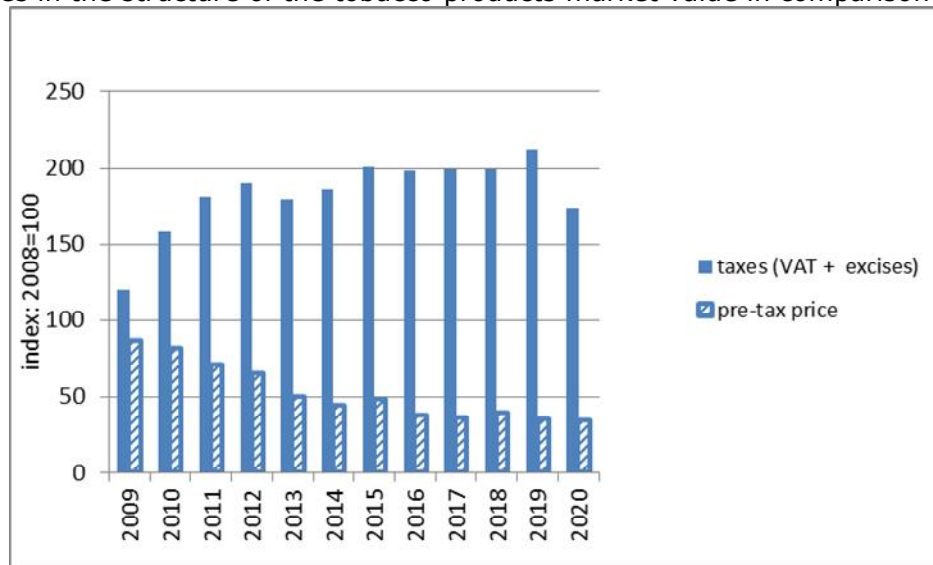


Chart 5. Changes in the structure of the tobacco products market value in comparison with 2008



Retail selling prices of cigarettes

The continuous increase in excise duties on cigarettes has brought a rapid rise in the weighted average retail price of cigarettes (WAP). Compared to 2008, the weighted average price increased by 248%. The biggest jump was recorded in 2010, due to the implementation of the new Law only

in the second half of 2009. The slower growth has been recorded later, primarily due to the high base for comparison (Chart 6). Another reason for such a trend is the extent to which the additional tax burden is shifted to the customer. The extent to which the additional tax burden is shifted to the customer depends on the elasticity of demand for goods. In the case of goods with elastic demand, shifting the tax burden will produce a sharp decline in the consumption of goods. In the case of goods with inelastic demand (e.g. luxury goods, local goods, addictive goods, such as cigarettes, alcohol, etc.), shifting the additional tax burden to sales prices generally does not lead to a significant decline in consumption of goods. A significant factor for shifting the tax burden is the situation with the competition in the market. In the case of existence of a monopoly on the market, shifting the tax burden to customers will not jeopardize demand. On the other hand, in the conditions of significant competition, companies can better position themselves in the market or take over the market of competitors if they do not shift additional tax burdens on sales prices. However, the policy of dumping prices run can be pursued in the long run only by financially strong companies, which can bear the reduced profit due to the takeover of part or the entire additional tax burden. It is indicative that the increase in the retail cigarette prices of 4,9% on average occurred in 2020, despite the fact that there was no increase in the specific excise duty in that year (due to the completion of harmonization with the EU) and a catastrophic decline in sales due to the pandemic.

Chart 6. Weighted average retail price of cigarettes (WAP)

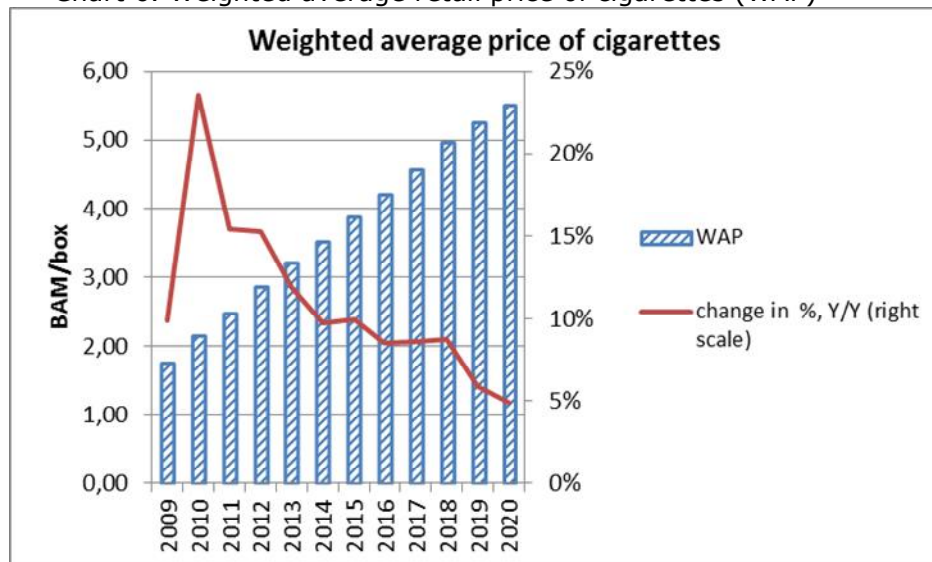


Chart 7 shows that tobacco companies have used inelastic demand for cigarettes on several occasions in the past ten years to increase retail cigarette prices above the new tax burden.¹⁰ Before the changes in the Law, this happened in 2010 and 2012, when retail cigarette prices increased on average above the new tax burden.

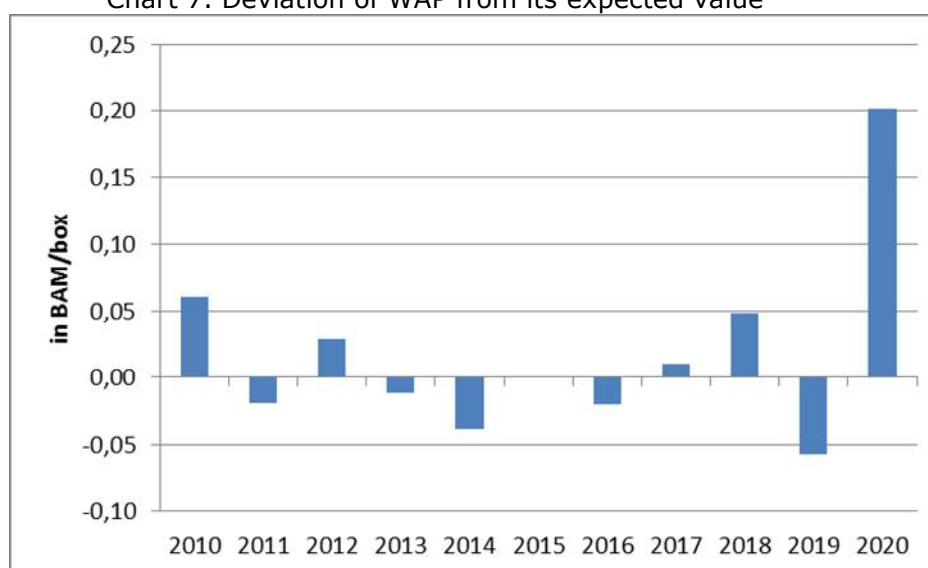
On the other hand, there have been more years in which tobacco companies have borne a part of the new tax burden at the expense of their profits, in order to amortize its impact on retail prices. It can be assumed that the reason for this policy was to assess the risk of falling sales which could happen in the case of shifting the total tax burden on sales prices. However, it can also be said that some companies pursued a kind of dumping policy. As the tobacco market have been decreasing from year to year, it can be assumed that the dumping pricing policy pursued in 2011 was used to better positioning of companies in the cigarette market. However, in the period from

¹⁰ The new tax burden includes an increase in specific excise (0,15 BAM per pack annually) as well as an increase in *ad valorem* excise and VAT, which comes from the growth of the specific excise, due to the fact that the basis for calculation of *ad valorem* excise and VAT includes the specific excise.

2013 to 2016, when there was an erosion of the legal cigarette market due to the growing legal and illegal substitution of cigarettes with tobacco, companies have struggled to maintain their existing market share by shifting the lesser extent of new tax burden to prices.

With this in mind, the increase in prices above the new tax burden in 2017 and 2018 was surprising (Chart 7). Such a pricing policy was certainly the reason for the decline in cigarette quantities in those two years and the stagnation in the value of the cigarette market (see Chart 2), and consequently in revenues. It can be assumed that this was the reason for the change in pricing policy in 2019, when most of the new tax burden (0,06 BAM per pack) was taken over by companies at the expense of their profits. Such a turnaround in pricing policy resulted in an increase in the value of the cigarette market of 4,8%, a minimal decrease in the quantity of cigarettes of 1% and in an increase in excise revenues of 6,5%.

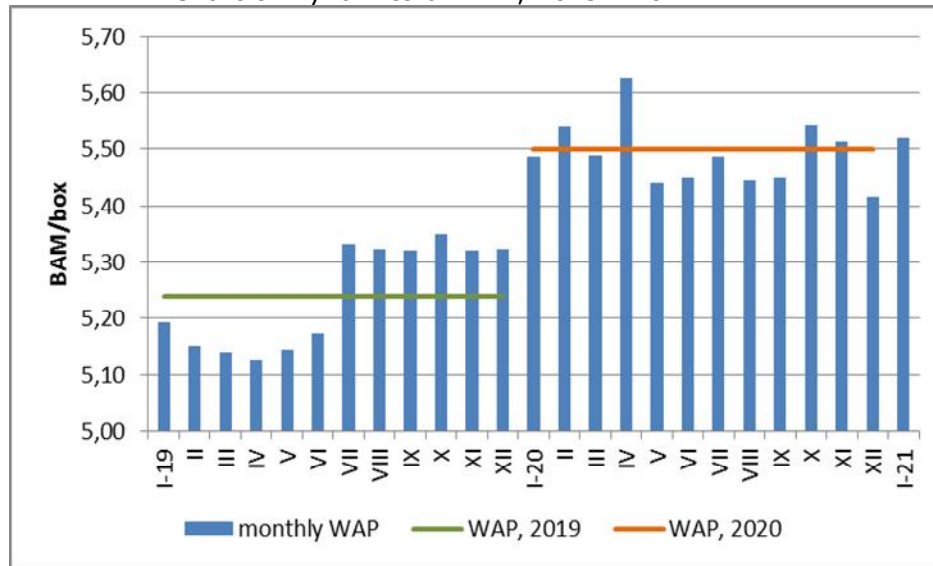
Chart 7. Deviation of WAP from its expected value



The process of harmonization of excise duties with the EU standards was completed in 2019. Since 2020, there has been no increase in the specific excise duty on cigarettes, and thus no external reason for the increase in retail prices in 2020. However, in early 2020, companies immediately significantly increased retail prices of cigarettes, so that in April 2020, the weighted average retail price of cigarettes was by 0,30 BAM per pack higher than in December 2019 (Chart 8). On average, cigarette prices in 2020 increased by 0,20 BAM per pack (Chart 7).

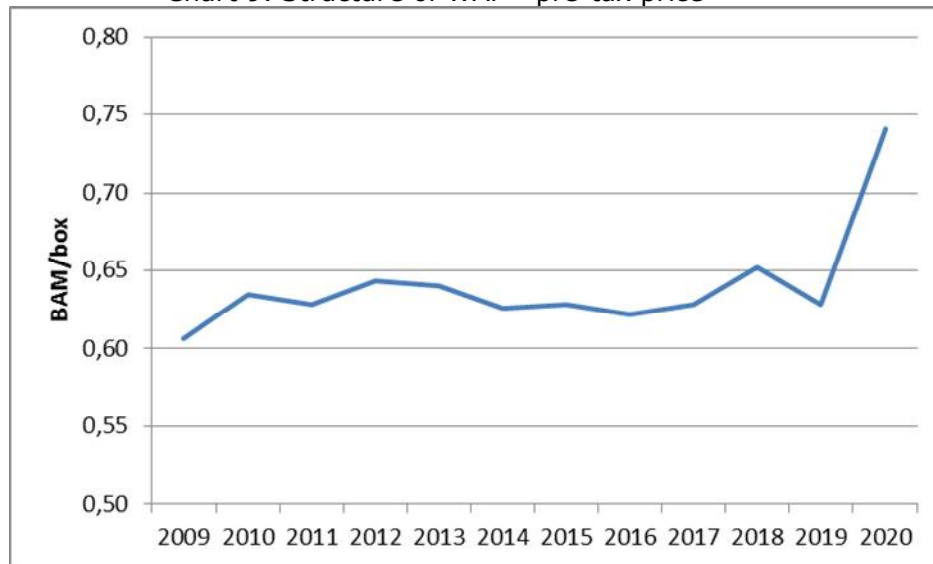
Even after it was clear that coronavirus was not a passing phenomenon, companies still did not make significant price adjustments, despite the fact that the demand of local consumers for cigarettes was drastically reduced due to the pandemic, and the consumption of non-residents was reduced to a minimum. An even bigger surprise in the company's pricing policy was the price policy in 2021. Although there was no increase in excise duties on cigarettes in 2021 either, the weighted average price of cigarettes in January 2021 was higher by 0,10 BAM than in December 2020, and by 0,20 BAM than in December 2019 (Chart 8).

