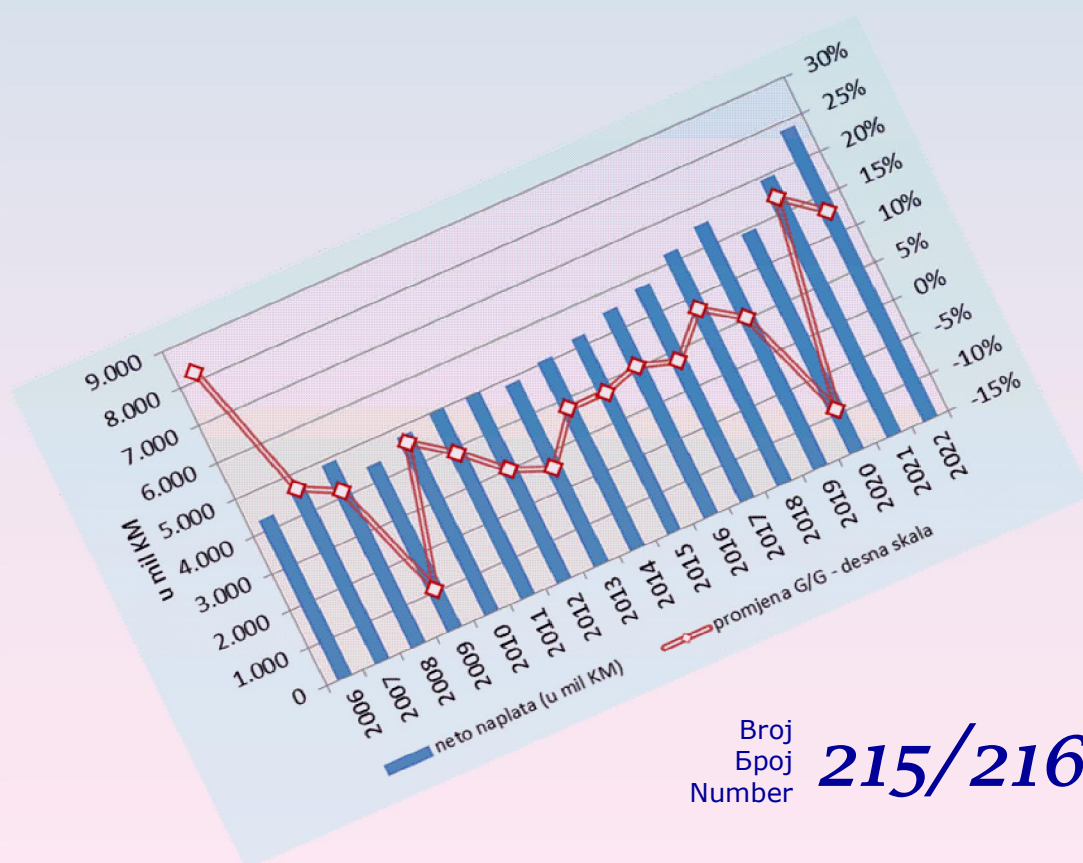




Macroeconomic Unit of the Governing Board of the Indirect Taxation Authority

# ОМА Билтен



Broj  
Број  
Number **215/216**

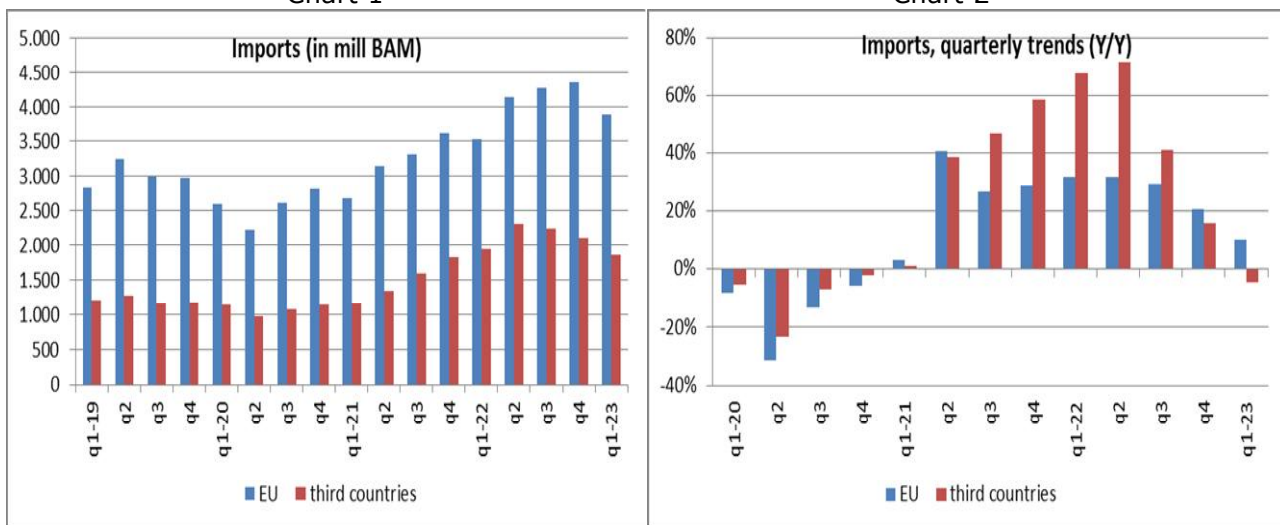
maj/juni 2023 – svibanj/lipanj 2023 – мај/јуни 2023 – May/June 2023

## With this issue

Tax structure of developing countries largely depends on the collection of consumption taxes, and if the country is small and open, such as Bosnia and Herzegovina, imports represent a significant factor in the collection of *ad valorem* taxes: VAT and customs duties. During the preparation of medium-term projections of indirect tax collection for the period 2023-2026, official data on imports in March 2023 were not available, but data on the collection of VAT on imports and customs have indicated the trends indirectly. After the publication of official data, the general assumption about the slowdown in import growth can be confirmed, which in March 2023 grew by only 1.2%, and at the level of the first quarter by 3.8%. The value of imports in the first quarter is traditionally the lowest of all quarters of the year, but the presentation of the trends of imports by main groupings of countries relevant for the collection of customs revenue shows a visible slowdown in imports from third countries in the last three quarters (Chart 1).

Chart 1

Chart 2



The quarterly comparison also confirms the above conclusion. After the enormous growth rates, caused primarily by the recovery of imports after the relaxing of anti-covid measures, and then by the rise in prices of energy and other goods after the outbreak of the war in Ukraine, import growth rates are slowly returning to normal ranges. However, unlike imports from the EU, which recorded a growth of 10.3% in the first quarter of 2023, imports from third countries recorded a decline of 4.6%, for the first time in the last two years (Chart 2).

Dinka Antić, PhD  
Head of Unit

### Table of contents:

Baseline scenario of indirect tax revenue projections	2
List of tables and charts	2
Summary	3
1. Basics and assumptions of indirect tax revenue projections from the baseline scenario	4
2. Projections of revenues from indirect taxes 2023-2026 (baseline scenario)	19
3. Differences from previous projections of indirect tax revenues	26
4. Risks	31
Annex I: Latest projections of international institutions	32
Analysis of collection of revenues from excise duty on beer in 2022 and current trends	34

Technical design: Sulejman Hasanović, IT expert

Reader/translator: Darija Komlenović, professor

## BASELINE SCENARIO OF INDIRECT TAX REVENUE PROJECTIONS 2023-2026

### LIST OF TABLES AND CHARTS

#### Tables

Table 1. GDP growth projection, DEP, March 2023 .....	4
Table 2. Share of indirect taxes collected on the ITA SA in GDP and in total consumption .....	6
Table 3. Baseline scenario of indirect tax revenue projections (2023-2026), April 2023 .....	19
Table 4. Baseline scenario of indirect tax revenue projections (2023-2026), April 2023 (% of GDP) .....	19
Table 5. Monthly crude oil prices (dollars per barrel) in the period from I-2019 to II-2023.....	21
Table 6. Differences in revenue projections for the period 2023-2025 compared to the projections from October 2022 .....	30
Table 7. Winter projections of the EC, February 2023.....	32
Table 8. Real GDP growth projections, IMF, January 2023 .....	33
Table 9. ECB: GDP growth and inflation projections for the Eurozone .....	33

#### Charts

Chart 1. Net revenues from indirect taxes on the ITA SA, 2006-2022.....	6
Chart 2. Indirect taxes in consumption and GDP, 2006-2022 .....	7
Chart 3. Monthly collection of indirect taxes (million BAM) .....	8
Chart 4. Collection of revenues from indirect taxes in the first quarter and changes in collection ..	8
Chart 5. Trends in customs revenue collection.....	9
Chart 6. Trends in gross VAT collection .....	10
Chart 7. Monthly collection of revenues from VAT on imports and domestic VAT .....	10
Chart 8. Quarterly trends in the collection of gross VAT components .....	11
Chart 9. Trends in the payment of VAT refunds .....	12
Chart 10. Trends in the collection of net VAT.....	13
Chart 11. Trends in excise collection .....	13
Chart 12. Trends in the collection of excise taxes on tobacco .....	14
Chart 13. Trends in the collection of excise duties on oil derivatives.....	16
Chart 14. Trends in road fee revenue collection .....	16
Chart 15. Trends in the collection of revenue from excise duties on coffee.....	17
Chart 16. Trends in the collection of excises on beer, non-alcoholic beverages, alcohol and alcoholic beverages and wine.....	18
Chart 17. Measures of dispersion of revenues from indirect taxes .....	20
Chart 18. Prices of oil derivatives in Bosnia and Herzegovina .....	21
Chart 19. Net revenues from customs 2006-2022.....	24
Chart 20. Projected share of indirect taxes in GDP and in total consumption .....	24
Chart 21. Contribution of certain types of revenues to the projected absolute increase.....	25
Chart 22. Projection of revenues from excises on tobacco.....	26
Chart 23. Difference in DEP projections for 2022 .....	27
Chart 24. Difference in DEP projections for 2023 .....	27
Chart 25. DEP: latest and previous projections of national accounts.....	28
Chart 26. Differences in revenue projections compared to projections from October 2022. ....	30
Chart 27. Revision of the projections of the European Commission .....	32

## Summary

### *Projections of macroeconomic indicators*

*Based on available national accounts data for the first three quarters and short-term statistical indicators for the fourth quarter, the Directorate for Economic Planning (DEP) estimates that in 2022, Bosnia and Herzegovina recorded a real GDP growth of 3.7%, while the nominal growth rate was 11.7%, compared to the previous year. The DEP states that the expected rate of real GDP growth in B&H should be: 2.0% in 2023, 2.7% in 2024, 3.0% in 2025 and 3.3% in 2026.*

### *Current revenue collection trends*

*In 2022, the annual growth of revenues from indirect taxes of 13.1% and historical maximum in nominal collection since the establishment of the ITA in the amount of 7.83 billion BAM was achieved. In 2023, the positive trends in the collection of indirect taxes from 2022 have continued, but with more modest effects in terms of the collection of additional revenues. In the first quarter of 2023, an increase in indirect tax revenues of 6.8% was achieved. This was the lowest quarterly growth rate that was achieved in the past eight quarters. A downward trend in quarterly growth rates is noticeable, as a consequence of the increase in the statistical base for comparison as well as the slowdown of net collection in absolute amounts.*

### *Projections of revenues from indirect taxes*

*In the first quarter of 2023, the growth rate of net revenues from indirect taxes was 6.8%, compared to the same period in 2022. According to DEP's projections, nominal GDP growth rate of 6.4% can be expected in 2023. Bearing in mind that the growth rate of revenues in the first quarter of 2023 partly stems from the specificity of the statistical basis for comparison, and taking into account the huge unknowns regarding the events in Ukraine, the projected growth rate of revenues from indirect taxes for 2023 is slightly lower than the quarterly growth rate, and amounts 4.2%. The projected growth rates of net revenues from indirect taxes for 2024, 2025 and 2026 are 4.5%, 3.7% and 3.9%, respectively. The revenue projection in the mentioned period is based on projected relevant macroeconomic indicators, historical seasonal collection pattern and projections of certain revenue categories for the year 2023.*

### *Risks*

*There are significant risks for the realization of projections of revenues from indirect taxes due to huge unknowns regarding the events in Ukraine. Achieving the projected level of revenues from indirect taxes in the period 2023-2026 is subject to the following risks: all risks for the achievement of projected macroeconomic indicators (DEP) and risks related to the collection of revenues from indirect taxes and the fight against grey economy.*

## 1. Basics and assumptions of indirect tax revenue projections from the baseline scenario

Indirect tax projections are based on the March 2023 macroeconomic projections of the DEP, and consider trends in indirect tax collection and current government policies in the field of indirect taxation (baseline scenario).