Chart 8. Dynamics of WAP, 2019 - 2021



An analysis of the structure of the WAP of cigarettes suggests that the pre-tax price (which includes the cost price and profit / margin) has varied only slightly, regardless of changing circumstances. In the meantime, due to the large rise in cigarette prices, there have been major changes in the structure of cigarettes, the number of types of brands has decreased, cheaper domestic brands have no longer been produced, and the price range between the cheapest and most expensive cigarettes has been shrinking. However, the high increase in cigarette prices in 2020 resulted in a significant increase in the pre-tax price, on average by 18% compared to the structure of the WAP in 2019 (Chart 9)

Chart 9. Structure of WAP - pre-tax price



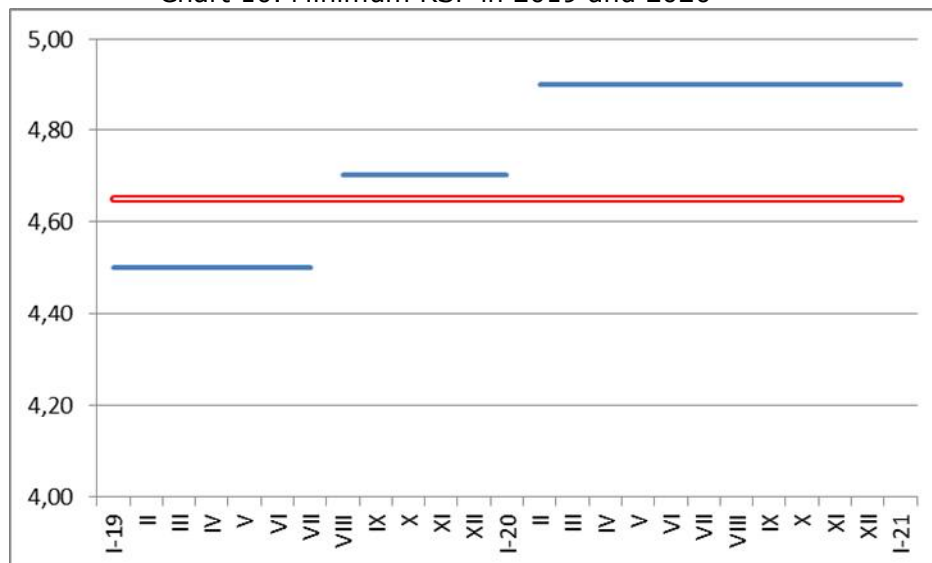
The high percentage of the increase in pre-tax price in the structure of WAP in 2020 is a cumulative result of the increase in cigarette prices and the fact that the specific excise duty on cigarettes remained at the level of 2019. However, the increase of pre-tax price is lower than the increase in WAP, because it indirectly caused an increase in the tax burden in the structure of the WAP in 2020. Namely, the increase in pre-tax price entails the growth of *ad valorem* excise and

VAT in the structure of WAP, whose calculation basis includes the pre-tax price. Since these are two successive fiscal years (2019/2020), it is unlikely that the cause of such a sharp rise in pre-tax price is the rise in input prices (raw materials - tobacco, labour, transport, energy, etc.), but it is also about the striving to increase profits / margins.

It can be seen from the above analysis the importance of the pricing policy of tobacco companies both for their business and for public revenues. It is surprising that companies have already increased retail prices in the first year of the period after the harmonization of excise duties, when there was no increase in specific excise duties, although this has been the reason for the drop in legal demand for cigarettes for years. An even bigger surprise is that it was done with the cheapest brands. Thus, the group of legal consumers with the lowest incomes was stimulated to shift their purchases of tobacco and cigarettes on the black market. This is shown by the following data and calculations:

The lowest retail selling price (RSP) of cigarette pack in 2019 was 4,50 BAM in the period January - July 2019 (Chart 10). It should be noted that this price was below the expectations, when the new tax burden would be added to the lowest RSP from 2018. After price correction in mid-2019, the lowest RSP was increased to 4,70 BAM, slightly more than the expected RSP, so that at the annual level, the lowest RSP in 2019 was on average at the level of the expected 4,65 BAM. In the total amount of cigarette packs in 2019, the brands with the lowest RSP had a share of 21,4%. In 2020, the lowest RSP of cigarette pack in January was 4,70 BAM, and in other months 4,90 BAM (Chart 10). If we take into account that in 2020 there was no increase in specific excise duty, the lowest RSP should have remained at the level of 2019. The same lowest price was maintained in January 2021, but due to the increase in prices of other brands, the weighted average price in January 2021 was higher by 1,9% compared to December 2020.

Chart 10. Minimum RSP in 2019 and 2020



Although a higher RSP in the conditions of unchanged excise policy brings higher revenues (pre-tax price) for companies it is necessary to analyse more broadly. A comparison of the elements of the lowest RSP in 2019 and the lowest RSP in 2020 shows that an increase in the RSP of 4,3% brings revenue growth (pre-tax price) of 22,1% (Table 4). However, in order to assess the overall effects, it is necessary to compare the sales value (quantities x RSP) for the cheapest brands in both years. The increase of the lowest prices by 0,20 BAM per pack in 2020 reduced the sales of this category of cigarettes by 58,7%, which also reduced the total revenue (pre-tax price) of companies in that category by 9,1 million BAM. **In terms of collected indirect taxes, the**

shortfall in VAT amounts to 18,2 million BAM, and in excise revenues as much as 98,2 million BAM (Table 4).

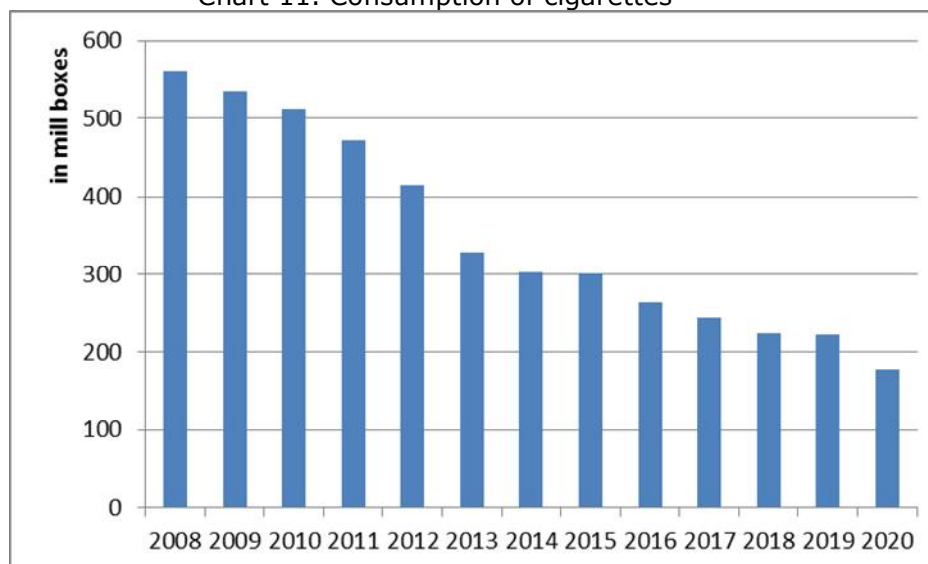
Table 4

Elements of RSP	min RSP 2019	min RSP 2020	change (in %)	change (in BAM)
RSP	4,70	4,90	4,3%	0,20
VAT	0,68	0,71	4,3%	0,03
ad valorem excise	1,97	2,06	4,3%	0,08
specific excise	1,65	1,65	0,0%	0,00
pre-tax price	0,39	0,48	22,1%	0,09
Effects:				
number of packs (in million)	46,9	19,4	-58,7%	-27,5
pre-tax price (million BAM)	18,4	9,3	-49,6%	-9,1
VAT (million BAM)	32,0	13,8	-57,0%	-18,2
Excises (million BAM)	170,0	71,8	-57,8%	-98,2

Consumption of tobacco products

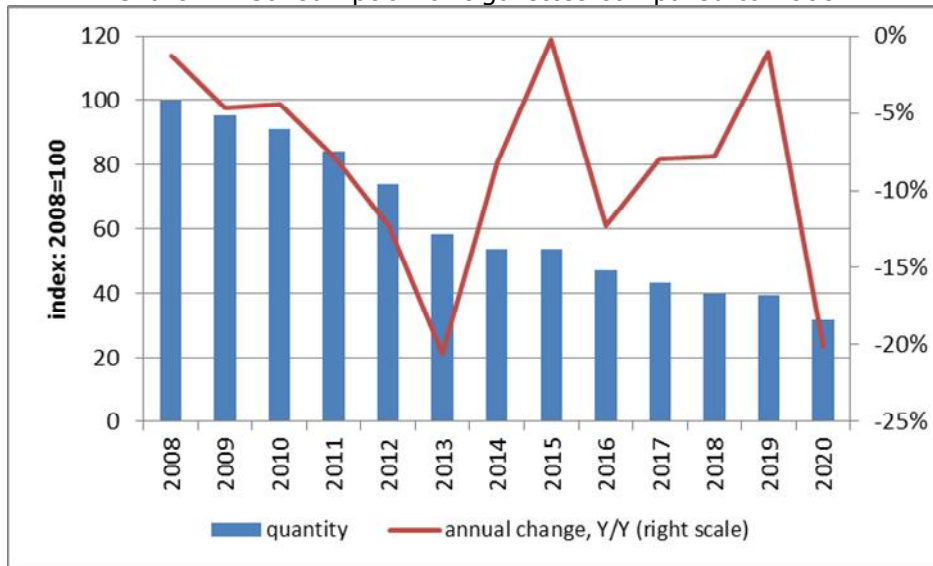
The continuous growth of retail cigarette prices in B&H since 2009 has resulted in a sharp decline in legal cigarette consumption¹¹ (Chart 11). In the first two years after introduction of the special excise tax, the cigarette consumption, measured by the number of issued excise stamps, decreased at a rate of 4,5% annually (Chart 12 - right scale).

Chart 11. Consumption of cigarettes



¹¹ For the purpose of analysis, cigarette consumption is measured by the quantity and structure of issued excise stamps.
Banja Luka: Bana Lazarevića, 78 000 Banja Luka, Tel/fax: +387 51 335 350, E-mail: oma@uino.gov.ba
Sarajevo: Zmaja od Bosne 47b, 71 000 Sarajevo, Tel:+387 33 246 081, Fax:+387 033 246 080, Web: www.oma.uino.gov.ba

Chart 12. Consumption of cigarettes compared to 2008



However, already in 2011 there was a serious deterioration of trends, which continued in 2012, and in 2013 there was a dramatic drop in consumption of 20,6%. Measures of the new excise policy stabilized the decline in cigarette consumption to 8,3% in just five months of implementation in 2014. However, the continued harmonization of the excise rate with EU standards already in 2016 brought a strong drop in cigarette consumption of 12,3%. In 2017, cigarette consumption in B&H decreased by 8% compared to 2016. The larger decline in consumption was mitigated by the increase in consumption of non-residents (diaspora, tourists), and cross-border and transit traffic of cigarettes and other goods in the summer season, driven by lower prices of oil derivatives compared to the neighbouring countries. The trend of stabilization of cigarette consumption was maintained in 2018 and 2019, regardless of the growth of retail prices due to the increase in the specific excise tax on cigarettes. In 2019, the consumption of branded cigarettes on the legal market amounted only 40% of the consumption in 2008. In 2020, there was a sharp decline in cigarette consumption of 20,1%, in the first place due to increased retail prices, and due to the negative impact of restrictive measures to prevent the transmission of the COVID-19 virus pandemic in B&H and the EU on cigarette consumption by locals and non-residents.

The continuous increase in excise duties on cigarettes has resulted in the substitution of cigarettes with smoking tobacco. Substitution escalated in 2013 when a serious decline in revenues from excises on cigarettes was recorded. The new excise policy of taxation of smoking tobacco from 2014 implied a drastic initial increase in excise duties on smoking tobacco, and continuous harmonization with excise duties on cigarettes in the coming years. The draconian increase in the tax on smoking tobacco has resulted in a large drop in the consumption of taxed smoking tobacco. Consumption of branded smoking tobacco in 2015 decreased by 89,4% compared to 2014. It is obvious that the large increase in retail prices of smoking tobacco and measures to combat the illegal production and sale of cigarettes have discouraged consumers from purchasing legal smoking tobacco, so they shifted to cigarette consumption. However, already in 2016, due to the increase in cigarette prices, the substitution of cigarettes with smoking tobacco became stronger, with the consumption of imported branded smoking tobacco leading the way. The amount of smoking tobacco increased by 31% compared to 2016, with the increase in the amount of imported tobacco of even 120%. An oscillating trend has been noticeable in the last four years. In 2017, a moderate increase in the quantities of smoking tobacco of 8,3% was recorded. This was, at the same time, the last year in which the increase of domestic tobacco was recorded. In 2018,

a decrease of 29,6% was recorded, in 2019 an increase of 17,1%, and in 2020 a decrease of 2,2%.

In recent years, after the completion of the privatization of the domestic tobacco industry, the structure of quantities of cigarettes and tobacco placed on the B&H market has drastically changed to the detriment of the domestic industry, whose production has been completely marginalized,¹² until complete disappearance.¹³

Chart 13. Dynamics of cigarette quantities

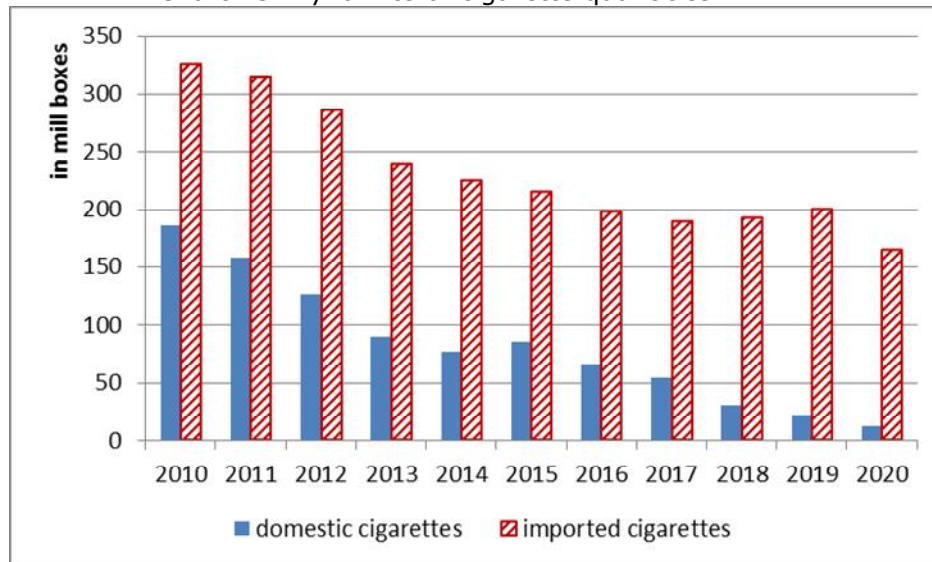


Chart 13 shows the structure of cigarettes placed on the market since 2010. There is a noticeable decrease in the quantities. However, the decrease in the quantities of imported cigarettes is nominally and relatively smaller than in the case of domestic cigarettes.

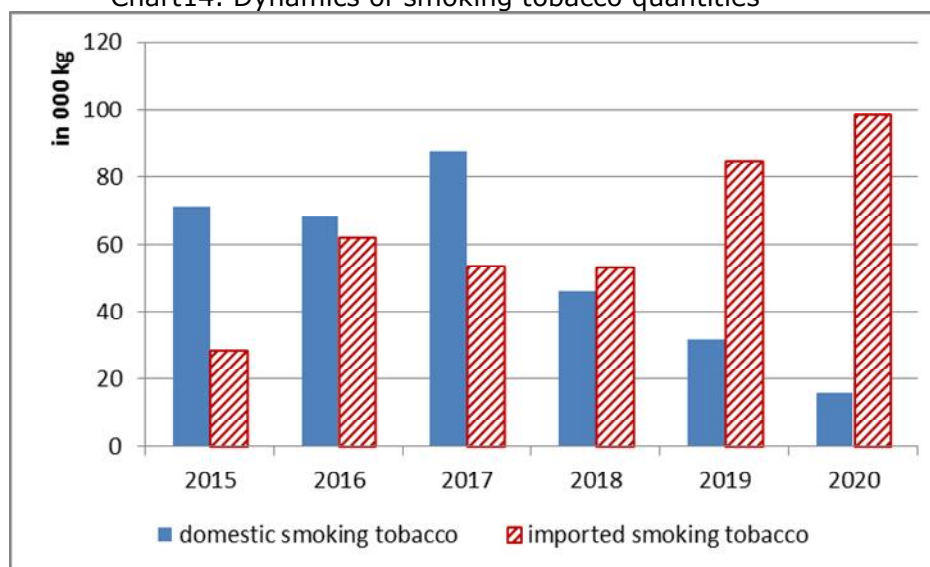
In 2020, the quantity of imported cigarettes corresponds to half of the number of imported cigarettes in 2010, while domestic cigarettes retained only 7% of their production in 2010. Nominally, the placement of domestic cigarettes on the market was lower by 173,6 million packs, and imported by 161,5 million packs. It can be concluded that imported cigarettes have completely absorbed domestic production until its disappearance.

Similar trends have been observed in the structure of smoking tobacco. At a time of strong tax evasion, prior to the changes in the Law, the domestic industry has focused on the sale of smoking tobacco. However, in the last four years, there has been a strong erosion of domestic tobacco production, on the one hand, and a strong increase in imports of smoking tobacco on the other (Chart 14). However, changes in the structure of the tobacco products market, which imply the increase in the smoking tobacco component, result in lower collection of excise revenues, due to a lower tax burden compared to cigarettes.

¹² FDS (Tobacco Factory Sarajevo)

¹³ Fabrika duvana u Banjaluci (Banja Luka Tobacco Factory)

Chart14. Dynamics of smoking tobacco quantities



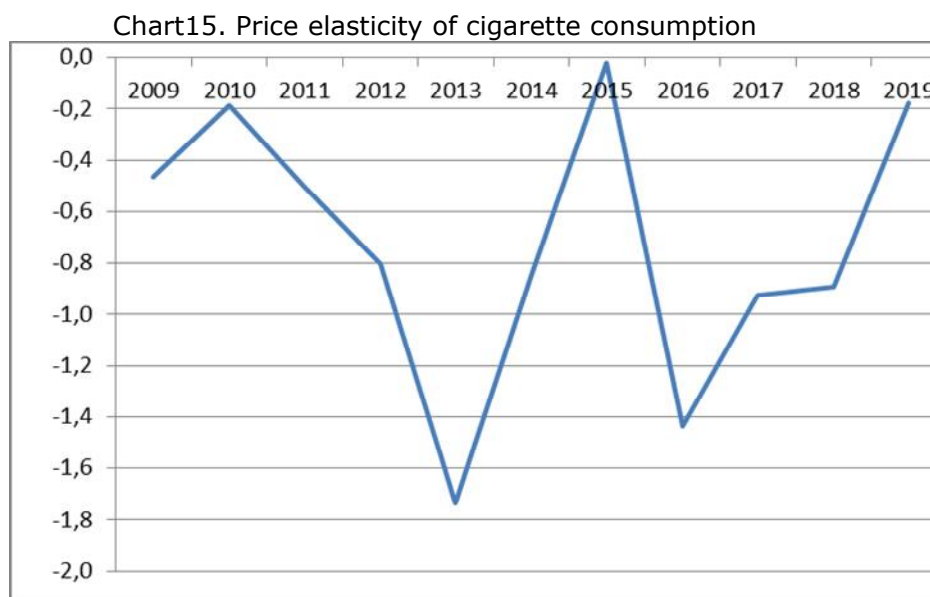
Data on the enormous growth of imported cigarette rolling paper, which can be used for machine production of cigarettes (in the form of rolls, booklets and tubes), indicate not only a large volume of substitution by manual rolling of cigarettes, but also a strong illegal domestic production of untaxed cigarettes. Imports of cigarette paper have been increasing, despite a sharp decline in domestic cigarette production. To illustrate, imports of cigarette paper in the form of booklets or tubes in 2020 exceed the imports in 2013, while domestic cigarette production in 2020 was only 14,4% of domestic production in 2013. An even more radical case is the import of cigarette roll paper, which doubled in 2020 compared to 2013. **The obvious discrepancy between the progression in the growth of cigarette paper imports and the declining needs of the domestic tobacco industry in terms of volume indicates not only the purchase of cigarette paper by individuals, but also illegal production cigarettes in B&H.**

Elasticity of cigarette demand

Based on researches by more than a hundred studies on the behaviour of cigarette consumption in the conditions of tax increases over the past fifty years, economists have concluded that in most countries the price elasticity of consumption was -0,4. On the other hand, the World Bank's analysis shows that the price elasticity of consumption is higher in less developed countries, and that in the case of cigarettes it ranges up to -0,8.¹⁴

In the initial years of harmonization of excise duties with EU standards, bearing in mind price inelastic cigarette consumption, the decline in cigarette consumption was within the projected framework. Despite the increase in the excise rate at the beginning of 2015, and contrary to the theory of elasticity in taxation and the results of researches in countries around the world, the rise in prices did not bring a decline in cigarette consumption. On the contrary, the consumption was almost completely inelastic (Chart 15). A similar situation was recorded in 2019, when, despite a price increase of 5,9%, consumption fell by only 1%. Due to the enormous decline in the volume of cigarettes in sales in 2020 of 20,1%, which is not correlated with the growth of prices of 4,9%, this year is not the reference year for calculating the elasticity.

¹⁴ More in: Antić, D., 2015. „Implications of the taxation of tobacco in the European Union in the period 2005-2014“. *Financial Theory and Practice*, 39(3) 279-304. Institute for Public Finance, Zagreb.



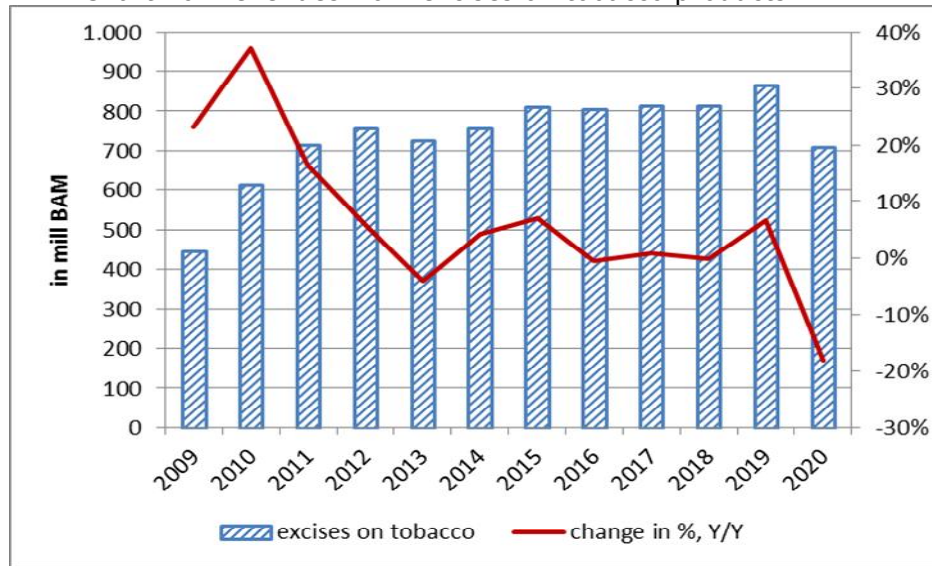
ANALYSIS OF EXCISE REVENUE

Trends

The erosion of cigarette consumption above expectations has also affected excise revenues. In the first years of excise harmonization, B&H recorded an enormous increase in revenues, which began to slow down in 2012, while in 2013 excise revenues fell by 4,1% (Chart 16). It can be concluded that in terms of the "endurance threshold"¹⁵ of consumers, 2013 was obviously a turning point. Substitution of cigarettes by tobacco only to a lesser extent compensated for significant losses in revenues from excises on cigarettes. Since only *ad valorem* excise duty was charged on other tobacco products (in the amount of 42% of the retail price of tobacco), the effects of the collection of excises on smoking tobacco were extremely modest. In 2012, 6,2 million BAM of excises were collected, and 28 million BAM in 2013, which was the historical maximum for this component of market. Although the new excise policy in 2014 has stabilized the cigarette market to some extent, and revenue growth of 4,3% was recorded, the collected excise revenues in nominal terms corresponded to the level of revenues from 2012, which was a historical maximum. Positive trends in the collection of excise duties have continued in 2015. There was a growth of 7,1%, and the total level of excise revenues exceeded the collection from 2012 by 53,2 million BAM (Chart 16).

¹⁵ A term related to the so-called Laffer curve.

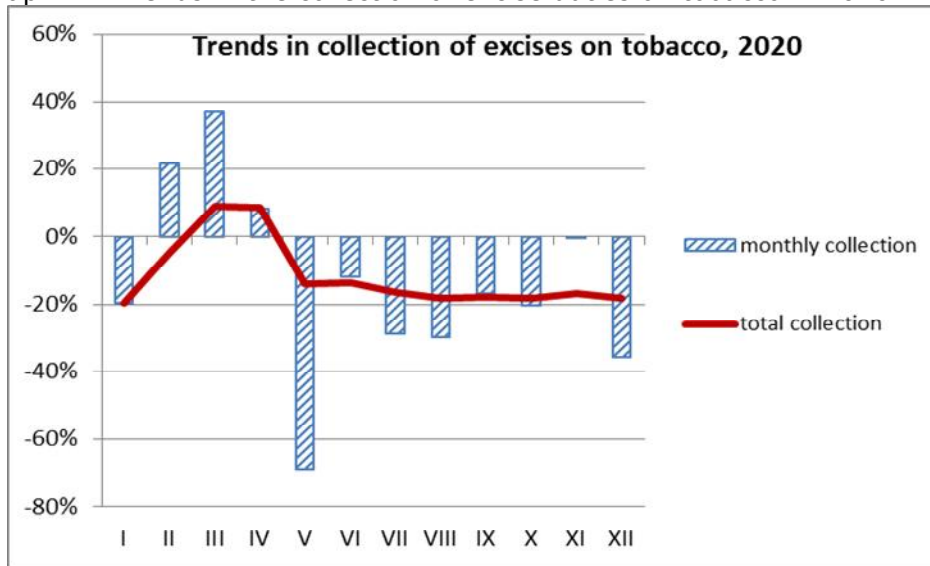
Chart 16. Revenues from excises on tobacco products



However, the effects of the new excise policy on revenue collection were exhausted as early as 2016. Under the pressure of increase in specific excise duty on cigarettes, and in conditions of slow growth of economy and aggregate consumption, strengthening the black market of tobacco and cigarettes had negative consequences for excise revenues, profitability of tobacco industry and the stability of the tobacco products market. These trends resulted in a drop in collected revenues from excises in 2016 of 3,8 million BAM. In the next two years, despite the continuous increase in the excise burden that resulted in the growth of retail prices of cigarettes, the collection of excise revenues was stable, slightly above the collection in 2015. In 2019, excise revenues grew by 6,5%, reaching a historical maximum in nominal terms. The revenue growth in that year is partly the result of the increase in consumption of non-residents (diaspora, tourists, cross-border consumption), as seen by the seasonal excise duty scheme where the summer months dominate, and partly of the takeover of more excise stamps before the end of that year. An incentive for such a policy was an increase in retail prices of cigarettes as of January 1, 2020. Tobacco companies took over a larger number of excise stamps to meet the expected higher demand for cigarettes at the old prices. Therefore, a part of the excise revenues expected in 2020 *de facto* shifted to fiscal 2019 year (Chart 16).

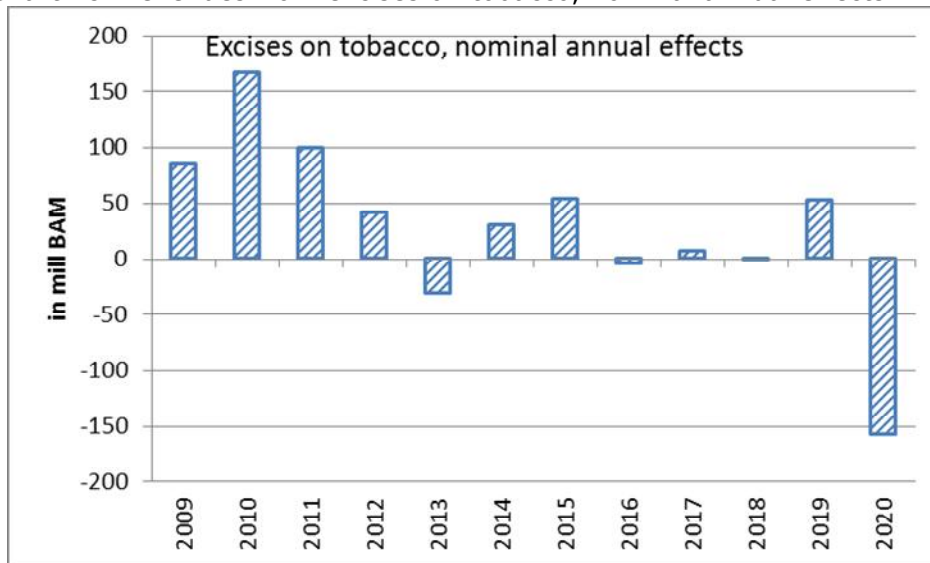
Given such a business policy, poorer collection of excises at the beginning of 2020 was expected. High monthly growth rates of excise collection were achieved in the next three months (Chart 17), which was surprising in the conditions of pandemic and restrictive measures that limited the entry of non-residents and travelling within B&H. However, it should be borne in mind that this is not about the actual consumption, because excise duties are paid *ex ante*, when taking over excise stamps, and the amount of excise stamps taken over, and thus the collection of excise duties, depends on the perception of large tobacco companies regarding future consumption of tobacco products in B&H. For this reason, in the first quarter of 2020, revenues from excises on tobacco products grew by 9%, while optimistic expectations regarding the outcome of the pandemic led to increased collection of excises in April. However, as the pandemic has continued in the following months, the drop in demand forced companies to adjust their business plans, which resulted in a drastic reduction in the number of issued excise stamps and consequently in drop in the collection of excises of 34,7% in the second quarter.