### 1.1. Projections of macroeconomic indicators, DEP, March 2023

Table 1 presents the latest projections of the Directorate for Economic Planning of B&H (DEP, March 2023) of nominal and real GDP growth rates for the period 2023-2026.

Table 1. GDP growth projection, DEP, March 2023

	Official data	Projections				
	2021	2022	2023	2024	2025	2026
Nominal growth	12,6	11,7	6,4	5,2	5,6	5,6
Real growth	7,6	3,7	2,0	2,7	3,0	3,3

Source: DEP, March 2023

#### 1.1.1. Projections for 2022

Based on available national accounts data for the first three quarters and short-term statistical indicators for the fourth quarter, DEP estimated that in 2022, Bosnia and Herzegovina recorded a real GDP growth of 3.7%, while the nominal growth rate was 11.7%, compared to the previous year.<sup>1</sup> The DEP concluded that domestic demand was a key pillar of economic growth, through an increase in final consumption and investments. In particular, they point out that: "...what marked the year 2022 in economic terms, both in Bosnia and Herzegovina and in the world, are definitely increased inflationary pressures and extremely high rates of growth in the prices of goods and services". According to the data of the Agency for Statistics of B&H, an average increase in price levels of 14.0% was recorded in 2022, compared to the previous year.<sup>2</sup>

#### 1.1.2. Projections for the period 2023-2026

In the latest document of DEP's macroeconomic projections, it is noted that an important determinant for economic trends in Bosnia and Herzegovina in the coming period, in addition to internal dynamics, are also economic trends in the external environment, especially in the EU-27 countries. DEP's projections of macroeconomic indicators are based on the European Commission's winter projections from February 2023.<sup>3</sup> They also refer to the latest publications of reference international institutions in the world, such as the International Monetary Fund and the World Bank. They point out that, in addition to external dynamics, a very important factor for economic growth in the country is the country's institutional capacity in implementing structural reforms. According to DEP's projections the following real economic growth rates are expected in B&H: 2.0% in 2023, 2.7% in 2024, 3.0% in 2025 and 3.3% in 2026 (see Table 1).

<sup>1</sup> It should be noted that nominal GDP growth rates are somewhat different from the official data for 2021 and estimates for 2022, published by the Agency for Statistics of B&H (BHAS). According to the BHAS document "Gross Domestic Product by Production, Income and Expenditure approach 2021" published on February 9, 2023, the nominal GDP growth of 12.3% was recorded in 2021. The nominal GDP growth of 14.9% was achieved in 2022, according to BHAS estimates from the document with quarterly data: "First release - Gross domestic product- expenditure approach - quarterly data" published on March 30, 2022.

<sup>2</sup> BHAS, Consumer price index in Bosnia and Herzegovina, Thematic Bulletin TB 09, Sarajevo 2023

<sup>3</sup> See Annex I: The latest projections of international institutions, Part i. Projections of the European Commission (EC)

## 1.2. Current policies in the field of indirect taxation

VAT obligations and payment system are regulated by the Law on Value Added Tax<sup>4</sup>. Excise policy is regulated by the Law on Excises in Bosnia and Herzegovina<sup>5</sup>. The policy of excises on tobacco in 2023 has been regulated by the Law on Excises and Decision<sup>6</sup> of the ITA Governing Board. As the legally prescribed ceiling of the total excise tax on cigarettes of 176 BAM / 1000 cigarettes was reached for all price categories of cigarettes in 2019, the harmonization with EU standards in the field of cigarette taxation was completed, while the taxation of cut tobacco is regulated according to the amendments to the Law (in force since 2014).<sup>7</sup> The Law<sup>8</sup> on Customs Policy in Bosnia and Herzegovina regulates the basic elements of customs policy and general rules and procedures that apply to goods brought into and out of the customs territory of Bosnia and Herzegovina.

## 1.3. Indirect tax collection trends

### 1.3.1. Collection in the period 2006-2022

In 2006, 4.12 billion BAM of net revenues from indirect taxes were collected on the Single Account (SA) of the ITA. In almost all years since the establishment of the ITA, there has been an increase in revenues collected at the ITA SA. The exceptions were: the "crisis" year of 2009, when there was a 9.9% drop in revenue, stagnation and a milder drop in revenues in 2012 and 2013, and a drop in 2020 of 9.3% as a result of the effects of the virus corona. In all other years, the growth of these revenues was recorded, and the highest was achieved in 2021, at a rate of 16.7%. In 2022, the annual growth of revenues from indirect taxes of 13.1% and a record nominal collection since the establishment of the ITA in the amount of 7.83 billion BAM has been achieved. Finally, the increase in collection in 2022 compared to 2006 was a high 89.8%.

*The share of indirect taxes on the ITA SA in GDP* has varied significantly in recent years (Table 2). Since the introduction of the VAT (2006), this indicator has ranged from 16.6% (minimum value, 2009) to 19.2% (maximum value, 2007). It amounted 17.4% in 2021. The dynamics of indirect taxes in GDP depended on numerous factors: trends in tax rates and tax base, efficiency of tax collection, consumption trends, but the other categories of gross domestic product (investments, imports and exports), which, like consumption, also affect denominator of this indicator.

*The share of indirect taxes on the ITA SA in total consumption* has also varied, having a continuous growth trend in the period from 2014 to 2019. In 2019, it amounted 19.9%, while in 2020 it dropped to 18.4%. In 2021, it grew again to 20.2%, which is the maximum value since the introduction of the VAT.

<sup>4</sup> "Official Gazette of B&H", No. 9/05, 35/05, 100/08 and 33/17

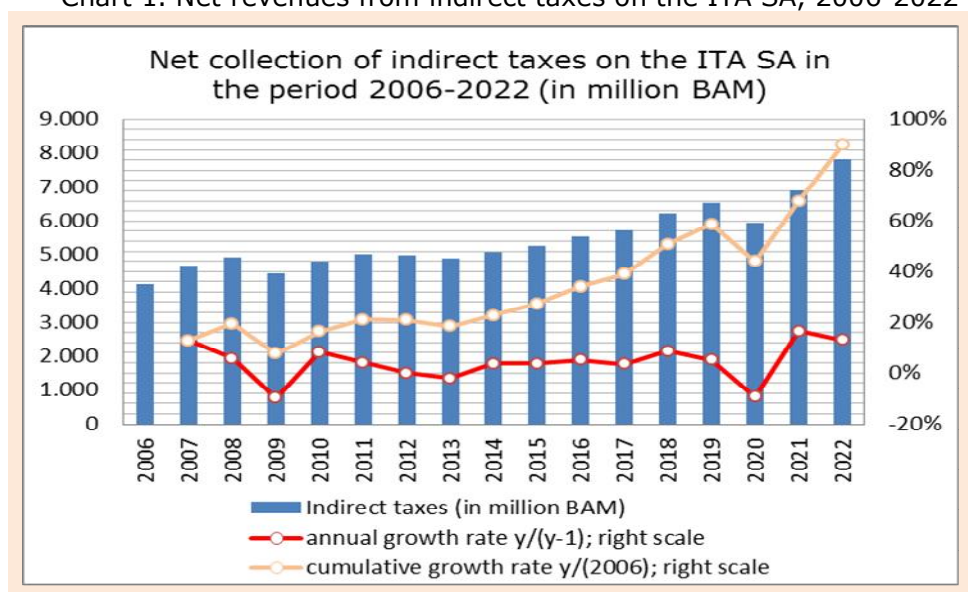
<sup>5</sup> "Official Gazette of B&H", No. 49/09, 49/14, 60/14, 91/17 and 50/22; Changes to the Law on Excises ("Official Gazette of B&H" No. 50/22) have been applied from the moment of entry into force of the by-laws adopted by the Governing Board of the ITA.

<sup>6</sup> Decision on Determination of the Specific and Minimum Excise Duty for Cigarettes and Amount of the Excise Duty on Smoking Tobacco for 2023 („Official Gazette of B&H" No. 74/22)

<sup>7</sup> The new policy is in effect since August 1, 2014 (Amendments to the Law on Excises in B&H "Official Gazette of B&H" No. 49/14)

<sup>8</sup> The new Law on Customs Policy ("Official Gazette of B&H" No. 58/15) has been applied as of August 1, 2022 ("Official Gazette of B&H" No. 23/22), and until that date the old Law on Customs Policy was applied, with the exception of Article 207 of the new Law which has been applied as of 25 April 2018.

Chart 1. Net revenues from indirect taxes on the ITA SA, 2006-2022



Source: Indirect Taxation Authority of B&H, calculation of the MAU

Table 2. Share of indirect taxes collected on the ITA SA in GDP and in total consumption

(in %)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 p.
indirect taxes / GDP	19,1	19,2	18,1	16,6	18,0	18,2	17,8	17,0	17,5	17,3	17,5	17,3	17,8	17,9	16,7	17,4	17,6
indirect taxes / C	18,8	19,3	18,0	16,6	17,7	17,9	17,6	17,1	17,5	17,9	18,6	18,8	19,7	19,9	18,4	20,2	19,8

Source: Calculation based on the ITA and BHAS data<sup>9</sup>

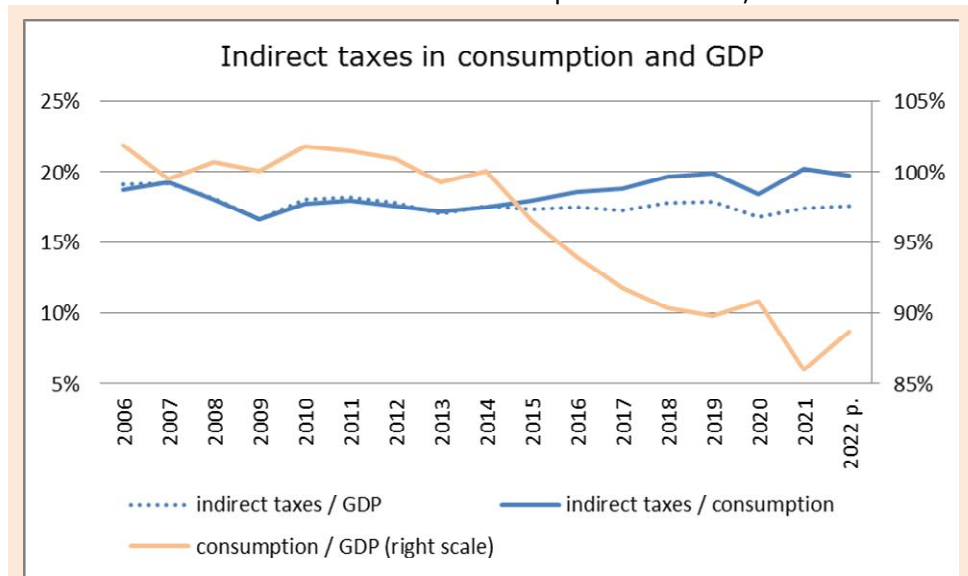
In Chart 2, the share of indirect taxes in GDP of B&H in the period 2008-2022 is broken down into product components, in accordance with the methodology from the OECD analysis<sup>10</sup>: (1) share of indirect tax revenues in total consumption and (2) share of total consumption in GDP. It can be concluded from the Chart 2 that the share of indirect taxes in GDP and consumption was at approximately the same level until 2015, when the share of consumption in GDP was around 100%. As of 2015, there has been a downward trend in the share of consumption in GDP (with the exception of a slight increase in 2020), and in 2021 it amounted to 86.0%. With the decline in the share of consumption in GDP, since 2015, the line of the share of indirect taxes in consumption has been above the line of their share in GDP. In 2021, there was a strong drop in the share of consumption in GDP compared to the previous year. On the other hand, the share of indirect taxes in GDP increased by 0.65 p.p. reaching a level of 17.4%. The analysis according to the components from the OECD equation shows that the increase in the share of indirect taxes in GDP in 2021 was the cumulative result of the annual increase in the share of indirect taxes in consumption by 1.79 p.p., and the decrease in the share of consumption in GDP by 4.85 pp.