Graph 17. Trends in the collection of excise duties on tobacco in 2020



The consequences of entry restrictions for non-residents into B&H¹⁶ were catastrophic for the collection of excise revenues. Monthly rates of decline in excise collection in the third quarter ranged between -17% and -30%, causing a decline of 25,8% at the quarterly level. Negative trends have continued in the fourth quarter. After a solid collection in November, a recovery was expected in December. However, a new wave of pandemics and mass "locking down" of the EU member states prevented a huge arrival of non-residents in B&H during the holidays, which led to a drop in demand for cigarettes, and to a decrease in the collection of excises of 18,7% in the fourth quarter. Not even the announcement of an increase in retail prices of certain brands of cigarettes as of January 1, 2021 could not encourage consumer stockpiling, as had been the practice in previous years. Ultimately, the collection of excise duties on tobacco products in 2020 was lower by 18,2% compared to 2019. The loss in revenues was enormous, as much as 157,4 million BAM (Chart 18).

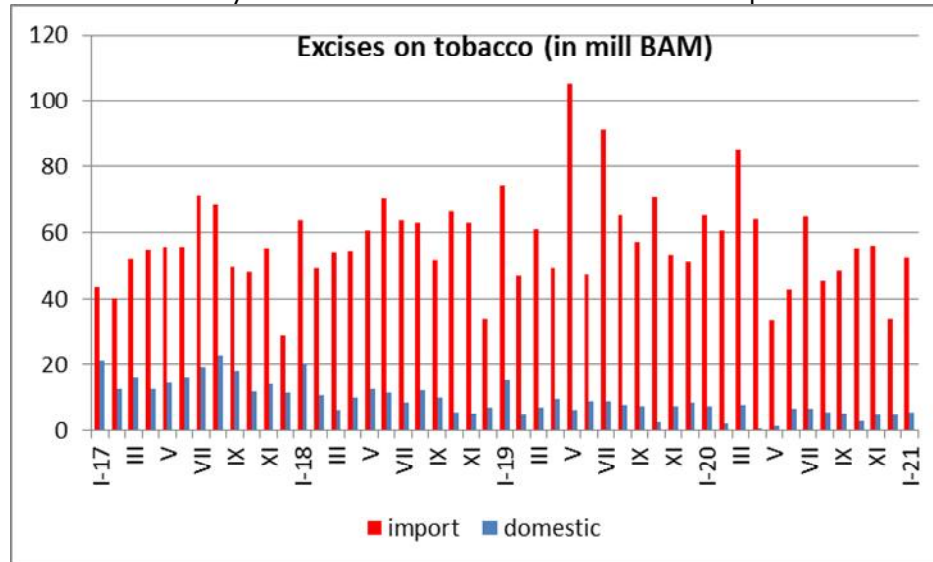
Chart 18. Revenues from excises on tobacco, nominal annual effects



¹⁶ Decisions of the B&H authorities regarding entry into B&H and EU decisions regarding the return of EU citizens from B&H
 Banja Luka: Bana Lazarevića, 78 000 Banja Luka, Tel/fax: +387 51 335 350, E-mail: oma@uino.gov.ba
 Sarajevo: Zmaja od Bosne 47b, 71 000 Sarajevo, Tel:+387 33 246 081, Fax:+387 033 246 080, Web: www.oma.uino.gov.ba

Bad trends have continued in January 2021. The growth of retail prices of certain brands of cigarettes and the overall circumstances related to population movements resulted in a decline in revenue collection of 19,8% (Chart 19).

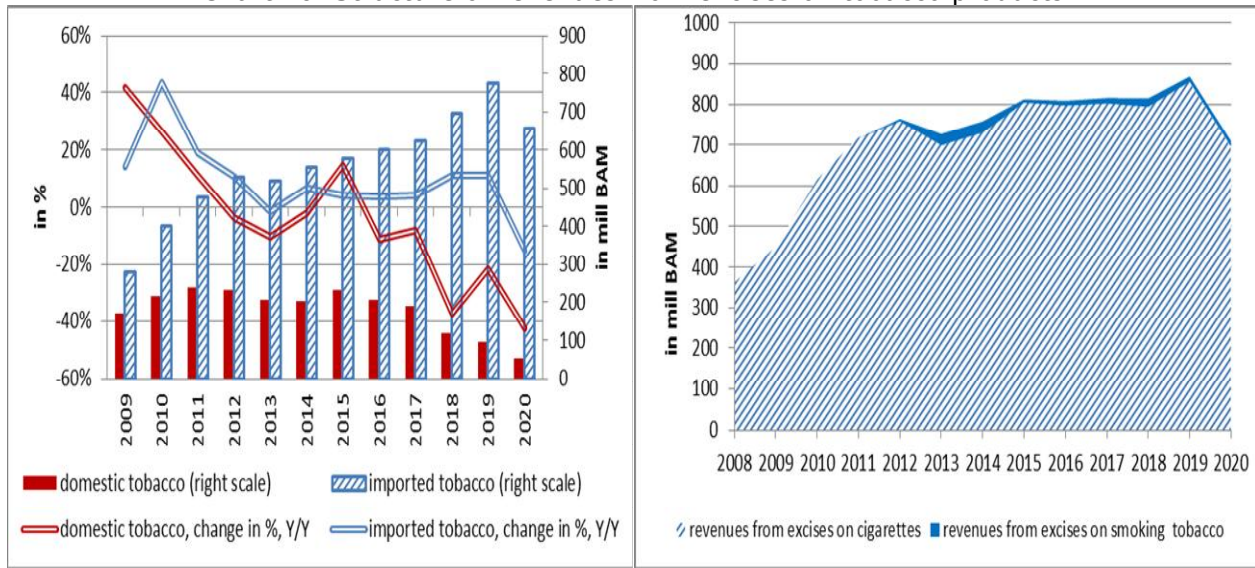
Chart 19. Monthly collection of excise duties on tobacco products



Revenue structure

The analysis of the structure of collected revenues from excises indicates a growing trend in collected excises on imported products, and a decrease in collected revenues on domestic tobacco products (Chart 20, left). If we analyse the structure of revenues from excises (domestic / import companies) in 2015, as a turning point, we come to the conclusion that domestic excises in 2015 grew by 14,7%, while import excises grew by 4,3% compared to 2014. However, if the collection is compared with 2012, the situation is reversed: domestic excises grew by only 0,9%, and import excises by 9,7%. In the structure of excise revenue loss in 2013 of 31,3 million BAM, the share of domestic companies was as much as 70%, which was disproportionate to their share in the collected revenues, which amounted to about 30%. It can be concluded that the domestic industry was more affected by the trends in the tobacco products market, than the importers. In addition to lower business efficiency, which does not leave much space for the maneuver with retail prices, the reason was the change in policies of domestic industry, which under the pressure of current trends has shifted the focus from cigarettes (which bring higher added value, and thus tax revenue) to tobacco. Compared to 2012, out of 53,2 million BAM of additional revenues collected in 2015, only 2,1 million BAM referred to domestic companies, and to import companies everything else.

Chart 20. Structure of revenues from excises on tobacco products



The final privatization of domestic industry brought a complete collapse of domestic production, and thus the collection of excises on domestic tobacco products. The total collected excises on domestic tobacco products in 2020 was about 40 million BAM lower than in 2019, amounting only 22,5% of the collection from 2011. This means that the losses of revenues from excises on domestic tobacco amounted to one quarter of total losses of revenues. On the other hand, despite large losses, the collection of excises on imported products was 5% higher than in 2017. **It is obvious that importers carried out their market expansion in B&H at the expense of the domestic tobacco industry.** However, the recomposition within the market has its limits, which correspond to the complete elimination of domestic production.

For the analysis of the effects of the new excise policy measures, the analysis of the structure of excise revenues by type of tobacco products is also important (Chart 20, right). Before the escalation of tax evasion, the share of excise revenues on smoking tobacco was negligible, amounting 3,9% in 2013. Excise policy measures have led to a decrease in revenues from excises on smoking tobacco. In 2014, the share of these revenues in total excises was reduced to 3,7%, and in 2015 to only 1%. The increase in the excise burden of cigarettes in the next two years has encouraged the use of smoking tobacco, despite the fact that the excise burden of this group of tobacco products has also been increasing every year, in accordance with the new policy. In the next three years, high growth rates of revenues from excises on smoking tobacco were recorded, but in nominal terms significantly lower than in 2013. In 2019 and 2020, only about 13-14 million BAM of excise duties were collected, which is only half of the amount collected in 2013.

Significance of excise revenue

Excises on tobacco products are a generous source of budget revenues in all economies. In B&H, revenues from excises on tobacco accounted for 7-8% of total indirect taxes until the implementation of the new Law on Excise Duties. The beginning of harmonization with EU standards has led to an increase in the significance of revenues from excises on tobacco.

The growth of revenues from excises on tobacco products in the first years of harmonization with EU standards increased their share in the indirect taxes to a maximum of 15,4% in 2015. In 2019, in which the highest amount of revenue was collected so far, the share was 13,3%. It can be concluded that revenues from indirect taxes have grown faster in recent years than the collection of excises on tobacco products, and the main reason was the increase in the rate of earmarked road tax as of February 1, 2018. In 2020, the share of revenues from excises on tobacco products fell to only 12%, indicating much larger decline than in other tax groups (Chart 21, left). The share of excises on tobacco depends not only on the collection of excise duties, but also on the growth rate of other revenues, primarily VAT, which increase the basis for comparison. If the related VAT revenues collected on tobacco products are included, **the share of revenues collected from cigarettes and tobacco consumers in total indirect tax revenues in B&H in the period 2011-2016 was 18-19%** (Chart 21, left, "excises + VAT").

Chart 21. Revenues from taxes on tobacco products as % of indirect taxes (left) and % of GDP (right)



Source: GDP data –Agency for Statistics of B&H; GDP estimates for 2020 - Directorate for Economic Planning, September 2020

With the increase in road tax revenues, this share dropped to 16%, and in 2020 to 14,9% of total indirect taxes. Measured in % of GDP, the excise burden on tobacco products increased from 1,4% of GDP in 2008 to a maximum of 2,7% of GDP in the period 2012-2015. In 2019, the excise burden amounted to 2,4% of GDP, and in 2020 only 2% of GDP (Chart 21, right). The total share of tobacco taxes (excise + VAT) in the tax structure measured as % of GDP ranged from a maximum of 3,5% of GDP in 2012 to a minimum of 2,6% in 2020 (Chart 21, right, "excise + VAT").

FACTORS OF THE COLLECTION OF EXCISES ON TOBACCO PRODUCTS

Given the growing importance of oscillations in excises on tobacco, the collection of this type of excise not only determine the effects of indirect tax revenue collection by the ITA and the fiscal balances of all levels of government in B&H, but also determine the seasonal pattern of indirect tax revenue collection and the pattern of budget financing. Given that the tobacco market in B&H is basically held by only a few large companies, which pay approximately 1 billion BAM of indirect tax revenues annually, it can be concluded that the collection of indirect tax revenues and budget financing dynamics largely depend on their business decisions. The analysis showed that **the stabilization of taxation policy, however, is not crucial for the stability of the collection of revenues from indirect taxes because of the unpredictable policy of companies.** The impossibility of predicting business decisions of companies in the conditions of continuous increase in taxes on cigarettes and tobacco brings a high degree of uncertainty in the projections of revenues from indirect taxes and budget projections of all levels of government. The erosion of revenues from excises on tobacco products was influenced by several factors:

i. Harmonization of excise duties with EU standards

Tobacco taxation policy must be placed in the context of the European path of B&H, as it is an integral part of the *acquis*. A major problem for alignment with the *acquis* is the fact that the minimum rates of excise duty in the EU were far above the rates in B&H at the time of drafting the new Law in B&H. To assess the effectiveness of the process of harmonization of excise duties on tobacco products with EU standards, it is necessary to keep in mind three facts.

First, unlike most other conditions related to the harmonization of legislation, including harmonization with the VAT Directive, the harmonization of excise policy is far more difficult. Due to the importance of excise revenues for the fiscal stability of the country, a sharp increase in excise rates may produce macroeconomic turbulence in the country. For that reason, the new EU member states¹⁷ have been harmonizing for many years (7-10), balancing the need for the increase in excise duties with the increase in other tax rates (VAT, etc.). For example, Slovenia¹⁸ had adjusted its excise tax rate twice a year in order to reach the agreed minimum tax rate by the time of joining the EU.

Secondly, it is necessary to place the harmonization of excise duties in the context of the "broader picture" of the European path. Harmonization of excise policy is just one of the many conditions on the European path of B&H. At the time of the decision to start the process of harmonization of excises on tobacco products, it was expected that B&H would become a member of the EU in ten years at the latest. It was also expected that other necessary reforms would be implemented in parallel, which would enable the country's economic growth and inclusion in the EU funding, which would neutralize effects of the increase in the excise burden on revenue collection. However, a gap in the implementation of policies has appeared- there was an unexpected stagnation, and even a blockade of the European path, while, on the other hand, excise duties on tobacco products had been continuously harmonized. The successful harmonization of excises on tobacco products in Slovenia indicates that these are related reforms. In parallel with other reforms, Slovenia started harmonizing excise duties on tobacco products on July 1, 1999, and every six months until January 1, 2004 increased its excise duties on tobacco products to the agreed level. After joining the EU, in the period from July 1, 2004 to January 1, 2008, Slovenia has been increasing excise taxes once a year (July 1) in order to reach the minimum in the EU of that time. So, it was a period of five years of harmonization before joining the EU and four years of harmonization after joining the EU, or totally nine years. If we keep this in mind, then it can be concluded that the

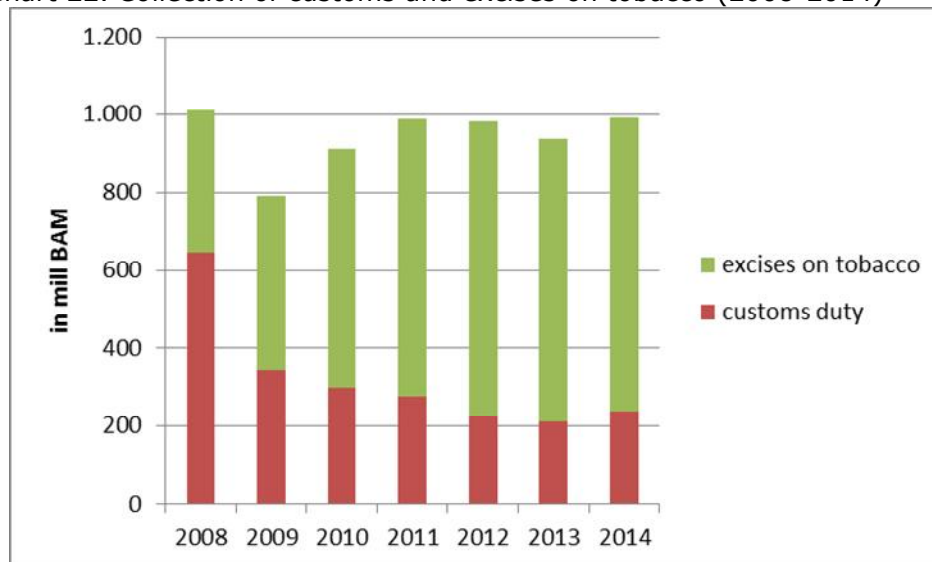
¹⁷ These are the ten countries that joined the EU in 2004, Bulgaria and Romania that joined in 2007 and Croatia that joined in 2013.