According to official data on the collection of revenues from indirect taxes for 2022 and projections of GDP and consumption (DEP, March 2023), it is estimated that the share of indirect taxes in GDP increased to 17.6% (+0.17 p.p. compared to the previous year) in 2022, while the share of indirect taxes in consumption decreased to 19.8% (-0.43 p.p. compared to the previous year). The increase in the share of indirect taxes in GDP in 2022 was the cumulative result of the increase in the share of consumption in GDP and the decrease in the share of indirect taxes in consumption (Chart 2).

<sup>9</sup> "Gross Domestic Product by Production, Income and Expenditure approach 2021", the Agency for Statistics of B&H (BHAS); February 9, 2023

<sup>10</sup> Simon, H. and M. Harding (2020), "What drives consumption tax revenues?: Disentangling policy and macroeconomic drivers" *OECD Taxation Working Papers*.

Chart 2. Indirect taxes in consumption and GDP, 2006-2022



Source: Indirect Taxation Authority of B&H, BHAS and DEP projections (presentation of the MAU)

### 1.3.2. Collection in the period January - March 2023

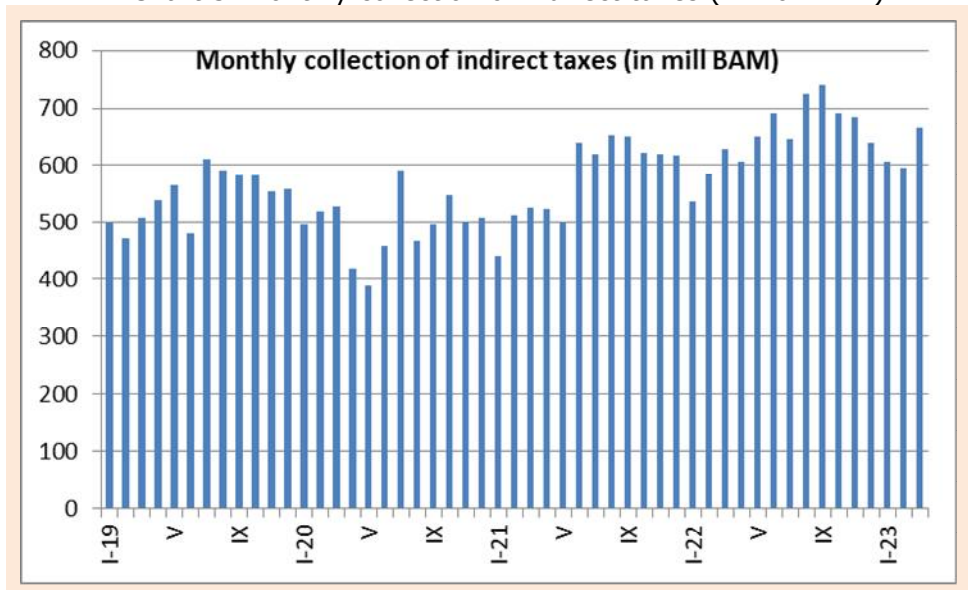
In 2023, the positive trends in the collection of indirect taxes from 2022 have continued, but with more modest effects in terms of the collection of additional revenues. For the analysis of revenue collection in the first quarter of 2023, it is important to emphasize the following. First, the base for comparison in 2022 is lower than in the other months of 2022, not only because the collection of indirect taxes is traditionally lower in the first quarter, but also due to the fact that it was a period before the outbreak of the war in Ukraine, which was characterized by stable situation on the world market, and thus stable prices of energy, raw materials, food and other goods. The basis for the collection of *ad valorem* taxes on imports (VAT, customs duties) was not burdened by the increase in prices on the world market, as in the case of period starting from March 2022 until today. The lower basis from the first two months of 2022 compared to the collection that includes inflationary effects in the same period in 2023 resulted in higher monthly growth rates of revenues from customs duties and VAT. On the contrary, in the case of specific taxes (excises on oil derivatives and road fees), the base in the first quarter of 2022, before the escalation of the energy crisis was higher due to stable consumption. Third, the trends in revenue collection from excise taxes on tobacco products, which are levied as a mix of *ad valorem* and specific excise taxes, do not follow the trends in the collection of *ad valorem* taxes and specific taxes on oil derivatives. Excise duty collection largely depends on the consumption of non-residents and the business policies of two large international tobacco corporations, while in 2023 the collection will be negatively affected by the change in the excise duty payment regime.<sup>11</sup>

An overview of monthly collection of indirect taxes in the first quarter of 2023 indicates a lower collection in absolute amount in the first two months, and a slight improvement in March (Chart 3).

<sup>11</sup> See Amendments to the Law on Excises ("Official Gazette of BiH" No. 50/2022).



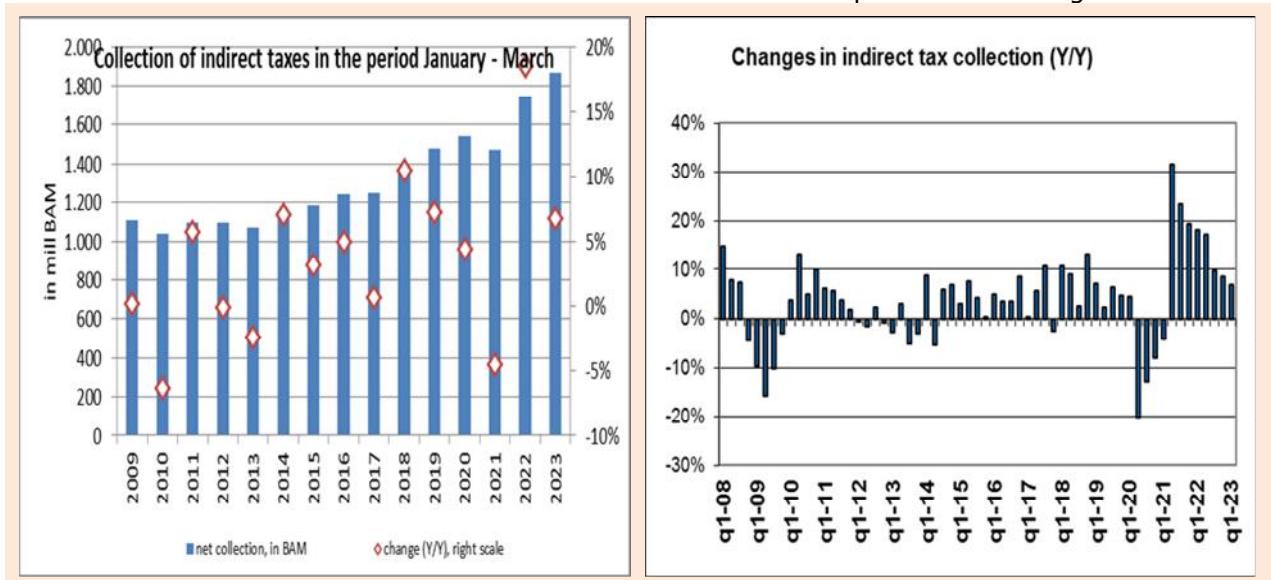
Chart 3. Monthly collection of indirect taxes (million BAM)



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

Nevertheless, the negative effects of the higher base in March 2022, after the outbreak of the war in Ukraine, partially reduced the positive effects of the lower base from the first two months of 2022, and in the first quarter of 2023, an increase in indirect tax revenues of 6.8% was achieved (Chart 4, left). This has also been the lowest quarterly growth rate in the past eight quarters (Chart 4, right). There has been a noticeable downward trend in quarterly growth rates, as a result of the increase in the base and the slowdown of net collections in absolute terms.

Chart 4. Collection of revenues from indirect taxes in the first quarter and changes in collection



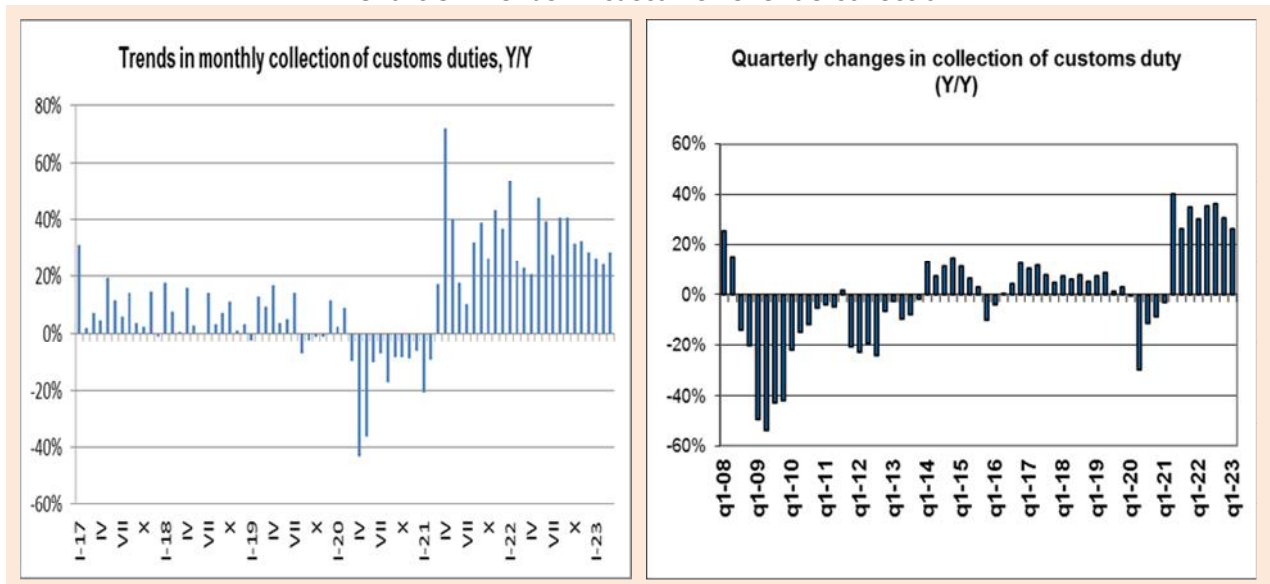
Source: Indirect Taxation Authority of B&H (presentation of the MAU)

## Collection by type of revenue

### Customs duties

The trend of high growth rates in customs revenues has been going on continuously since March 2021 (Chart 5, left). At the level of the first quarter of 2023, a 26.4% growth in customs revenue was achieved, continuing the trend of high quarterly growth rates from the previous eight consecutive quarters (Chart 5, right). The significant factor for the analysis of customs revenues is the import of goods that remained under the customs regime. This refers to the import of goods from the third countries and to a part of goods imported from the EU. Until now, the growth of customs revenues has mostly been in line with the growth of imports. However, a large discrepancy was recorded in the first quarter of 2023, since the growth rate of imports was only 4%,<sup>12</sup> which is 22.4 p.p. less than the growth rate of customs revenues. One of the reasons may be the faster growth of imports of goods that are under the customs regime, but the data on the decline of imports from third countries do not confirm this.<sup>13</sup> Another reason may be the collection of old custom debts from the previous year.<sup>14</sup>

Chart 5. Trends in customs revenue collection



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

### VAT

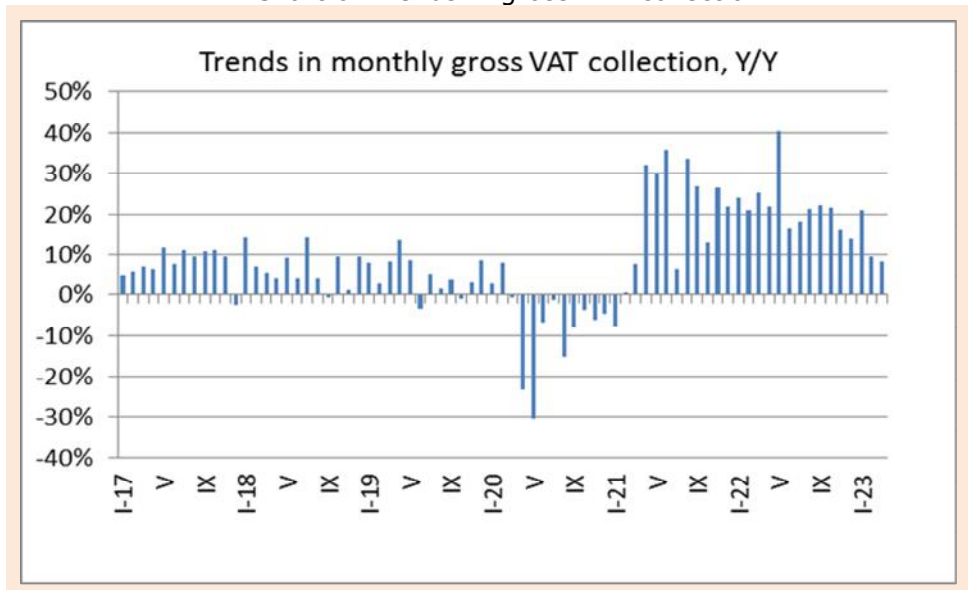
In March 2023, a high growth rate of gross VAT collection of 8.3% was achieved, thus continuing the trend of positive growth of gross collection that has been ongoing since April 2021 (Chart 6). However, it can be seen that the lowest growth rate of gross VAT collection in the last 20 months was recorded in February.

<sup>12</sup> Source: Indirect Taxation Authority.

<sup>13</sup> According to available data of the Agency for Statistics of B&H on the import of goods for the first two months of 2023, the import of goods from the EU increased by 13.8%, while the import of goods from third countries, which are entirely under the customs regime, decreased by 5.6%.

<sup>14</sup> Old customs debts amount to 3.5% of annual customs collection in 2022, i.e. 16.9% of customs revenue collection in the first quarter of 2022. Source: Activity Report of the ITA for 2022.

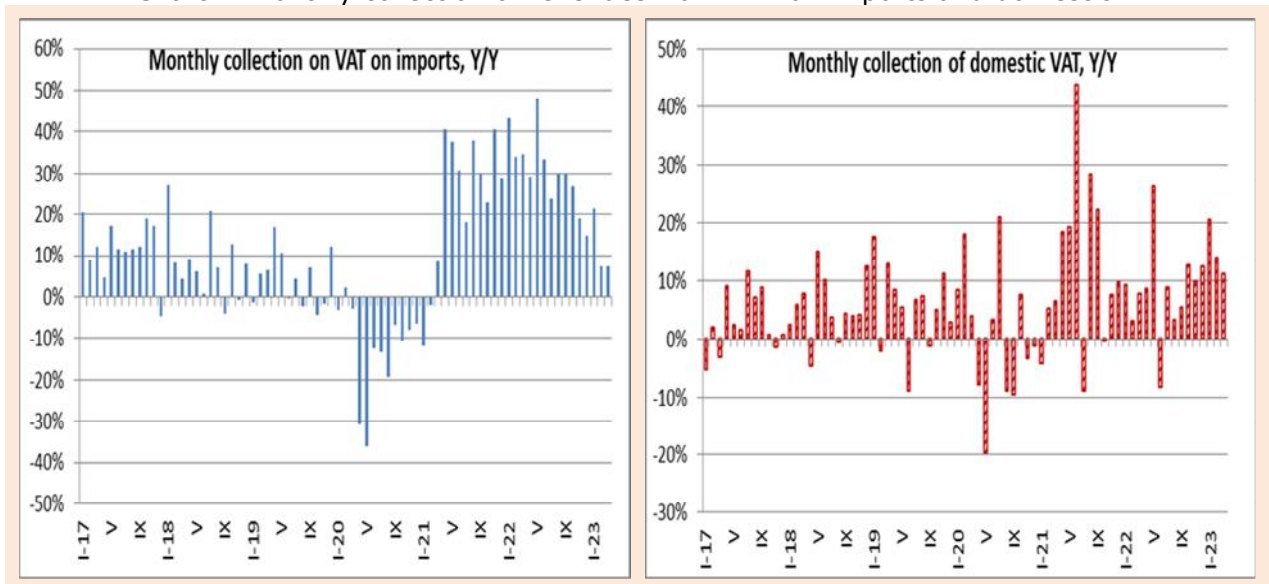
Chart 6. Trends in gross VAT collection



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

The analysis of the structure of gross VAT in the first quarter of 2023 points to the conclusion that the lower growth of gross VAT collection than expected was a consequence of significantly lower growth rates of VAT on imports in February and March, representing the lowest monthly growth rates of VAT on imports in the last two years (Chart 7, left). On the other hand, domestic VAT collection has been recording unusually high growth rates since the fourth quarter of 2022 (Chart 7, right).

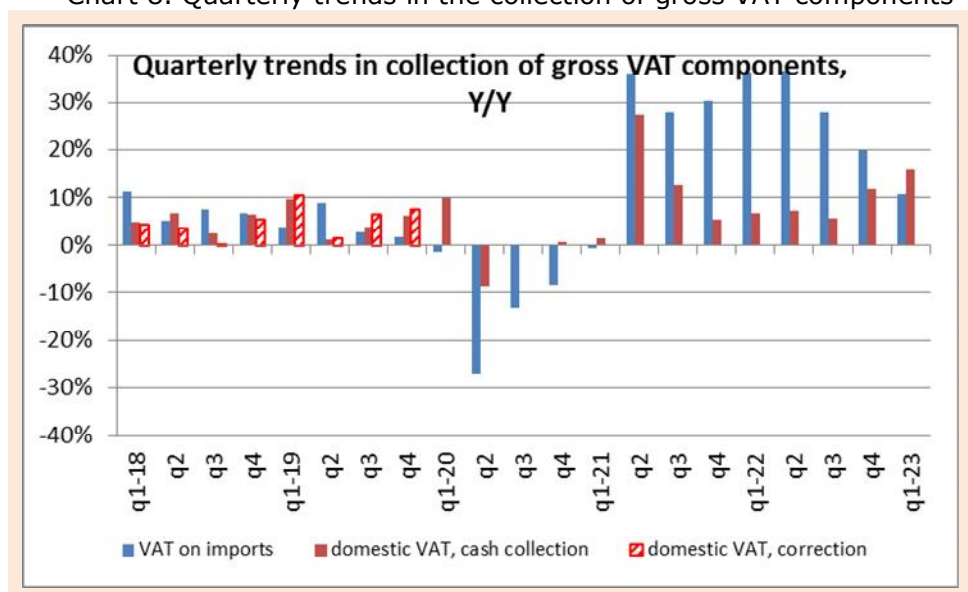
Chart 7. Monthly collection of revenues from VAT on imports and domestic VAT



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

In the first quarter of 2022, VAT collection on imports recorded a growth of 10.7%, which is the lowest quarterly growth in the last eight quarters. On the other hand, the growth rate of domestic VAT amounted to 15.8%, which represents the highest growth rate since the second quarter of 2021 (Chart 8).

Chart 8. Quarterly trends in the collection of gross VAT components

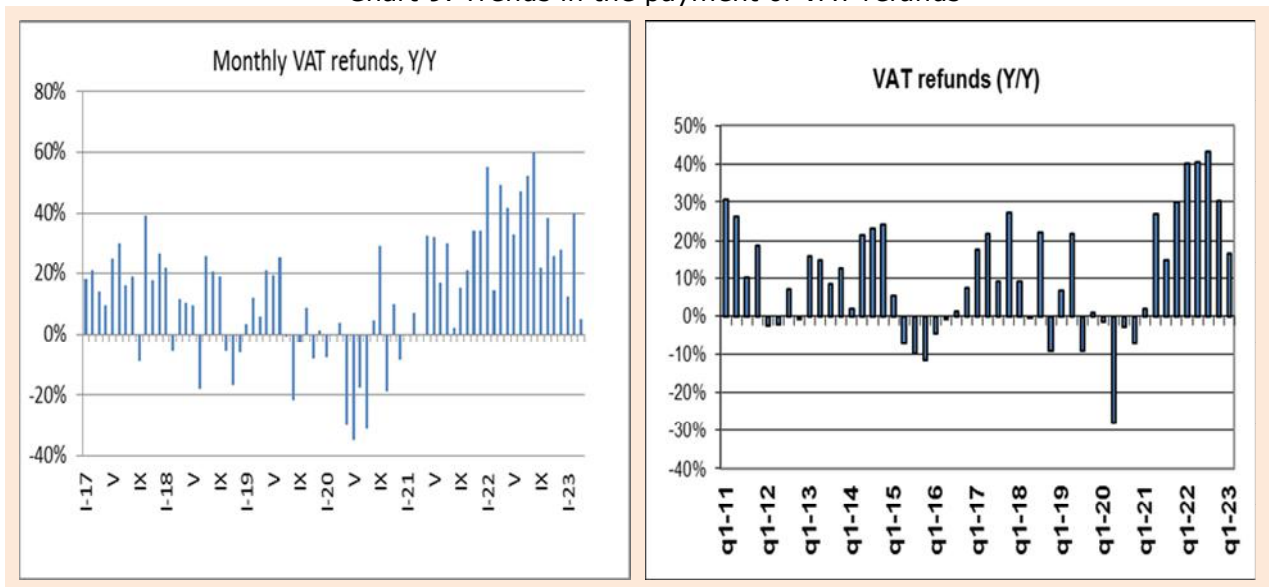


Source: Indirect Taxation Authority of B&H (presentation of the MAU)

Note: "Domestic VAT - correction" implies the correction of the amount of domestic VAT in accordance with the rules of accrual accounting. The ITA uses the net cash concept when reporting, and due to the significant offset amounts of liabilities for excise duties on oil derivatives and road fee with VAT claims (tax credits) during 2018, there were significant deviations in the amount of domestic VAT compared to those presented in the ITA report.

An overview of the quarterly trends in the collection of gross VAT components shows divergent trends in the gross VAT structure. There has been a decreasing trend in VAT on imports, as expected, given the slowdown in imports after the stabilization of world stock markets. In the case of domestic VAT collection there has been an obvious growing trend, which could be a consequence of the growth in private consumption, but also the slowing down of VAT refund payments to importers. Taking into account that, in the first quarter of 2023, 25.6 million BAM of unadjusted revenues were recorded, and bearing in mind that the majority of unadjusted revenues are regularly related to VAT payments, a slightly higher growth rate of domestic VAT can be expected during the final revenue adjustment in March 2022, and thus a higher growth rate in the first quarter of 2023.

Chart 9. Trends in the payment of VAT refunds



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

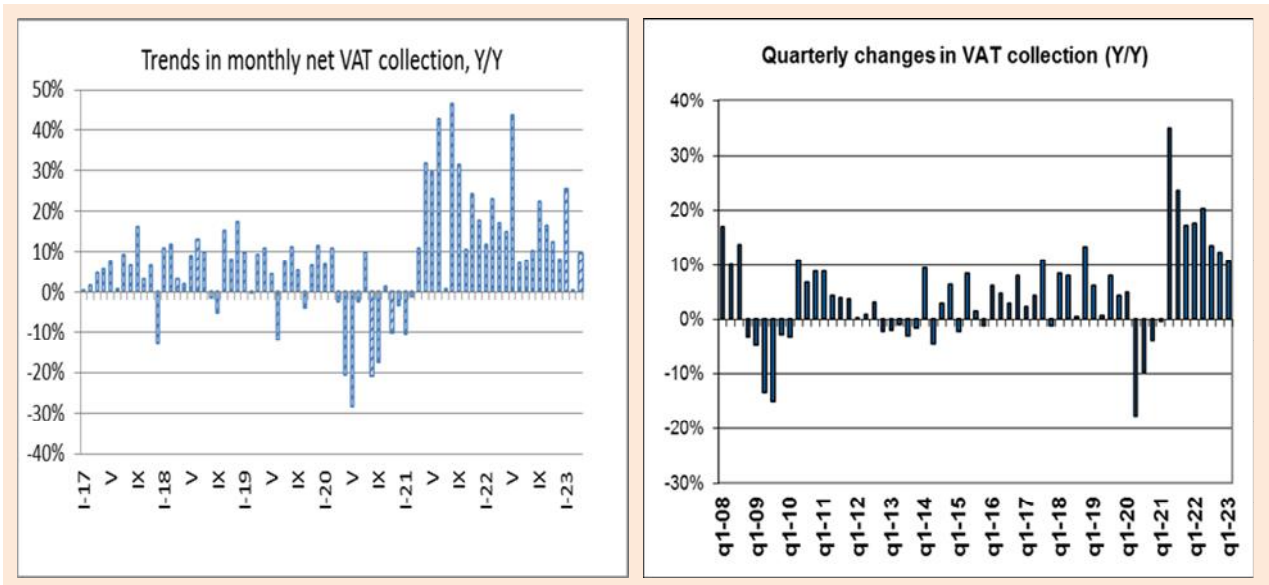
There is a noticeable slowdown in VAT refund payments, which has been ongoing since September 2022. In March 2023, refunds were only 5.1% higher than in the same month of 2022 (Chart 9, left). A quarterly review of trends in refund payments indicates a strong slowdown in the first quarter of 2023, when a growth rate of 16.8% was recorded (Chart 9, right).