¹⁸ Zakon o trošarinah (uradno prečišćeno besedilo) (ZTro-UPB2), <http://www.pisrs.si/>

ten-year period of harmonization in B&H (July 1, 2009 - January 1, 2019) corresponds to the dynamics of harmonization in Slovenia. However, other reforms from the European path of B&H have failed, which has had a negative consequences for excise revenues.

Third, the harmonization of excise duties with the EU standards was necessary in order to neutralize the negative effects of the trade part of the Stabilization and Association Agreement with the EU on indirect tax revenues, which brought the gradual abolition of customs duties on many EU imports in the period from July 1, 2008 to 2013. It should be borne in mind that the implementation of the SAA began at a very bad time, because the whole world, including B&H, was affected by the global economic crisis in the fourth quarter of 2008, which had full swing in 2009. Chart 24 shows the rapid pace of decline in revenues from customs duties, especially in 2009. Due to the fact that the new Law has been applied as of July 1, 2009, the growth of excises on tobacco products in that year compensated only 28% of the loss of customs revenues in 2009 compared to 2008. The losses of customs revenues were compensated by the increase in tobacco excise revenues only in 2014 (Chart 22).

Chart 22. Collection of customs and excises on tobacco (2008-2014)



ii. Adapting other actors to the process of harmonization of excises with EU standards

When analysing implications of the harmonization of excise duties, another key player must be taken into account - the tobacco industry, and in the case of B&H, the domestic industry. Namely, the domestic tobacco industry had to adapt to the new circumstances, because the dynamics of the increase in the excise burden was predictable, legally defined. After the introduction of VAT in 2006, the tax burden on cigarettes (17% of VAT) was lower than at the time of sales tax (20% of sales tax), which yielded extra profits that needed to be invested more efficiently, more through vertical expansion (from tobacco production to distribution), than by horizontal diversification of business, by entering into other activities. Better use of the internal economy, more rational and efficient investments in the main production activity and turning to domestic tobacco producers could partially neutralize the increase in tax duties as of 2010.

The stimulation of domestic tobacco production by the state would also play a significant role, which would preserve domestic production and help the domestic tobacco industry to overcome the shocks due to the increase in excise duties. As all of the above was missing, the consequences

in the form of the growth of the black market of cigarettes and tobacco, a dramatic reduction in domestic cigarette production and a decline in the collection of excise revenues were inevitable. Finally, better cooperation of state institutions and coordination of activities of agencies of all levels of government (tax, police, inspection) to combat the black market is always one of the important preconditions for stable collection of revenues from excises on tobacco products.

iii. Cigarette sales structure

In recent years, there has been a strong dependence of the collection of excise duties on tobacco products on the consumption of non-residents. There are several subgroups:

- diaspora, which visits relatives in B&H most often in summer and during religious and New Year's holidays
- tourists, who are increasingly visiting B&H (religious, winter / summer tourism)
- tourists in transit to the Adriatic Sea
- cross-border consumption, most often in the zones towards Croatia
- small-scale consumption of persons living right next to the border with B&H.

It should be borne in mind that a significant part of domestic consumption of tobacco products has so far been financed indirectly from remittances from abroad.

iv. Population emigration

Liberalization of the labour market in Germany and some other developed EU members has caused the process of emigration of the working population from B&H, and then of entire families. According to EUROSTAT data, the number of issued residence permits to B&H citizens has been growing exponentially in the last few years (Table 5). According to EUROSTAT data, the main reason for issuing residence permits in the EU in 2018 was work (33.229 or 61% of all permits), and the rest was schooling, family reunification, etc.

Table 5. Number of residence permits issued for the first time to B&H citizens

	2015	2016	2017	2018
annual migration	20.845	27.334	37.344	54.107
cumulative	20.845	48.179	85.523	139.630

Source: EUROSTAT (Domazet, A., Domljan, V., Peštek, A., Hadžić, F. (2020). "Održivost emigracija iz Bosne i Hercegovine", (*Sustainability of emigration from Bosnia and Herzegovina*). Friedrich Ebert Stiftung. Sarajevo, <http://library.fes.de/pdf-files/bueros/sarajevo/16523.pdf>)

If we assume that all persons have retained at work in the following years, this figure becomes dramatic (Table 5, "cumulative"), especially if the same trend have continued in 2019, in terms of the number of permits issued for the first time (up to and including 2019: a total of about 200.000 permits, of which about 120.000 for work). We assume that there were no major emigrations in 2020, due to the pandemic. Since these are younger people, such a process inevitably affects the consumption of tobacco products. If we take into account **that only 10% of working-age people** who left B&H consumed 1 pack of cigarettes per day in B&H, assuming that it is the cheapest brand whose retail price is 4,50 BAM per pack, **the annual loss in revenues would be 18,4 million BAM** (loss in revenues from excises of 15,5 million BAM, and in related VAT of 2,9 million). Since this is a much larger number of people who left B&H because of work, the loss in revenues is far greater. In previous years, the loss was partially offset by the consumption of our workers during their visits to B&H, but due to the closure of borders caused by the pandemic, revenue losses were the largest in 2020.

v. COVID-19 Pandemic

The outbreak of the COVID-19 virus pandemic had a negative impact on the collection of revenues from excise duties on tobacco products in 2020, and due to uncertainty regarding its duration, negative effects will also be recorded in 2021, and probably next year as well. The impact of the pandemic on excise revenues on cigarettes was multiple:

- Restrictive measures taken by the B&H authorities to prevent the spread of the pandemic have affected the private consumption of citizens. Falling incomes and employment of the population, reduction of remittances from abroad, and fear of uncertainty regarding the duration of the pandemic are limiting factors of the increase in consumption of tobacco products;
- Appearance of the COVID-19 virus has strongly affected the consumption of non-residents. Closure of the borders and travel restrictions, both in B&H and in neighbouring countries and EU member states, have drastically reduced the inflow of non-residents, while the economic crisis, as a result of closing economies, has brought a reduction in remittances, which then caused a reduction in private consumption in B&H, including legal consumption of tobacco products;
- The pandemic has directly affected the consumption of tobacco products as it mostly affects the respiratory system. Due to the large number of patients, revenue losses are significant. Given the fact that the pandemic has affected middle-aged and elderly citizens the most, it can be assumed that half of them were smokers before the pandemic. If we assume that it is about 50,000¹⁹ citizens who refrained from smoking for at least 60 days due to illness, and that before the pandemic they smoked one box of the cheapest cigarettes (of 4,5 BAM) per day, revenue losses amount approximately 12,6 million BAM in 2020 (loss in excises of 10,6 million BAM and in VAT of 2,0 million BAM). Longer sick leave, higher consumption than one pack per day, previously consumed the more expensive cigarettes, or smoking cessation would certainly further increase the loss in revenues.

vi. External constraints of consumption

In 2021, it is realistic to expect a further decline in cigarette consumption by non-residents due to worsening restrictions for third-country nationals regarding the inflow of tobacco products into the EU, which has been reduced from 10 packs of cigarettes to a lower limit of 2 packs per person, without paying VAT and excises. Croatia applies the same restrictions to cross-border purchases of its citizens in B&H, while Croatian citizens living in a zone up to 15 km from the border can bring in 25 cigarettes a day.²⁰ This restriction will significantly reduce the "export" of cigarettes purchased in B&H by the diaspora, tourists returning to their country of residence, tourists in transit, B&H citizens working in the EU and other non-residents leaving B&H, and thus the collection of excise duties.

¹⁹ Number of people infected with coronavirus in B&H on December 31, 2020 amounted to 111.642. Source: Ministry of Civil Affairs of B&H, <http://mcp.gov.ba/publication/read/epidemioloska-slika-covid-19?pageId=3>.

²⁰ Source: Rool book on exemption from value added tax and excise duties on goods imported in the personal luggage of persons traveling from third countries and on goods imported as a small consignment of non-commercial significance, Official Gazette 146/2020

CONCLUSIONS AND RECOMMENDATIONS

The analysis of policy, market trends and revenues from the taxation of tobacco products in the period 2009-2021, with a focus on 2020, showed the following:

- stagnation has been noticeable in the last few years, and in 2020 a huge decline in the collection of revenues from excise duties on cigarettes;
- the continued increase in the tax burden on cigarettes has resulted in a significant decline in the legal market and strong growth in the black market in tobacco products;
- the process of harmonization of excise duties in B&H with the current EU minimum standard was completed in 2019, and in 2020 and 2021 there was no increase in excise duties on cigarettes;
- regardless of the completion of the harmonization process, tobacco companies increased retail prices of cigarettes in 2020, which they did not adjust downwards even when there was a catastrophic decline in cigarette sales;
- tobacco companies have continued to increase the retail prices of cigarettes in 2021, despite the decline in sales in 2020 and the fact that the specific excise tax on cigarettes remained at the level of 2019;
- the structure of cigarette sales in B&H largely depends on the external demand of non-residents, which at the time of the pandemic proved to be a weak point in the collection of excise duties and total indirect taxes;
- emigration of the working population and family members from B&H negatively affects both the collection of excises on cigarettes and the total collection of indirect taxes;
- uncertainty about the duration of the COVID-19 virus pandemic delays the recovery of consumption and thus the collection of excise revenues;
- external constraints of consumption imposed by neighbouring countries and EU member states, regarding cross-border movements and restrictions on the amount of cigarettes imported into the EU, will have a negative impact on the recovery of part of cigarette sales to non-residents.

There are two opposing ideas regarding the taxation of tobacco products in the public. The first is to reduce excise duties on cigarettes, in order to reduce black market, and the second is to allocate part of the excise revenues to health funds, in order to mitigate the negative effects of smoking on the health of citizens (so-called negative externalities) and health funds. The second idea is based on additional taxation of tobacco products, because it is not possible to redirect the current collection of excises to health funds. Namely, revenues from excises on tobacco products, together with VAT and other indirect taxes, have so far served exclusively to finance the budgets of all levels of government in B&H, and their possible shifting to health funds would jeopardize the financing of regular budget expenditures.

When it comes to the option of reducing excise duties on cigarettes, it should be **noted that there are no guarantees that tobacco companies will reduce retail prices of cigarettes after reducing the rate of excise duties**. That this is the practice is shown by studies on reducing VAT rates conducted in the EU. In addition to the experiences in the EU, B&H has its own experiences regarding the behaviour of taxpayers in a situation when tax rates are reduced, namely the taxpayers of tobacco companies. We have two examples from the recent past.

The first example is the introduction of VAT, whose rate (17%) is 3 percentage points lower than the sales tax rate on excise products that was in force until 2006 (20%). Although the difference

in taxation was significant, it did not affect the pricing policy of tobacco companies that did not reduce the retail prices of cigarettes during the period 2006 – July 1, 2009.

Another example is the increase in retail cigarette prices in 2020 and 2021, although the rate of specific excise duty on cigarettes remained the same as in 2019. Even the outbreak of pandemic and, consequently, the catastrophic decline in cigarette sales, could not influence companies to return prices to 2019 levels. The analysis showed that policy of increasing the prices of the cheapest category of cigarettes contributed the most to the loss of excise revenues in 2020 (see Table 4). Although the price increase was not the only factor that has led to a sharp decline in cigarette sales in 2020 and excise revenues, it cannot be ignored because these are the cheapest cigarettes consumed by people with the lowest incomes, whose existence in 2020 was even more seriously threatened by restrictive measures taken by the authorities to combat the pandemic. Prices have also been increased to a lesser extent for certain brands of cigarettes in 2021, despite the uncertainty and risk for sale and business brought by the pandemic.

The idea that B&H should follow the practice of Montenegro, regarding a reduction in excise duties on cigarettes is often repeated in the public, without a deep analysis. The analysis shows that Montenegro has been implementing a new taxation policy since 2014, which implies a gradual increase in the specific excise duty on cigarettes and a reduction in the *ad valorem* excise duty on cigarettes by 2024. This policy of recomposing the structure of excise duties on cigarettes should reduce the impact of prices on the variation of excise duty collection.²¹ This is, at the same time, in line with the practice of some member states that recompose the structure of excise duties in favour of a specific excise tax, provided that the total excise tax follows EU standards. According to the prescribed dynamics, in 2024, cigarettes in Montenegro will be taxed with a specific excise tax in the amount of 47,50 EUR per 1000 pcs (in B&H it is EUR 42,20 per 1000 pcs) and by *ad valorem* excise tax of 24,5%.²² However, it is necessary to look at the taxation policy even more broadly, because Montenegro has compensated the possible loss in excise revenues by a higher VAT rate, which was increased from 19% to 21% in 2018. What can be noticed is the ten-year dynamics of harmonization of excise duties with the minimum EU excise tax.

In any case, the effects of the reduction of excise duties in B&H would be questionable at this time, and the political repercussions in terms of the continuation of European integration would be extremely unfavourable. In addition, it is necessary to always keep in mind the demands of the health sector and the opinions of the World Bank on the effectiveness of high taxes to discourage citizens from smoking, and, on the other hand, to intensify activities to combat the black market.

Finally, **the analysis of the factors of poorer collection of excises on tobacco products in 2020 indicates that not all the loss in the consumption of legal cigarettes ended up on the black market.** The large part resulted from the following factors that have significantly reduced the legal consumption of cigarettes:

- a large number of people who were smokers infected by coronavirus;
- emigration of the working population from B&H;
- tightening restrictions on the export of cigarettes from B&H to the EU.