In the first quarter of 2023, taxpayers were refunded 67.1 million BAM of VAT more than in the same period in 2022, while refund payments to international projects were 13.5 million BAM higher. The share of cumulative VAT refunds in cumulative gross VAT in the first quarter of 2023 is 31%, which is 1.1 p.p. above the share in the same period in 2022. The high share of refunds in the gross VAT collection in the first quarter was a consequence of the time mismatch between the current gross VAT collection and refund payments which are related to previous tax periods when import and export rates were higher.<sup>15</sup>

In March 2023, net VAT grew by 9.7% (Chart 10, left), while at the level of the first quarter of 2023, a growth of 10.7% was recorded (Graph 10, right). After the adjustment of unadjusted revenues, significantly higher monthly and cumulative growth rates of net VAT can be expected in the first quarter of 2023, as the larger part of unadjusted revenues is regularly related to VAT payments.

<sup>15</sup> In accordance with the provisions of the Law on VAT, refunds are paid to predominant exporters within 30 days from the submission of the VAT return for the month in which the export occurred, while to other exporters and importers refunds are paid within 60 days from the submission of the VAT return for the month in which the import/export took place.

Chart 10. Trends in the collection of net VAT

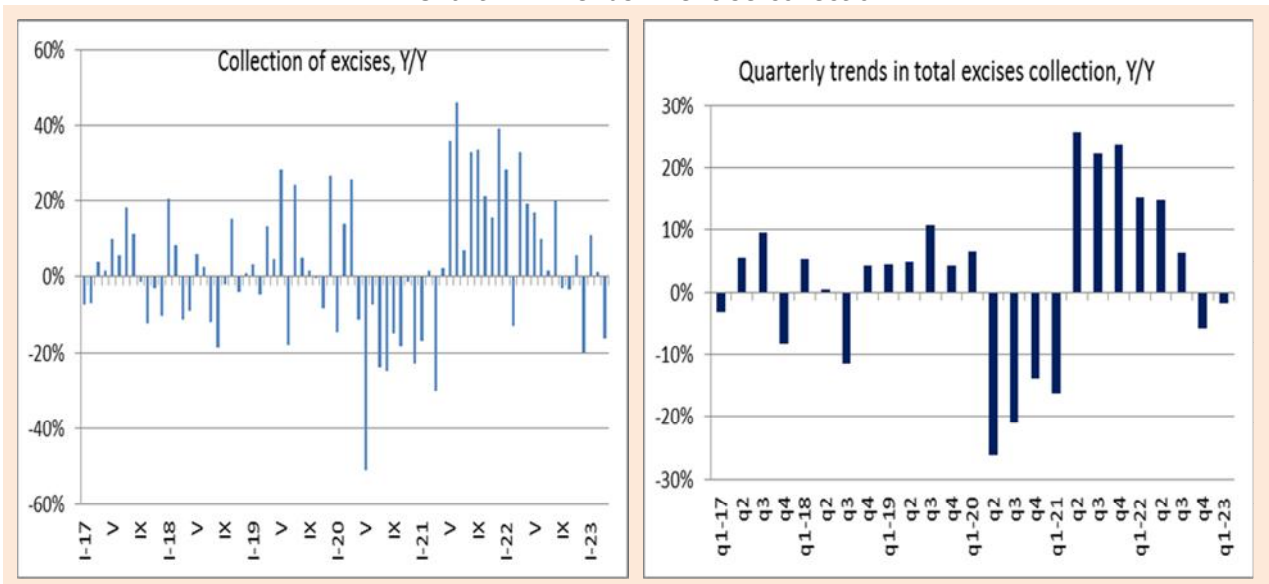


Source: Indirect Taxation Authority of B&H (presentation of the MAU)

*Excise duties*

Excise collection in the first quarter of 2023 fluctuated strongly. There was a strong growth of 11.1% in January, a minimal growth of 1.1% in February, while in March a drop of even 15.1% was recorded (Chart 11, left).

Chart 11. Trends in excise collection

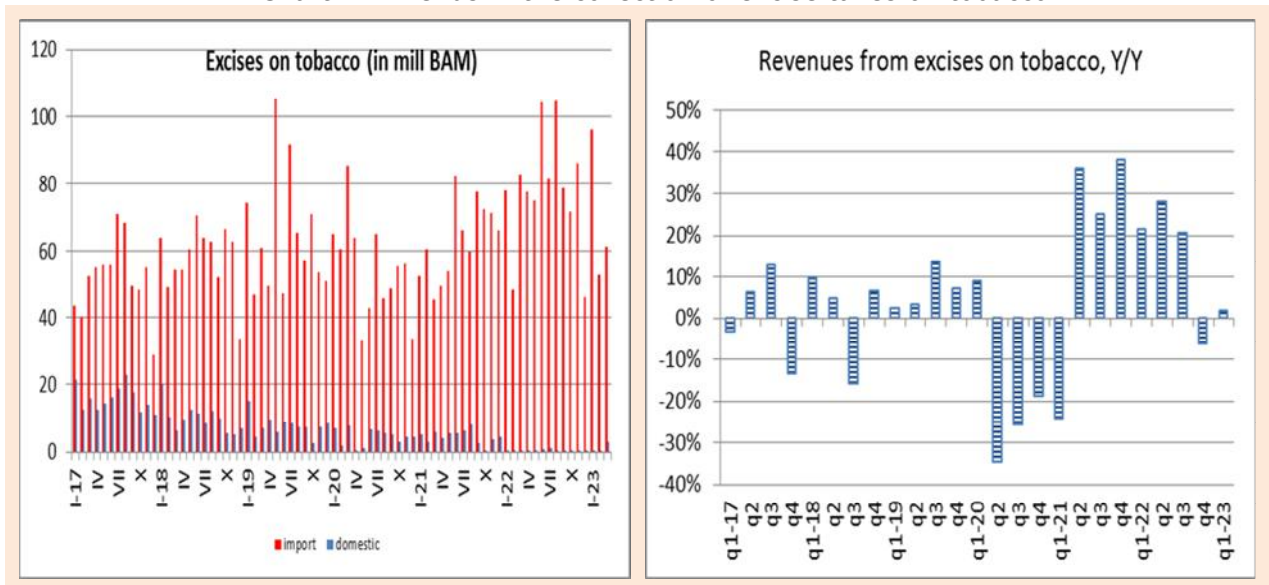


Source: Indirect Taxation Authority of B&H (presentation of the MAU)

Due to the poor collection of excise duties in March 2023, a 1.9% decrease was recorded in the first quarter of 2023, which continued the negative trend from the fourth quarter of 2022 (Chart 12, right).

Excises on tobacco products and excises on oil derivatives dominate in the structure of excise revenues. Bearing in mind the stable negative trend in the collection of excise duties on oil derivatives, it can be concluded that the fluctuations in the collection of total excise revenues in the first quarter of 2023 were the result of fluctuations in the collection of excises on tobacco products. In absolute amounts, the collection of excise duties on tobacco was very high in January and very low in February and March (Chart 12, left). However, due to fluctuations in the base from 2022, the growth rates reflect different trends. Thus, in January and February 2023, growth rates of 22.9% and 8.7% were achieved, respectively, while in March a large drop of 22.2% was recorded, compared to the reference months in 2022. Poor collection of excises on tobacco products in March has canceled the growth from the first two months, so that at the level of the quarter, there was a decrease of 1.8% in revenues from excise taxes on tobacco (Chart 12, right).

Chart 12. Trends in the collection of excise taxes on tobacco



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

Since the domestic tobacco industry was completely shut down in the first quarter of 2022, after four years of rapid reduction in the production, the collection of excises on tobacco products refers only to imported cigarettes and other tobacco products.<sup>16</sup> After suspension of the production of a large domestic producer, the vast majority of the tobacco products market in B&H is *de facto* held by only two foreign tobacco companies.<sup>17</sup> By changing the payment regime, excise duty on tobacco products has recently been paid upon importation. This shortened the time lag between the payment of excise duty and the sale of cigarettes to which the payment refers.<sup>18</sup> The impact of the change in the excise duty payment regime was one of the reasons for the strong fluctuations in excise collection in the last four months. With the transition to a new methodology of paying excise duties, a vacuum appeared in the collection of excise duties, the length of which and, consequently, the impact on the collection of excise revenue, depended on the time lag between

<sup>16</sup> The aforementioned was also reflected in the analytics of excise revenue, in which from now on there are only excises on imported tobacco products (see Chart 12, left side, "domestic"). However, it should be noted that, in March 2023, 3.1 million BAM was collected based on the difference in the amount of *ad valorem* excise tax on the stocks of tobacco products found at the time of the last increase in retail prices (on 1 March 2023 and 13 March 2023). The amount was recorded as domestic excise tax, although it refers exclusively to stocks of imported cigarettes.

<sup>17</sup> According to data for 2022, two foreign tobacco companies hold 85% of the cigarette market in B&H.

<sup>18</sup> Before the amendments to the Law on Excise Taxes, the excises were paid at the time of receipt of stamps, which have been producing negative effects on the cash flow of tobacco companies, due to the required payment of significant financial resources for excise taxes with a large time gap before their sale.

the receipt of stamps and the import of cigarettes.<sup>19</sup> It is a one-time effect, which is positive for the cash flow of tobacco companies, but for the state it represents a loss of revenues from excises. In anticipation of changes to the Law on Excises<sup>20</sup>, distributors have reduced their stocks of cigarettes in retail to a minimum, because paying excise taxes according to the old model required the *ex-ante* engagement of large financial resources.<sup>21</sup> All this resulted in lower excise collection in December 2022. Although it was expected that, with the entry into force of all the implementing regulations, tobacco companies would shift to the new payment regime during January 2023, this did not happen due to adjustments to customs procedures regarding the payment of excise duties on imports (obtaining bank guarantees, etc.). Bearing this in mind, it is understandable that the pace of taking over the new procedures and switching to the new payment regime differed, which ultimately resulted in the effect of the loss of revenues being manifested *de facto* in two months (February and March). Another reason for the more modest collection of excises on tobacco products than expected in the first quarter was the reduced arrival of non-residents in B&H, due to the bad winter season. Finally, we should not ignore the effects of the increase in the retail prices of most cigarette brands in March 2023.<sup>22</sup> This had a positive effects on revenue collection in January (after the announcement of the increase and before the actual price increase, considering that, at that time, payments were made *ex ante* according to the old price list when taking over stamps) and negative effects on the collection of excises in March (after the increase in prices due to a drop in consumption).

Negative trends in the collection of excises on oil derivatives from 2022 have continued in 2023. It is also necessary to keep in mind the basis for comparison in the first quarter of 2022. Stable energy prices on the world market in the first two months of 2022 resulted in stable consumption of oil derivatives in B&H, which grew in accordance with the projections, which ultimately led to an increase in the collection of specific taxes (excises and road fees on oil derivatives) in that period in 2022. The increase in oil prices after the outbreak of the war has led to a decline in the consumption of oil derivatives in B&H, which continued in 2023, resulting in a drop in excise and road fee revenues, compared to the higher statistical base from the period before the outbreak of the war. The collection of revenues from excises on oil derivatives in January was lower by 10.2%, in February by 8.4%, and in March by 7.8% compared to the reference months in 2022. Observation in absolute terms shows that the lowest amount of excises on oil derivatives in the last two years was collected in the first two months of 2023 (Chart 13, left). In addition to the base effects, an important reason is that the retail prices of oil derivatives in B&H are slowly adjusted downwards in relation to price fluctuations on the world market. Not only do they not follow the pace of reduction, but the reduction is lower than it could be expected, which has a restrictive effect on consumption derivatives. The third factor that led to lower consumption of oil derivatives is the bad winter season and reduced arrival of non-residents in B&H.