The last two factors result in a permanent loss of legal consumption of cigarettes, and thus the collection of excise and VAT revenues. At the same time, these factors will determine the consumption of cigarettes in B&H in the coming years.

²¹ We have an example of that in B&H. From the calculation in Table 4, it could be concluded that the increase in prices in 2020 in the conditions of unchanged tax policy still increased the tax burden of a pack of cigarettes, since the retail price including taxes represents the tax base for VAT and *ad valorem* excise.

²² Source: Law on Excise Duties, consolidated text, Ministry of Finance and Social Welfare, Directorate for issuing approvals for the production, processing and trade of tobacco products, <http://www.aduvan.co.me/>.

Trade of goods and services for 2020

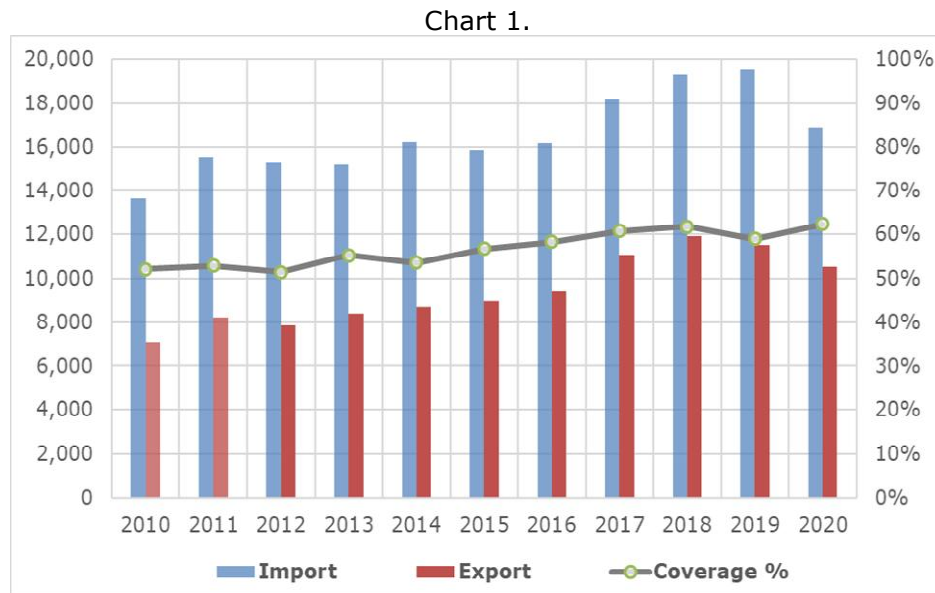
(Author: Mirjana Popovic, expert advisor -macroeconomist)

The analysis of trade in Bosnia and Herzegovina (hereinafter: B&H) with other countries for 2020 represents a continuation of the analyzes published in previous issues of the Unit's bulletin. The analysis presents the main trends in total foreign trade, trends in trade to the most important foreign trade regions (EU²³, CEFTA²⁴, EFTA²⁵, Asian developing countries), trends in trade to the most important foreign trade partners, as well as trends in trade by type of products.

1. Main trends in foreign trade

In 2020, B&H recorded a decline in the volume of foreign trade. Exports decreased by 8.5%, while imports decreased by 13.4% compared to 2019. The coverage of imports by exports is 62.3% and is higher by 3.3 p.p. compared to the same period last year.

Chart 1 shows the trends in B&H foreign trade for the period 2010-2020. The values of imports and exports in millions of BAM (left vertical scale) and the percentage values of the coverage of imports by exports (right vertical scale) for the observed period are presented.



Source: Agency for Statistics of B&H, MAU review

The decrease in exports and imports resulted in a reduction of the foreign trade deficit in 2020 of 20.4% compared to 2019. The reduction of the foreign trade deficit cannot be viewed on the positive side because imports have been reduced due to extraordinary circumstances. Due to the measures taken to combat the spread of coronavirus, the reduction of the foreign trade deficit is a consequence of the decline in overall foreign trade activity.

Chart 2 shows the quarterly movement of imports and exports, and the coverage of imports by exports in the period from the first quarter of 2010 to the fourth quarter of 2020 (I-III 2010 - X-XII 2020). The values of imports and exports in millions of BAM (left vertical scale) and the

²³ European Union

²⁴ Central European Free Trade Agreement - CEFTA (Albania, B&H, Montenegro, Northern Macedonia, Moldova, Serbia and UNMIK / Kosovo)

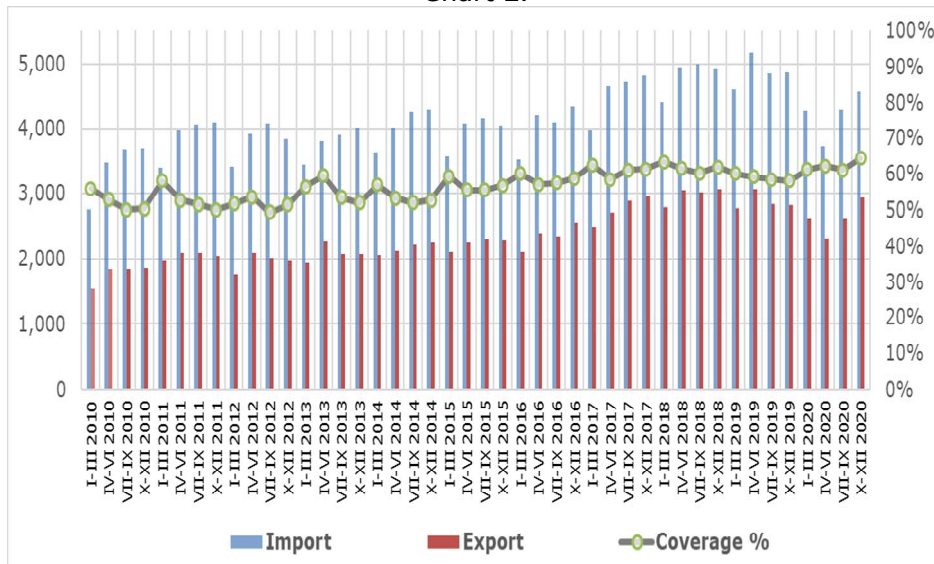
²⁵ European Free Trade Association uniting the markets of Switzerland, Norway, Iceland and Liechtenstein

percentage values of the coverage of imports by exports (right vertical scale) for the observed period are presented.

Until 2020, the lowest seasonal oscillations in the volume of foreign trade are observed at the beginning of the year, i.e., in the first quarter of each year. However, in 2020, the introduction of measures to combat the coronavirus pandemic in early March, and the maintenance of the introduced measures during April and May, caused the most significant reduction in imports and exports in the second quarter.

Thus, in 2020, in the second quarter, a smaller volume of foreign trade was recorded compared to the first quarter, which differs from the recorded trend of previous years. After the mitigation, i.e. "relaxation" of measures, in the third quarter there was a slight increase in the volume of foreign trade, and imports and exports were recorded at the level of the first quarter. In the fourth quarter, the volume of foreign trade increased, where compared to the third quarter, imports increased by 6.1% and exports increased by 11.9%. If we compare the fourth quarter with the second quarter of 2020, when due to the pandemic, the volume of foreign trade was extremely low, imports increased by 22.3%, while exports increased by 26.6%.

Chart 2.



Source: Agency for Statistics of B&H, MAU review

Table 1 shows the percentage of increase / decrease in foreign trade on a monthly basis for 2020 compared to 2019.

Table 1.

	Jan 2020 / Jan 2019	Feb 2020/ Feb 2019	Mar 2020/ Mar 2019	Apr 2020/ Apr 2019	May 2020/ May 2019	June 2020/ June 2019	July 2020/ July 2019	Aug 2020/ Aug 2019	Sep 2020/ Sep 2019	Oct 2020/ Oct 2019	Nov 2020/ Nov 2019	Dec 2020/ Dec 2019	2020/ 2019
Export	0.0	-0.3	-14.2	-32.7	-28.3	-10.8	-13.1	-8.2	-0.7	0.6	-1.8	14.8	-8.5
Import	-4.4	1.2	-16.3	-35.2	-34.6	-11.9	-13.4	-14.4	-5.7	-6.3	-10.2	-2.3	-13.4
Volume	-2.6	0.6	-15.6	-34.3	-32.3	-11.5	-13.3	-12.2	-3.8	-3.7	-7.0	3.7	-11.6
Coverage	4.5	-1.5	2.5	3.9	9.5	1.3	0.4	7.2	5.3	7.4	9.3	17.4	5.7
Deficit	-12.9	3.4	-19.0	-38.9	-42.8	-13.7	-13.9	-22.0	-14.1	-16.4	-23.2	-22.0	-20.4

Source: Agency for Statistics of B&H, MAU review

The table shows that global and national virus control measures have led to a decline in activity and consumption in the country, which has resulted in a decline in the total volume of foreign

trade. Due to the closure of borders, in March there was a significant decline in imports and exports compared to the same period of previous year. March officially marks the beginning of a natural disaster caused by the Covid-19 pandemic in B&H. The largest decline in exports and imports was recorded in April and May when pandemic control measures were most rigorous. After a slight "relaxation" of measures in June, there was a slight decrease in the volume of foreign trade. The same trend continued on a monthly basis in the second half of 2020, after which a positive trend in the volume of foreign trade was recorded at the end of the year, i.e. in December 2020, compared to December 2019.

Table 2 shows the percentage of increase / decrease in foreign trade at the quarterly level for all four quarters of 2020, and in relation to the same period in 2019.

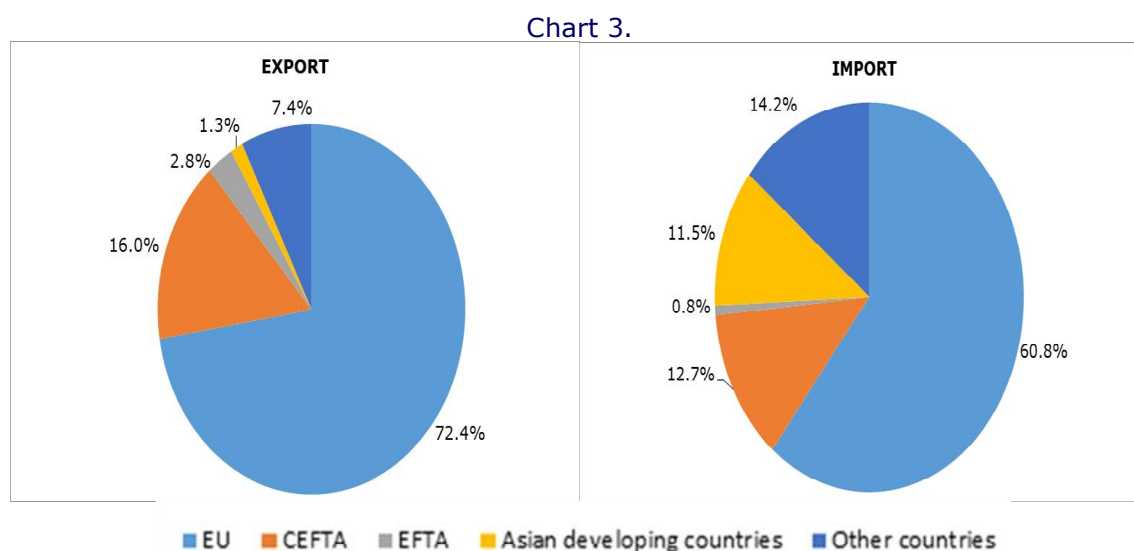
Table 2.

	Q1 2020/Q1 2019	Q2 2020/Q2 2019	Q3 2020/Q3 2019	Q4 2020/ Q4 2019
Export	-5.2	-24.1	-7.3	3.9
Import	-7.1	-27.8	-11.2	-6.3
Volume	-6.4	-26.4	-9.8	-2.5
Coverage	2.1	5.0	4.4	10.9
Deficit	-10.0	-33.0	-16.7	-20.5

Source: Agency for Statistics of B&H, MAU review

1.1. Foreign trade of B&H towards the most important regions for 2020

Chart 3 shows the percentage of participation of the most important regions in foreign trade with B&H in 2020.



Source: Agency for Statistics of B&H, MAU review

The EU, as the most important partner of B&H in foreign trade, in 2020 participates with 72.4% of exports and 60.8% of imports. Exports to EU countries in the observed period decreased by 9.2%, while imports decreased by 15.0% compared to 2019. The coverage of imports by exports is 74.2%, which is 4.8 p.p. higher compared to the same period in 2019.

CEFTA member countries in foreign trade with B&H in 2020 participate with 16.0% of exports and 12.7% of imports. Exports decreased by 11.5%, while imports decreased by 11.3% compared to the same period last year. The coverage of imports by exports is 78.5%, which is 0.2 p.p. lower than in the same period in 2019.

EFTA member countries in foreign trade with B&H in 2020 participated with 2.8% of exports and 0.8% of imports. Exports increased by 10.1%, while imports decreased by 14.4% compared to the same period last year. The coverage of imports by exports is 216.4%, which is 48.0 p.p. higher compared to 2019.

In 2020, B&H realized 1.3% of exports and 11.5% of imports in foreign trade with a group of Asian developing countries. Of the total realized imports from this group of countries, 69.7% refers to imports from China. Exports decreased by 35.1%, while imports decreased by 5.9% compared to the same period last year. The coverage of imports by exports is 7.3%, which is 3.3 p.p. lower than in 2019.

1.2. B&H foreign trade exchange by the most important foreign trade partners for 2020

Table 3 shows the share in exports to the ten most important foreign trade partners of B&H in 2019 and 2020. Also, the percentage of increase / decrease in exports in 2020 is shown, compared to the same period last year.

Table 3.

BH EXPORT (% of participation)				
No.	Country	2019	2020	growth (%)
1	Germany	14.6	15.5	-2.7
2	Croatia	12.2	13.0	-2.6
3	Serbia	11.4	11.0	-12.0
4	Italy	11.3	9.7	-21.9
5	Austria	9.5	9.6	-7.7
6	Slovenia	8.8	9.1	-5.2
7	Turkey	2.5	3.0	7.4
8	Montenegro	3.5	2.8	-28.0
9	Switzerland	2.1	2.5	11.6
10	France	2.3	2.5	-1.7
	other countries	21.8	21.5	-9.8
	total	100.0	100.0	

Source: Agency for Statistics of B&H, MAU review

The table shows that the most important partner, i.e. the country to which B&H exported the most in 2020, is Germany. It is also the most important export partner of B&H in the EU. In the same period, from the group of member countries of the CEFTA region, B&H exported upwards to Serbia, while the largest export from B&H to the countries of the EFTA region was recorded by Switzerland.