The collection of excises on oil derivatives has been in the negative growth zone for four consecutive quarters, with an 8.7% drop in collection recorded in the first quarter of 2023 (Chart 13, right).

---

<sup>19</sup> Between those two final activities, it is necessary to export excise stamps to the countries where tobacco products are produced, produce cigarettes and transport them to Bosnia and Herzegovina. Until now, depending on the manufacturer, it has taken at least a month to import cigarettes with excise stamps on which excise duty has been paid.

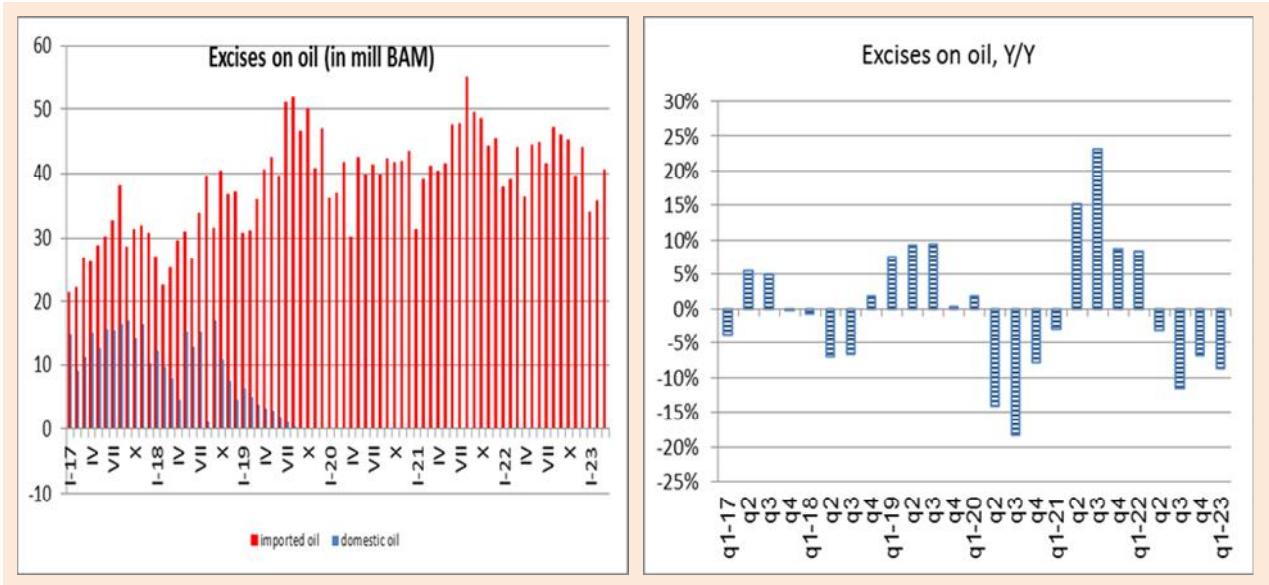
<sup>20</sup> In order to implement the amendments to the Law on Excises, it was necessary to amend several rulebooks in a complex procedure that included public consultations, adoption by the Governing Board of ITA and publication in the Official Gazette of B&H.

<sup>21</sup> The average monthly payment of excises on tobacco products in 2022 was 78 million BAM.

<sup>22</sup> Considering the weighted average price of cigarettes, the increase in cigarette prices amounted to an average of 2.7%, (YoY) and 3.4% compared to the average weighted price of cigarettes in December 2022.

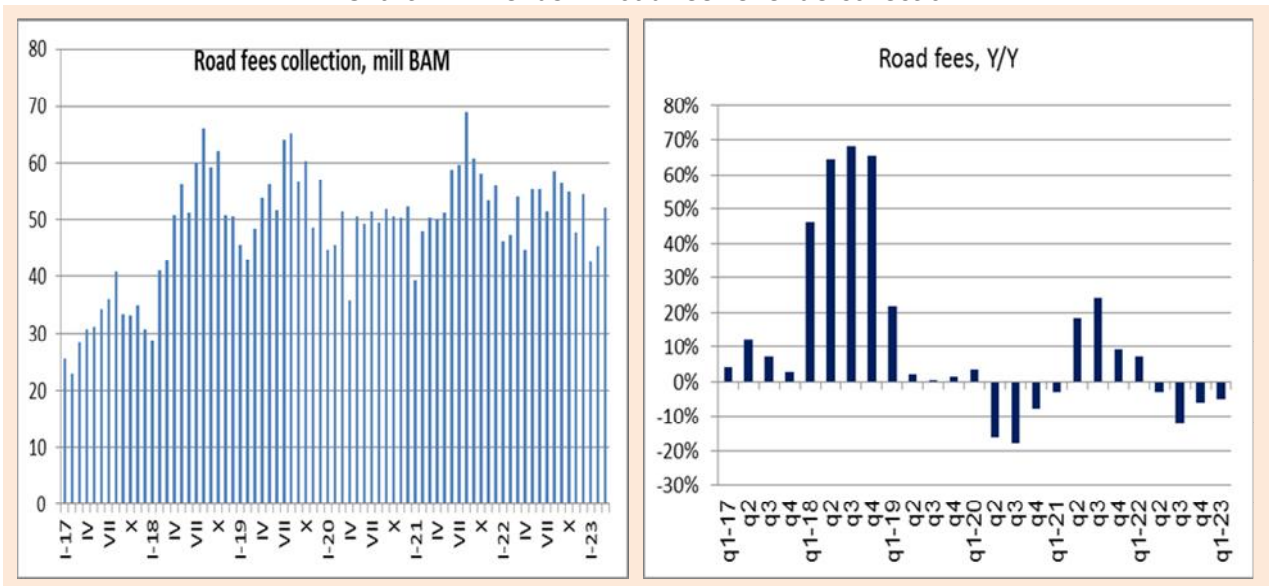


Chart 13. Trends in the collection of excise duties on oil derivatives



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

Chart 14. Trends in road fee revenue collection

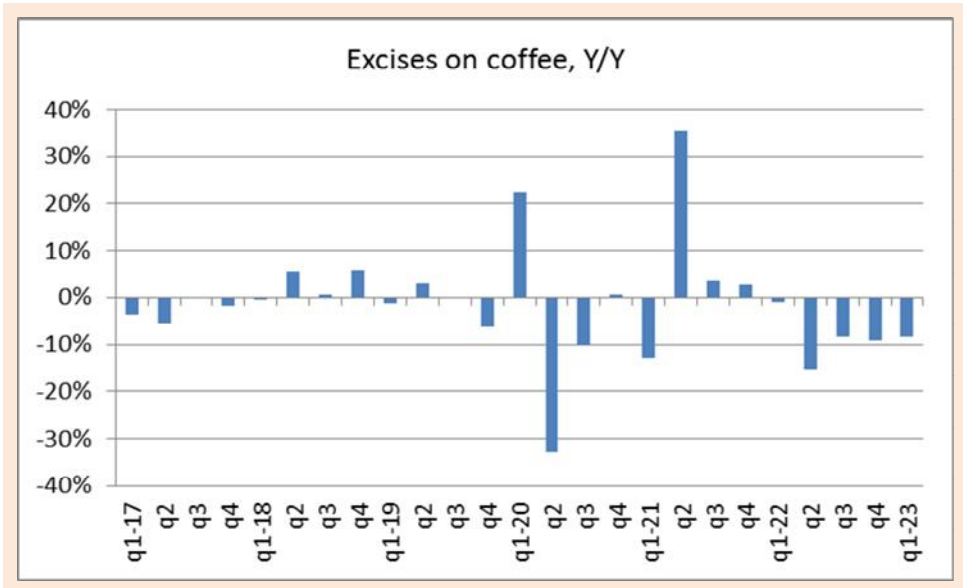


Source: Indirect Taxation Authority of B&H (presentation of the MAU)

The collection of road fee revenues follows the collection of excises on oil derivatives, with certain differences arising from the different bases on which road fees and excises on oil derivatives are levied and paid. The base effect and negative trends in the consumption of derivatives were also reflected in the collection of road fee revenues, especially in the first two months of 2023 (Chart 14, left). In the first quarter of 2023, gross road fee collection was 5.1% lower than in the same quarter of 2022, thereby continuing the trend of negative growth from 2022 (Chart 14, right).

The negative trends in the collection of revenues from excises on coffee from 2022 have continued in the first quarter of 2023, when an 8.5% drop in revenues from excises on coffee was recorded (Chart 15).

Chart 15. Trends in the collection of revenue from excise duties on coffee

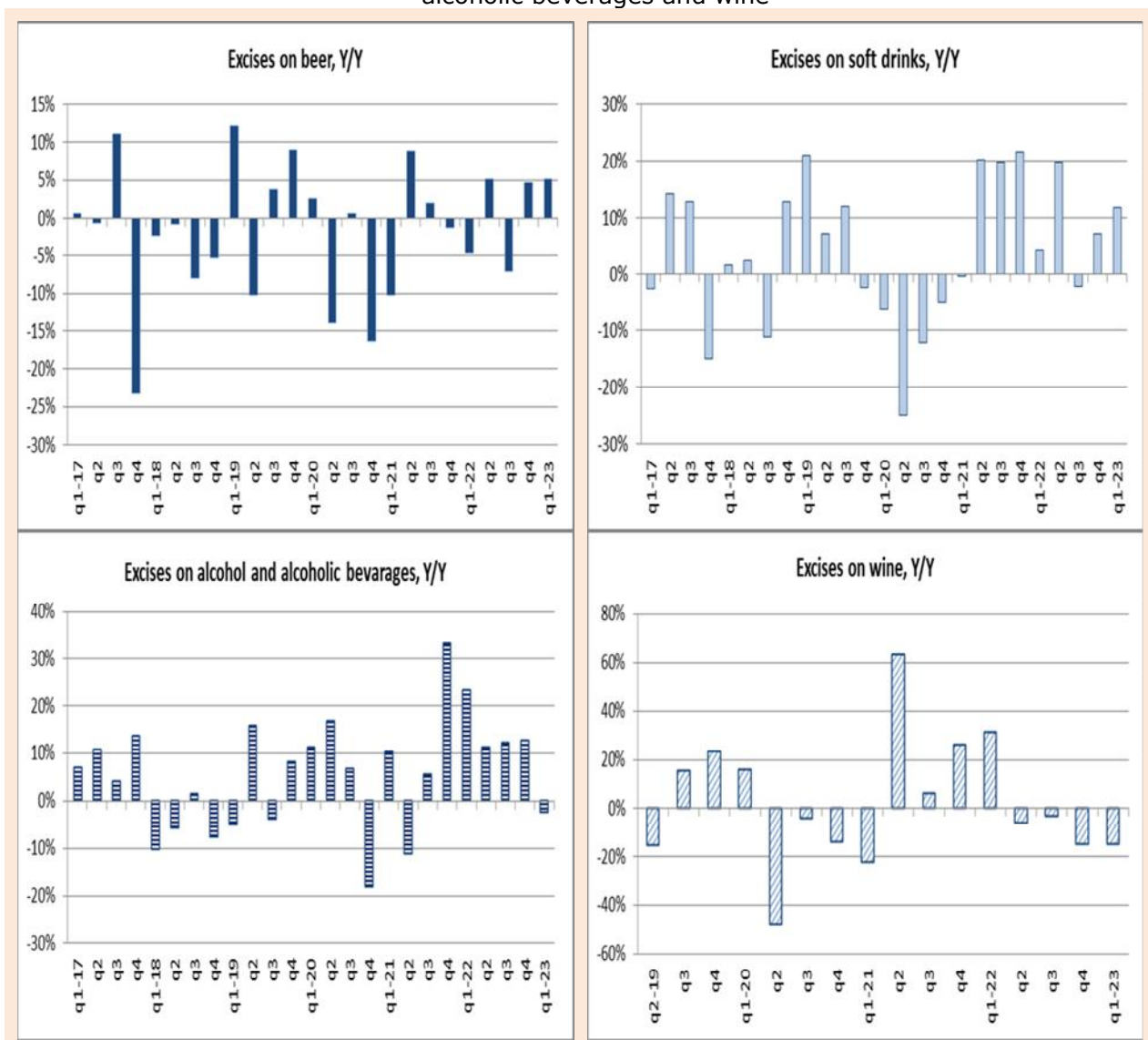


Source: Indirect Taxation Authority of B&H (presentation of the MAU)

In the first quarter of 2023, trends in the collection of excise taxes on alcohol and alcoholic beverages have worsened, and after six consecutive quarters of positive growth, a 2.3% decrease in revenue was recorded (Chart 16). Negative trends have also continued in the collection of excise duties on wine. On the other hand, the positive trends in the collection of excise duties on non-alcoholic beverages have continued with a growth rate of 11.7%.

After strong oscillations, since the fourth quarter of 2022, the collection of excise duties on beer has been stable, which has continued with a growth rate of 5.1% in the first quarter of 2023. However, positive growth was achieved thanks to the increase in revenues from excises on imported beers of 13.5%, which, due to the greater share in the beer consumption structure, was enough to completely neutralize the 19.5% drop in revenues from excises on domestic beers.

Chart 16. Trends in the collection of excises on beer, non-alcoholic beverages, alcohol and alcoholic beverages and wine



Source: Indirect Taxation Authority of B&H (presentation of the MAU)

## 2. Projections of revenues from indirect taxes 2023-2026 (baseline scenario)

Revenue projections for the period 2023-2026 are available in Table 3. In order to ensure comparability of projected and collected indirect tax revenues, indirect tax revenue projections are presented on a cash basis in accordance with the ITA reports on collection by types of revenues.

Table 4 shows revenue projections in % of GDP.

Table 3. Baseline scenario of indirect tax revenue projections (2023-2026), April 2023

Type of revenue (net)	in million BAM					Projected growth rate			
	Realization	Projection				2023	2024	2025	2026
	2022	2023	2024	2025	2026				
VAT	5.121,5	5.382,1	5.578,6	5.789,7	5.992,6	5,1%	3,7%	3,8%	3,5%
Excises	1.580,0	1.623,2	1.743,3	1.791,1	1.861,1	2,7%	7,4%	2,7%	3,9%
Customs	431,9	470,3	503,7	539,9	585,8	8,9%	7,1%	7,2%	8,5%
Road fee	627,2	639,7	657,0	676,7	699,0	2,0%	2,7%	3,0%	3,3%
Other	66,1	36,3	36,3	36,3	36,3	-45,1%	0,0%	0,0%	0,0%
<b>TOTAL</b>	<b>7.826,7</b>	<b>8.151,6</b>	<b>8.518,9</b>	<b>8.833,7</b>	<b>9.174,9</b>	<b>4,2%</b>	<b>4,5%</b>	<b>3,7%</b>	<b>3,9%</b>
Earmarked road tax *)	-392,0	-399,8	-410,6	-422,9	-436,9	2,0%	2,7%	3,0%	3,3%
Funds for distribution	7.434,8	7.751,8	8.108,2	8.410,8	8.738,0	4,3%	4,6%	3,7%	3,9%

Note:

\*) Until February 1, 2018, the earmarked road fee amounted to 0.10 BAM per litter of oil derivative, intended entirely for the construction of highways. As of February 1, 2018 it amounts to 0.25 BAM per litter of oil derivative (0.20 BAM/l for the construction of highways and 0.05 BAM/l for the construction and reconstruction of other roads).

The category "Other" includes other revenues that are collected at Single Account of the ITA (revenues from terminals, rents, etc.) and unadjusted revenues (revenues that remain unadjusted after the final adjustment of revenue collection with applications and declarations in the ITA IT system)

Table 4. Baseline scenario of indirect tax revenue projections (2023-2026), April 2023 (% of GDP)

Type of revenue (net)	in % of GDP				
	Realization	Projection			
	2022	2023	2024	2025	2026
VAT	11,5%	11,3%	11,2%	11,0%	10,8%
Excises	3,5%	3,4%	3,5%	3,4%	3,3%
Customs	1,0%	1,0%	1,0%	1,0%	1,1%
Road fee	1,4%	1,3%	1,3%	1,3%	1,3%
Other	0,1%	0,1%	0,1%	0,1%	0,1%
<b>TOTAL</b>	<b>17,6%</b>	<b>17,2%</b>	<b>17,1%</b>	<b>16,8%</b>	<b>16,5%</b>
Earmarked road tax *)	-0,9%	-0,8%	-0,8%	-0,8%	-0,8%
Funds for distribution	16,7%	16,3%	16,2%	16,0%	15,7%

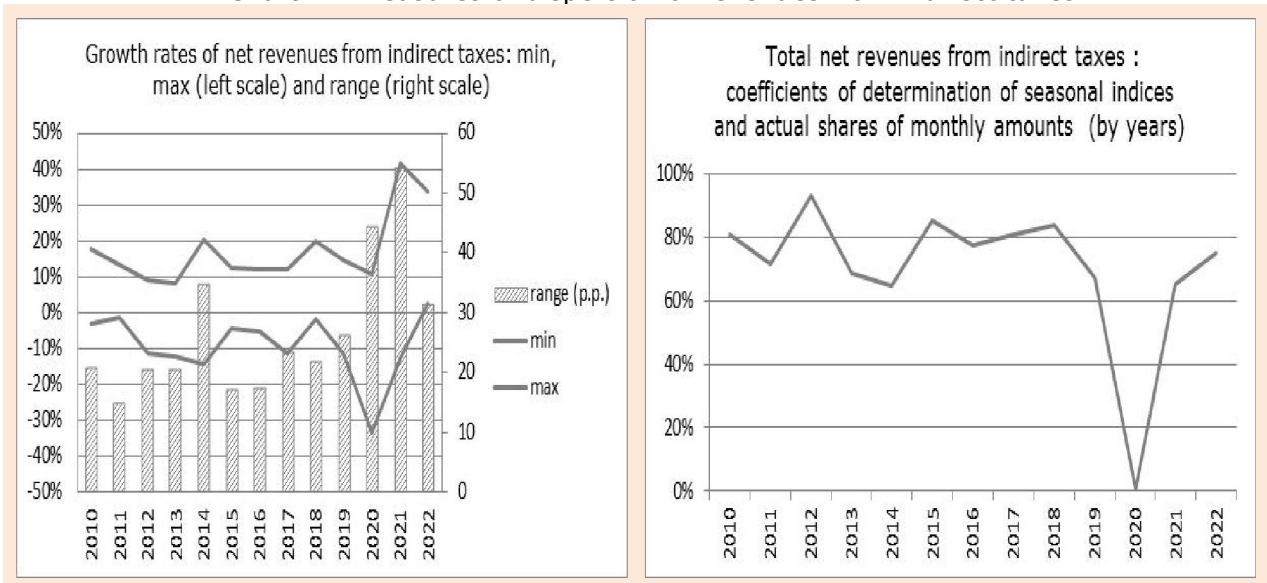
Data source for GDP: BHAS, Expenditure Approach, February 2023 and DEP Projections, March 2023

## 2.1. Projections for 2023

Preparation of revenue projections for 2023 cannot rely on seasonal revenue collection scheme from 2020 and 2021, as they dropped from all previous seasonal patterns due to the effects of coronavirus.<sup>23</sup> Despite disruptions on the global level, turbulences on the oil derivative's market and strong price growth, in 2022, the range of monthly growth rates of net revenues from indirect taxes decreased compared to the previous two years (Chart 17, left), and the monthly dynamics of revenues in 2022 has pretty much returned to the pre-COVID-19 seasonal pattern<sup>24</sup> (Chart 17, right). This is especially pronounced for revenues from VAT, excise duties on alcohol, beer and non-alcoholic beverages, while excise duties on oil derivatives and road fees, as expected, deviate considerably from the old seasonal pattern in 2022 as well. Revenues from excise taxes on tobacco and coffee have never had a pronounced seasonal component.<sup>25</sup>

In the first three months of 2023, the growth rate of net revenues from indirect taxes was 6.8% compared to the same period in 2022. According to DEP's projections, nominal GDP growth of 6.4% is expected in 2023. Bearing in mind that the growth rate of revenues in the first quarter of 2023 partly stems from the specificity of the statistical basis for comparison (see Part 1.3.2.), and taking into account the huge unknowns regarding the events in Ukraine, **the projected growth rate of indirect tax revenues for 2023 is slightly lower than the three-month growth rate and amounts to 4.2%.**

Chart 17. Measures of dispersion of revenues from indirect taxes



Source: Indirect Taxation Authority of B&H (calculation of the MAU)

Note: Total net monthly revenues in the calculation do not include unadjusted income on the ITA SA

<sup>23</sup> The monthly dynamics of revenues in 2020 completely deviated from the so-called pre-COVID-19 seasonal pattern. The range of monthly growth rates of net revenues (the difference between the maximum and minimum value) was 44.2 percentage points. Although it has partly returned to the old pattern, the collection of net revenues from indirect taxes in 2021 was also quite different from the old seasonal scheme. The range of monthly growth rates of net indirect tax revenues was even higher in 2021 than in 2020 (54.1 percentage points), which was the result of: (1) disorders of the seasonal pattern in the base year 2020, and (2) characteristics of the seasonal pattern in 2021.

<sup>24</sup> After calculating seasonal indices based on data from the period 2010-2019, regression models were estimated and the coefficients of determination of seasonal indices and actual shares of monthly amounts of individual types of revenue in the corresponding period were calculated, in order to show how well the seasonal indices „fit“ into the real shares in the observed period.

<sup>25</sup> For more information about the monthly fluctuations of certain types of indirect tax revenues and the strength of the seasonal component see the bulletins of the Unit no. 174/175 and 209/210 ([www.oma.uino.gov.ba](http://www.oma.uino.gov.ba))

2.1.1. VAT

After a 6.8% drop in net VAT revenues in 2020, as a consequence of the corona virus pandemic, in 2021 and 2022, their strong recovery and high growth rates of 18.2% and 15, 6%, were recorded, respectively. Net revenues from VAT in 2022 were higher by 1,099.1 million BAM than in the pre-crisis year of 2019.

The projected amount of net VAT revenues in 2023 is 5,382.1 million KM, which is 5.1% more than the realization in 2022. The projection is based on the historical seasonal collection pattern of certain categories of VAT (which does not include specifics in 2020 and 2021), as well as the historical trends and projections of macroeconomic indicators.

2.1.2. Excise duties and road fees

*Excise duties on oil derivatives and road fees*

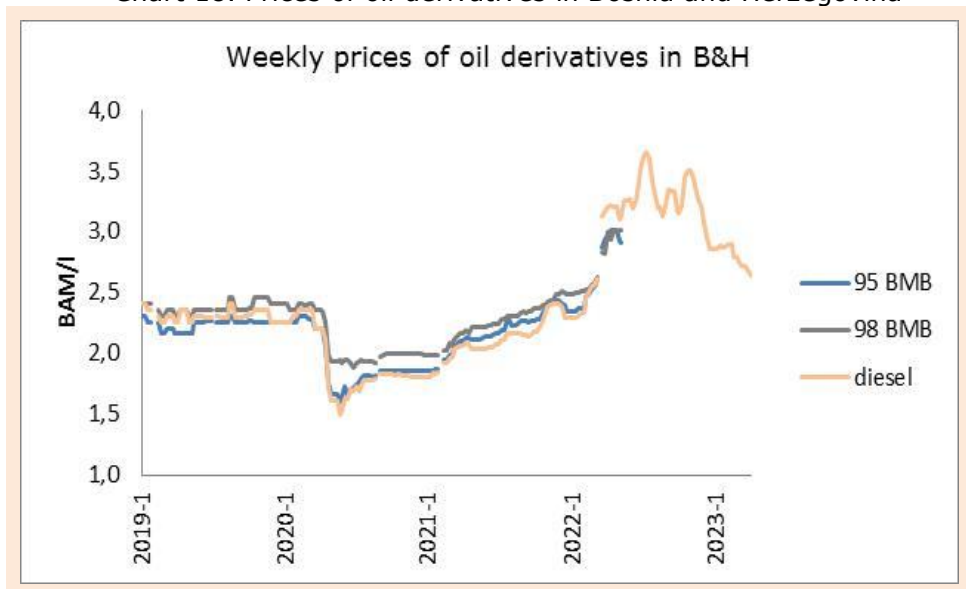
According to available data from the U.S. Energy Information Administration, the price of crude oil has fluctuated significantly between the beginning of 2019 and February 2023. Table 5 shows the annual averages of monthly Brent crude oil prices (Europe Brent Spot Price FOB) in the specified period, as well as their minimum and maximum values. Based on Table 5, it can be concluded that crude oil prices in January and February 2023 were much lower than the average for 2022.