The table also shows the percentage of increase / decrease in exports. The indicators presented in the table reflect the unfavorable picture caused by the Covid-19 pandemic, the decrease in

exports to the markets of major trading partners and the decrease in exports to all other markets except the markets of Switzerland and Turkey.²⁶

Exports to Montenegro and Italy fell the most by 28.0% and 21.9%, respectively. The cause is the early appearance of coronavirus and the early introduction of measures to prevent the spread of the virus in Italy, with a significant decline in activity in early 2020, i.e. a decline in total trade, especially in the first half of 2020. In the second half of the year, measures were eased and borders were opened, and thus B&H's foreign trade with these countries recovered. Restrictions on foreign trade have caused a significant drop in exports, which B&H has also recorded with other countries, major trading partners.

Table 4 shows the share in imports to B&H according to the ten most important foreign trade partners of the country in 2019 and 2020. Also, the percentage of increase / decrease in imports in 2020 is shown, compared to the same period last year.

Table 4.

BH IMPORT (% of participation)				
No.	Country	2019	2020	growth (%)
1	Germany	12.0	12.3	-11.2
2	Italy	12.0	11.5	-16.5
3	Serbia	11.0	11.2	-11.8
4	Croatia	10.4	9.0	-24.6
5	China	7.4	8.0	-6.5
6	Turkey	4.9	5.3	-7.0
7	Slovenia	4.6	5.0	-7.3
8	Austria	3.7	4.0	-5.4
9	Poland	3.0	3.0	-12.9
10	Hungary	2.7	2.8	-12.1
	other countries	28.2	27.8	-14.7
	total	100.0	100.0	

Source: Agency for Statistics of B&H, MAU review

The most important partner, i.e. the country from which B&H imported the most in 2020, is Germany. It is also the most important import partner of B&H from the EU. In the same period, out of partners from the group of CEFTA member countries, B&H imported the most from Serbia, while from the group of Asian developing countries the largest import to B&H was recorded from China.

The table also shows the percentage of increase / decrease in imports. The consequence of the reduction of imports in B&H is caused by the stagnation of trade in the observed period, i.e. the reduction of total domestic demand and consumption as well as the reduction of prices of oil and oil derivatives in 2020.

The table shows that imports from Croatia fell the most, 24.6%. As well as the decline in exports, the crisis caused by the early introduction of measures and restrictions caused by the pandemic, affected a significant decline in imports from Italy, 16.5%, as one of the most important foreign

²⁶ The comparison of exports to Turkey in 2020 with exports in the previous year is not relevant due to the problems caused by the stagnation of exports in 2019, and because of the non-ratification of the Free Trade Agreement.

trade partners of B&H. Imports also were reduced from all other major trading partners of the country.

1.3. B&H foreign trade exchange by the type of product for 2020

Table 5 shows the share in exports of the ten most important product groups in 2019 and 2020. Also, the table presents the percentage of increase / decrease in exports of certain types of goods.

Among the ten most important product groups presented in Table 5, three groups achieved positive exports in 2020 compared to 2019, while seven product groups achieved negative exports.

Table 5.

EXPORT (% of participation)					
No.	Code	Code description	2019	2020	growth (%)
1	94	Furniture; bed equipment and like products; lamps and other lighting fixtures	8.8	9.7	1.4
2	85	Electrical machinery and equipment and parts thereof; sound recording or reproducing apparatus; television sets, etc.	6.8	7.7	3.6
3	84	Nuclear reactors, boilers, machinery, apparatus and mechanical appliances; their parts	7.0	7.3	-4.4
4	73	Iron and steel products	6.8	6.9	-7.3
5	44	Wood and wood products; charcoal	6.5	6.8	-5.0
6	27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	8.1	6.8	-23.2
7	64	Footwear, slippers and the like; parts of these products	6.5	6.0	-15.0
8	39	Plastics and plastic products	4.3	4.9	4.2
9	28	Inorganic chemical products; organic and inorganic compounds of precious metals, radioactive elements, etc.	5.4	4.8	-18.7
10	72	Iron and steel	5.0	4.4	-20.3
I		In total (1-10)	65.2	65.3	-8.7
II		Other products	34.8	34.7	-8.5
		TOTAL (I + II)	100.0	100.0	

Source: Agency for Statistics of B&H, MAU review

Table 6 shows the share in imports of the ten most important product groups in 2019 and 2020. Also, the percentage of increase / decrease in imports of certain types of goods is presented.

Among the ten most important product groups presented in Table 6, two groups achieved positive imports in 2020 compared to 2019, while eight product groups achieved negative imports.

Table 6

IMPORT (% of participation)					
No.	Code	Code description	2019	2020	growth (%)
1	27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	14.0	9.7	-40.0
2	84	Nuclear reactors, boilers, machinery, apparatus and mechanical appliances; their parts	8.2	8.0	-15.8
3	85	Electrical machinery and equipment and parts thereof; sound recording or reproducing apparatus; television sets, etc.	5.9	6.9	1.0
4	87	Vehicles other than railway or tramway rolling-stock and parts and accessories thereof	7.4	6.3	-26.3
5	39	Plastics and plastic products	5.4	6.0	-4.2
6	30	Pharmaceutical products	3.2	3.9	5.2
7	72	Iron and steel	3.2	3.3	-10.8
8	73	Iron and steel products	2.6	2.9	-3.7
9	76	Aluminum and aluminum products	2.1	2.2	-9.7
10	48	Paper and cardboard; products of paper pulp, of paper or of paperboard	1.8	1.9	-8.1
I		In total (1-10)	53.9	51.1	-17.9
II		Other products	46.1	48.9	-8.1
		TOTAL (I + II)	100.0	100.0	

Source: Agency for Statistics of B&H, MAU review

2. Conclusion

The corona virus pandemic caused a decline in overall economic activity and a slowdown in economies globally. There was a marked slowdown in foreign trade, and thus a decrease in overall economic activity of the country, compared to the previous year. In 2020, the turbulence caused by the coronavirus pandemic, the uncertainty of the duration of the pandemic, the closing of borders, the cancellation of contracts, brought B&H into recession. Decline in production was recorded, which was reflected on foreign trade. In 2020, the country faced the difficult functioning of supply chains, as well as its disruptions caused by the global Covid-19 pandemic and various, uncoordinated measures taken to prevent the spread of the virus globally. The consequences are reflected in the interruption of work, interruption of the supply of raw materials and finished products, as well as interruption or difficulty in performing transport operations. The measures significantly affected foreign trade and resulted in a decline in the volume of foreign trade due to the closure of the borders of countries in the region and EU countries to the region as the country's most important foreign trade partners.

In B&H in 2020, there was a decline in the volume of foreign trade compared to 2019, with a larger decline in imports than exports of goods and services from the country. Also, it was recorded the foreign trade deficit as one of the most important economic indicators of the country. Domestic market-oriented sectors are less affected than foreign market-oriented sectors.

Basic findings of the European Commission Study regarding the size of the VAT gap in the EU for 2018 and 2019, and forecasts for 2020 and 2021 in the conditions of the recession caused by coronavirus

(Prepared by: Aleksandra Regoje)

Introduction

Unpaid taxes lead to losses in government budgets. Since they can cause a relatively higher burden on taxpayers who fully meet their tax obligations, efficient tax collection is also important for equal treatment of all taxpayers, and for avoiding distortions in the economy. In the conditions when all taxpayers fully settle their obligations in accordance with the applicable tax regulations, the collected tax would correspond to the so-called theoretical tax. The difference between the theoretical tax and the actually collected tax is called the tax gap. The tax gap is actually an estimate of budget loss. It should not be equated with the gray economy, because it is a narrower concept than it. The gray economy includes all taxable economic activities carried out informally, while the tax gap represents the amount of tax that should be paid on these activities. It is mostly a consequence of tax evasion, but can also refer to declared but unpaid taxes, tax losses due to taxpayers' bankruptcy, write-offs, etc. Tax gap assessments provide useful information for tax administrations and authorities regarding the degree of compliance by taxpayers, and the need for the improvement of tax policy and tax administration, in order to reduce tax fraud and evasion.

In this article, we will deal with the gap related to value added tax, which is called the VAT gap. In the article from 2014 (OMA Bulletin No. 110, September 2014), we presented the values of these indicators in the member states of the European Union in the period from 2000 to 2011.²⁷ In this article, we will present the basic findings of the European Commission (EC) from September 2020²⁸ (hereinafter "EC Study") regarding the estimates of the VAT gap in the member states of the European Union for 2018, followed by the so-called fast estimates based on the simplified methodology for 2019, and finally the results of econometric analysis to assess the effects of the coronavirus pandemic on the VAT gap in 2020 and 2021. According to these findings, the VAT gap in the European Union (EU) has been gradually declining from 14,3% VTTL²⁹ in 2014 to 11% VTTL in 2018. According to the fast EC estimate, a further decline is expected in 2019 to 9,6%, while according to the econometric analysis based on numerous assumptions, it is roughly estimated that the VAT gap in 2020 will increase by about 4,1 percentage points, reaching around 13,7% VTTL.

1. Definition of the VAT gap

Compliance gap arises due to imperfect implementation of tax regulations, and its zero value means that all taxpayers meet their obligations properly. Policy gap refers to the shortfall of revenues in comparison with the theoretical ones, which results from the tax policies i.e. legal solutions in a particular country. In the EC analysis of the tax gap in the member states of the European Union, the compliance gap referred to VAT revenues is called the VAT gap.

In this section, we will briefly review the definition of the VAT gap, which is explained in detail in Bulletin no. 110.³⁰ The VAT gap measures the difference between potential and collected VAT revenues that can be attributed to non-compliance with tax regulations but not to the

²⁷ Indicators from „Study to Quantify and Analyse the VAT Gap in the EU-27 Member States“, CASE -Center for Social and Economic Research, CPB Netherlands Bureau for Economic Policy Analysis, Warsaw, July 2013; commissioned by the European Commission

²⁸ European Commission, "Study and Reports on the VAT Gap in the EU-28 Member States: 2020 Final Report," September 2020, https://ec.europa.eu/taxation_customs/sites/taxation/files/vat-gap-full-report-2020_en.pdf.

²⁹ VAT total tax liability according to the law

³⁰ OMA Buletin No. 110, September 2014., http://www.oma.uino.gov.ba/bilteni/Oma_Bilten_bos_110.pdf

arrangements of the applicable tax regulations. In order to calculate this indicator, data on collected VAT revenues are required, as well as those that would be collected in the conditions of full compliance with tax regulations (VTTL - VAT total tax liability according to the law). It is calculated as the difference between VTTL and collected VAT revenues. It can also be expressed in % of VTTL, i.e. as a share of above difference in VTTL.

The assessment of the VTTL is a very complex procedure. Estimation according to the "top-down" approach is performed on the basis of data from national accounts. In the methodology used by the EC in its Study, the VTTL is assessed as a sum of the liabilities from household, government and NPHIS (non-profit institutions serving households) consumption, gross fixed capital formation (GFCF), intermediate consumption, as well as the adjustments for each individual member state. The European Commission calculates the potential VAT revenue (VTTL) for each EU Member State on the basis of data on different VAT rates (standard and reduced rates, exemptions) and available data on final and intermediate consumption, together with other relevant data provided by member states. The quality of the VTTL estimate, and consequently of the VAT gap, depends on the availability of data from national accounts.

2. Factors that affected changes in VAT revenues in the EU in 2018

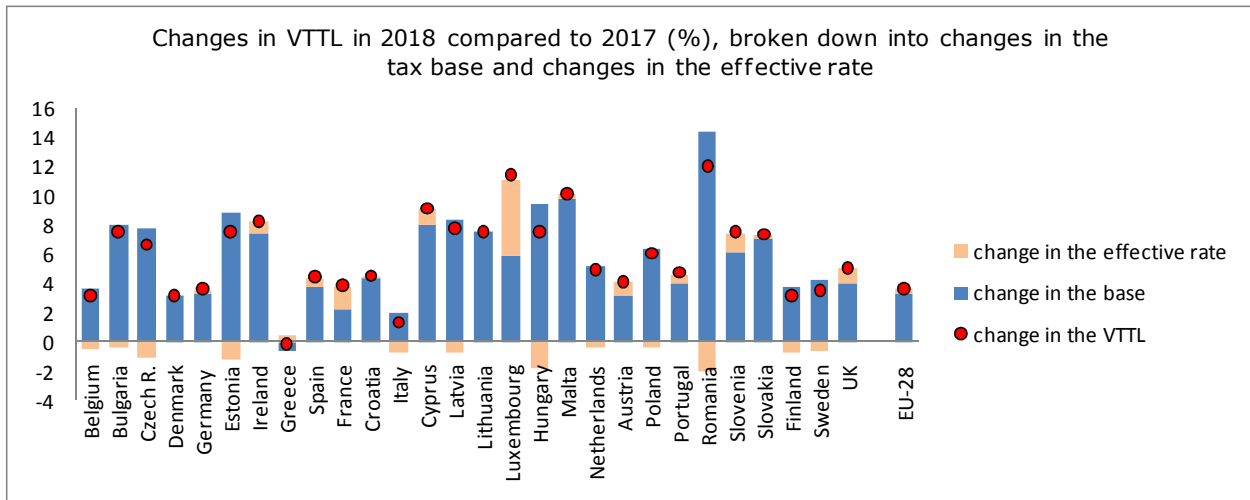
In order to better understand the factors that affect changes in VAT revenues, the equations that define their level are presented below. Collected VAT revenues can be expressed as a product of VTTL and collection efficiency (the so-called compliance ratio, or an indicator of compliance with legal provisions). Compliance ratio is actually the opposite indicator of the VAT gap, and amounts 1- VAT gap in % (Equation 2). Since the collected taxes can be expressed as a product of the net tax base and the effective tax rate (Equation 3), the collected revenues can be further decomposed as in Equation 4.

Box No 1.

Equation 1	Collected revenues = VTTL * collection efficiency
Equation 2	Collection efficiency = 1- VAT gap (in %)
Equation 3	VTTL = net base * effective tax rate
Equation 4	Collection efficiency = net base * effective tax rate * collection efficiency

In accordance with the Equation 3, Chart 1 shows changes in VTTL in the member states of the European Union in 2018 compared to 2017, broken down into changes in the tax base and changes in the effective rate. It can be seen that there were no significant increases in the effective rates in the member states (the exceptions were, for example, Luxembourg, France, Slovenia), nor a significant decreases (the exceptions were Romania and Hungary). At the EU-28 level, the change in the effective rate contributed only 0,4% to the change in VTTL. The change in the VTTL of 3,6% was largely caused by the change in the VAT base (Chart 1, column EU-28).

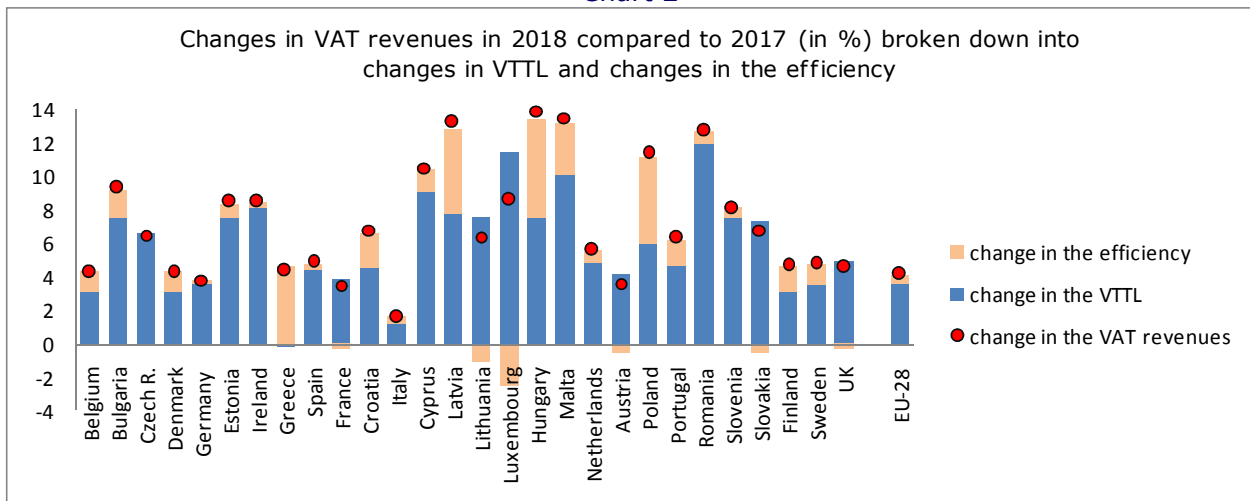
Chart 1



Source: Author's presentation based on estimates from the EC Study (2020)

When it comes to VAT revenues, the main factor of their increase in the EU-28 was the change in VTTL, while the change in efficiency had only a small influence (Chart 2, column EU-28).

Chart 2



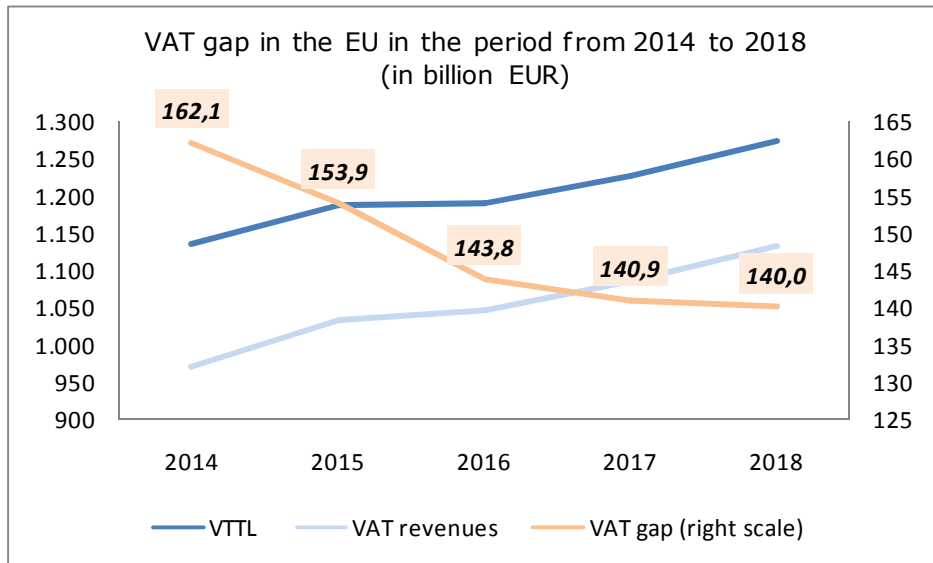
Source: Author's presentation based on estimates from the EC Study (2020)

Finally, according to the EC estimate, the increase in VAT revenues of 4,2% in the EU-28 in 2018 (compared to 2017) came from the increase in the base of 3,3%, increase in the effective tax rate of 0,4%, and increase in the collection efficiency of 0,5%.

3. VAT gap level in the EU in 2018 and fast estimates for 2019

The estimated value of VTTL for the EU-28 in 2018 was 1.272 billion EUR, while total VAT revenues amounted 1.132 billion. The VAT gap was therefore 140 billion EUR or 11% of VTTL. Chart 3 shows the dynamics of the VAT gap in the EU in the period from 2014 to 2018. Expressed in percentages of VTTL, the VAT gap in the EU fell by 3,3 percentage points (from 14,3% VTTL in 2014 to 11% VTTL in 2018).

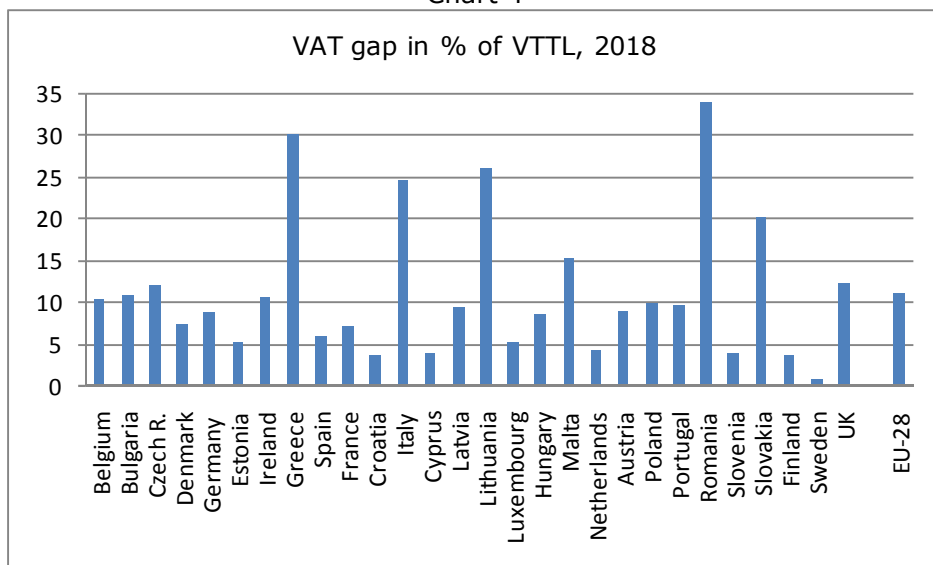
Chart 3



Source: Author's presentation based on data from the EC Study (2020)
 Note: data for 2014 refer to EU-26; for 2015 to EU-27; and for 2016-2018 to EU-28

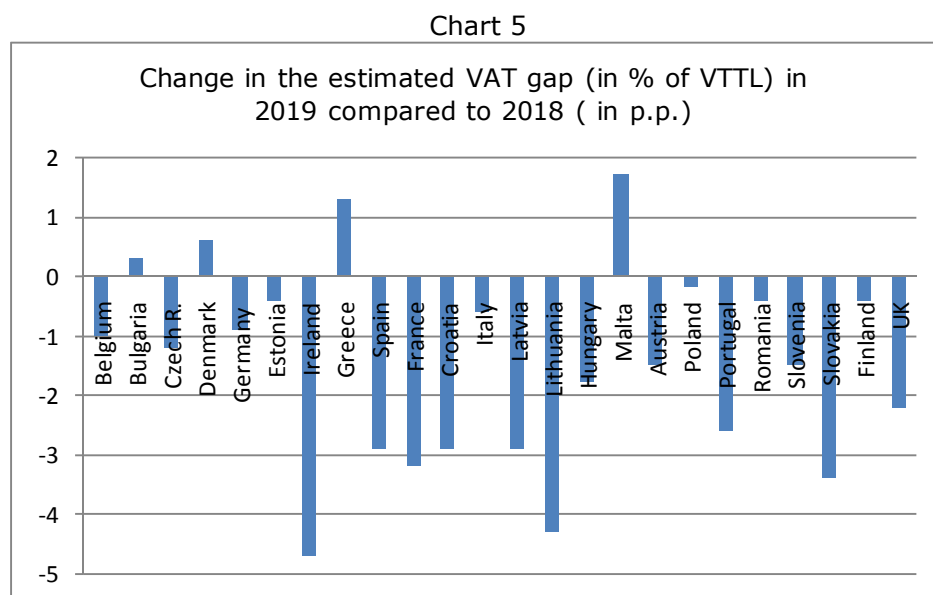
There were huge differences in the amount of collected VAT revenues among EU member states. Only five countries (Germany, UK, France, Italy and Spain) together collected over two thirds of the total EU-28 VAT revenues in 2018. When comparing the VAT gap among countries, it is necessary to use the share of the gap in the VTTL. When comparing these indicators, large differences can also be noticed among EU members. Chart 4 shows the 2018 levels of the VAT gap in % VTTL in the EU member states. Five countries with the smallest VAT gap in % VTTL (below 4%) were Sweden, Croatia, Finland, Cyprus and Slovenia. In contrast, five member states with the largest VAT gap in % VTTL (20% and above) were: Romania, Greece, Lithuania, Italy and Slovakia. The weighted average for the EU-28 was 11%.

Chart 4



Source: Author's presentation based on data from the EC Study (2020)

Fast estimates from the EC Study indicate that the VAT gap could fall further to 125 billion EUR, or 9,6% of VTTL in 2019. The estimate was performed on the basis of a simplified methodology with numerous assumptions, and it was noted that its accuracy depends on the stability of the structure of the liability components.



Source: Author's presentation based on data from the EC Study (2020)

It can be noticed from Chart 5 the estimated increase of the VAT gap in % VTTL in 2019 for four EU member states: Malta (+1,7 percentage points), Greece (+1,3 percentage points), Denmark (+0,6 percentage points) and Bulgaria (+0,3). For all other member states, the decline in the VAT gap in % VTTL was estimated. The largest declines were estimated for Ireland (-4,7 percentage points), Lithuania (-4,3 percentage points), Slovakia (-3,4 percentage points) and France (-3,2 percentage points). Estimates for Cyprus, Luxembourg, Netherlands and Sweden were not available in the EC Study.

4. Potential effects of coronavirus on the VAT gap in 2020 and 2021

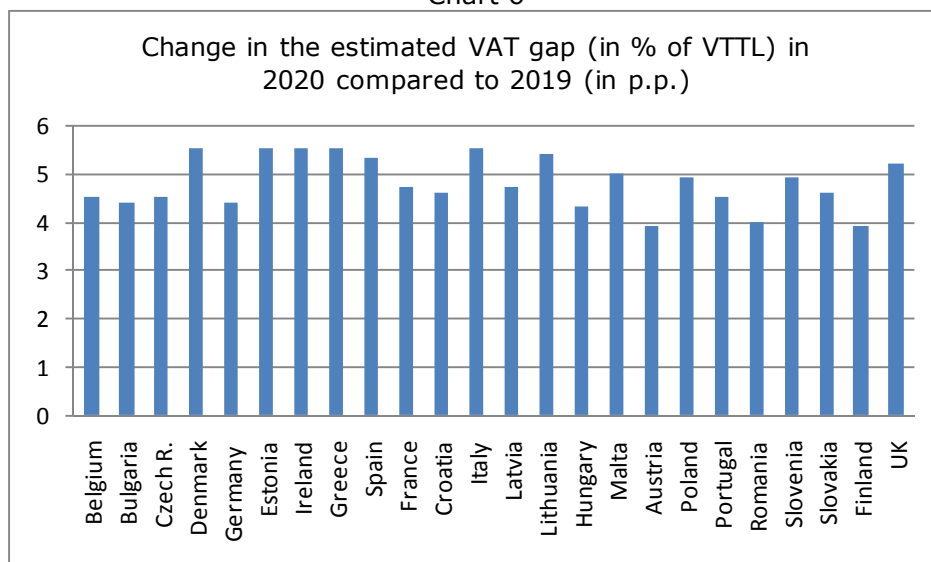
The European Commission has made estimates of the effects of the coronavirus crisis on the VAT gap in 2020 and 2021, based on the results of a multiple regression analysis, using available data from previous years. The dependent variable was the calculated level of VAT gap of certain EU member state (*i*) in year (*y*), taken from the EC reports published in the period from 2013-2019. In order to assess the effects, the EC used the independent variables, which, according to the calculated statistical parameters, were significant at a 5 percent level of significance. These are: GDP growth, general government balance, the share of IT expenditures in tax administration expenditures, etc. The calculated coefficients from the econometric analysis and the estimates of macroeconomic indicators from the EC spring forecast (May 2020)³¹ were used to project the VAT gap in 2020 and 2021. Since the projections were based on numerous assumptions, the range of the VAT gap forecast was relatively large, so the EC presented them in its Study in the form of so-called fan charts.³² According to the EC estimation, the VAT gap in 2020 will increase by about 4,1 percentage points and reach about 13,7% VTTL. In nominal terms, the VAT gap is expected to

³¹ European Economic Forecast, Spring 2020, https://ec.europa.eu/info/sites/info/files/economy-finance/ip125_en.pdf

³² The projections were shown by ranges for possible outcomes together with a line showing the central estimate or the most likely outcome.

exceed 164 billion EUR. Expressed in % of VTTL, the growth of the VAT gap in 2020 is projected to be higher than the overall decline for the previous three years, so that the VAT gap in % VTTL will be higher than in 2016.

Chart 6



Source: Author's presentation based on data from the EC Study (2020)

We can see from Chart 6 that the increase in the VAT gap in % VTTL in 2020 (compared to the previous year) was estimated for all member states.³³ The annual growth of the VAT gap in % of VTTL for all member states was projected in the range between 3,9 percentage points (Finland and Austria) and 5,5 percentage points (Ireland, Greece, Italy, Denmark and Estonia). Based on estimates of the recovery in the EU economy from the EC spring forecasts (2020), a VAT gap decline in nominal amounts was projected for 2021 (compared to 2020), but it was stated that it would unlikely reach the level of % VTTL from 2019. Due to the number of assumptions used and the high degree of uncertainty, the EC did not present the projections of the VAT gap for 2021 on their charts.

³³ As in the case for 2019, estimates for Cyprus, Luxembourg, the Netherlands and Sweden were not available in the EC Study.