Table 5. Monthly crude oil prices (dollars per barrel) in the period from I-2019 to II-2023

	2019	2020	2021	2022	I-II 2023
average	64,4	41,8	70,7	100,8	82,5
min	59,0	18,4	54,8	80,9	82,5
max	71,3	63,7	83,5	122,7	82,6

Source: U.S. Energy Information Administration

Chart 18. Prices of oil derivatives in Bosnia and Herzegovina



Source: Foreign Trade Chamber of Bosnia and Herzegovina (presentation of the MAU)

Factors influencing formation of prices of oil derivatives on the B&H market are crude oil prices, trade margins, tax rates, etc. Chart 18 presents weekly price movement of oil derivatives<sup>26</sup> on the B&H market in the period from the beginning of 2019 to the 14<sup>th</sup> week of 2023.<sup>27</sup>

After a period of extremely stable prices in 2019, the prices of oil derivatives on the B&H market fell sharply in the spring of 2020, as a result of the coronavirus pandemic. In the 21<sup>st</sup> week of 2020, the price of diesel fuel amounted to only 1.5 BAM/l, while the price of BMB-95 fuel was 1.6 BAM/l. From the 22<sup>nd</sup> week of 2020 (end of May), the prices of derivatives have recorded a stable growth trend, which has been maintained throughout the entire 2021. At the end of 2021, the prices of diesel fuel and BMB-95 amounted to 2.3 BAM/l, while the prices of BMB-98 were 2.5 BAM/l. The events in Ukraine influenced the intensification of the price growth trend in 2022. According to the latest available published data for gasoline, in the 19<sup>th</sup> week of 2022, the prices of BMB-95 fuel increased by 24.2% compared to the 1<sup>st</sup> week of 2022, reaching a high level of 2.9 BAM/l. The average price of diesel fuel reached its maximum of 3.7 BAM/l in the 28<sup>th</sup> week of 2022. After that, the prices varied strongly, and in the last week of 2022 they amounted to 2.9 BAM/l. So far in 2023, a slight downward trend in diesel fuel prices has been recorded. In the 14<sup>th</sup> week of 2023, diesel fuel prices amounted to 2.6 BAM/l.

Compared to 2021, the total consumption of oil derivatives in 2022 decreased by 2.9%. The consumption of diesel fuel fell by 2.5%, gasoline by 5.6%, and other derivatives (heating oil, kerosene and liquid petroleum gas by 2.9%). The Unit has developed a multiple regression model,<sup>28</sup> with the dependent variable ( $y$ ) "*diesel and gasoline consumption (in millions of liters)*". The independent variables were: (1) *GDP level* and (2) *weighted average import prices that include weighted corresponding amount of excise and road fees (BAM/l)*. Based on the regression model, October 2022 projections of net revenues from excises on oil derivatives and road fee for the year 2022 were realized with an accuracy rate of 99.8% and 100.1%, respectively. It should be noted that October projections were made in the conditions of significant turbulences on the market of oil derivatives.

Data for the consumption of oil derivatives by type for Q1 2023 were not available at the time the preparing the projections, but data on revenue collection indicate a drop in consumption, compared to the same quarter of the previous year. In the first quarter of 2023, negative growth rates of excise taxes on oil derivatives and road fees were recorded, which has been expected, given the specifics of the statistical basis for comparison. Namely, in the first quarter of 2022, high growth rates of excise taxes on oil derivatives and road fees were recorded, after which, with the beginning of war events in Ukraine and the consequences on the prices of derivatives, negative growth rates were achieved in the following three quarters. Therefore, the year 2022, as well as the previous two (due to other specifics), cannot represent the basis for creating revenue projections. Based on the old seasonal pattern and projections of macroeconomic indicators for the year 2023, the growth rates of net excise taxes on oil and road fees of 1.4% and 2.0%, respectively, have been projected.

### *Excise duties on tobacco*

The starting point for projections of revenues from excise taxes on tobacco products for 2023 was the current trends in the market of tobacco products, which are characterized by large fluctuations and extremely poor collection in March. In contrast to previous years, the collection of excise

<sup>26</sup> After the 19<sup>th</sup> week of 2022, reporting on prices for fuel 95 BMB and 98 BMB on the website of the Foreign Trade Chamber of Bosnia and Herzegovina with data from the International Road Transport Union was discontinued and only data for diesel fuel are shown. Only data on the most common fuel prices for individual companies in Bosnia and Herzegovina are available.

<sup>27</sup> Data from the International Road Transport Union were used, taken from the website of the Foreign Trade Chamber of B&H (FTCBH).

<sup>28</sup> More about the regression model and consumption of oil derivatives in 2022 in MAU Bulletin no. 213/214 ([www.oma.uino.gov.ba](http://www.oma.uino.gov.ba))

taxes on tobacco products in 2022 cannot be a reliable base for the 2023 projections for several reasons. First, the collection of excise duties on tobacco products in the first quarter of 2023 was strongly influenced by the change in the collection regime, the negative effects of which, due to their large scale, will be reflected in the total collection of excise revenue in 2023. Second, it is obvious that the high growth in the collection of excise revenue on tobacco products in 2022 of 15.4% was a consequence of the anticipated consumption of non-residents in the winter season of 2023, which has not been realized to the expected extent. Third, the increase in retail prices of cigarettes in March had both positive (in January) and negative (in March) effects on revenue collection, while the full effects on consumption will be manifested in the following period. Bearing in mind the negative effects of the change in the excise duty payment regime in the amount of the average monthly excise collection, starting from the macroeconomic projections of consumption for 2023 and assuming that the maximal level of total increase in the weighted average price of cigarettes in 2023 (including the increase in retail prices of cigarettes in the first quarter of 2023<sup>29</sup>) will amount to 2.7%, an increase in excise duty on tobacco products of 3.7% can be expected in 2023.

### *Revenues from other categories of excise duties*

Revenues from other categories of excise taxes (alcohol and alcoholic beverages, beer, wine, non-alcoholic beverages and coffee) do not have a significant share in the total revenues from excise taxes.<sup>30</sup> They are projected in accordance with current collection trends, historical seasonal patterns and projections of relevant macroeconomic indicators.

### 2.1.3. Customs

Liberalization of foreign trade led to a strong drop in customs revenues, both in absolute amounts and as a share in total net revenues from indirect taxes. From 650.4 million BAM in 2007, net revenues from customs fell to only 211 million BAM in 2013. Since 2014, a six-year trend of slight growth of these revenues has been recorded, reaching the level of 300.6 million BAM in 2019. In 2020, with the coronavirus pandemic, these revenues fell again to 262.2 million BAM, while in 2021 and 2022 they recorded a strong recovery, amounting to 431.9 million BAM in 2022, which represents the highest level since the beginning of the implementation of the Stabilization and Association Agreement with the EU in 2008. The analysis of the share in total net revenues from indirect taxes shows a strong decline in the period from 2007 to 2013, from 14.0% to 4.3%. After that period (2014-2021), this share was relatively stable, ranging from 4.4% to 4.7%. In 2022, it increased to 5.5% (Chart 19).

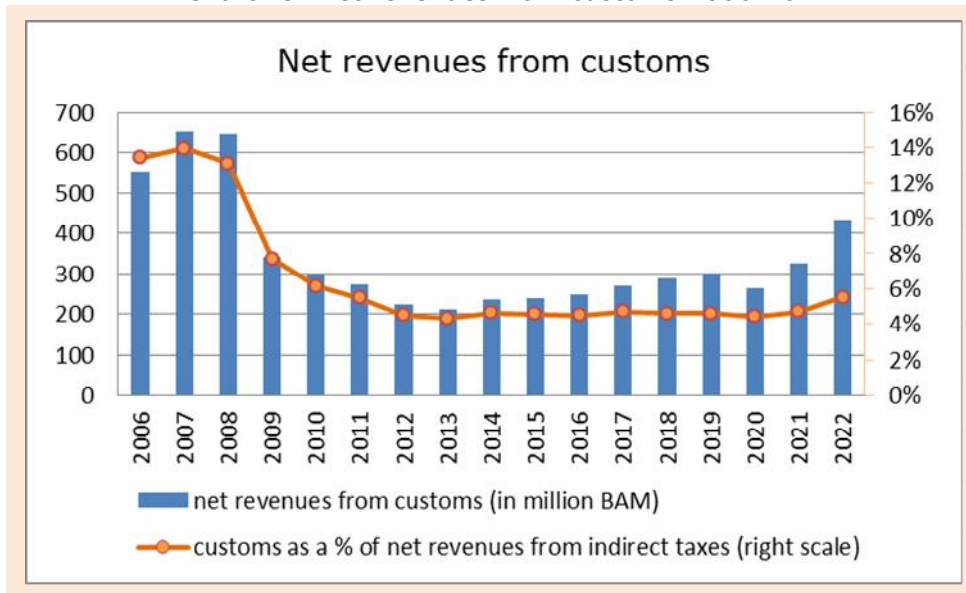
According to the data of the Indirect Taxation Authority of B&H, in the first quarter of 2023, an import growth rate of 4% was achieved, compared to the same quarter of the previous year. Taking into account the trends in the collection of customs revenues, the dynamics of imports and DEP's projections, the net collection of customs is projected in the amount of 470.3 million BAM for 2023, which is 8.9% more than the collection in the previous year.

<sup>29</sup> According to the requests for price corrections, which were submitted to the ITA, the increase in the retail prices of cigarettes has ranged from 0.10 BAM to 0.20 BAM per pack.

<sup>30</sup> Gross revenues from all listed types of excise taxes accounted for only 9.2% of gross revenues from excise taxes in 2022.



Chart 19. Net revenues from customs 2006-2022

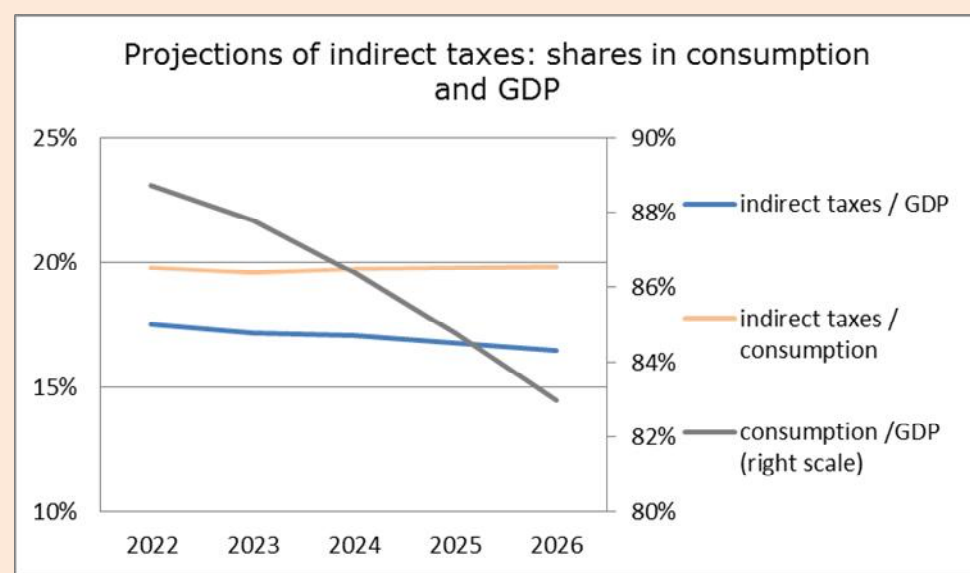


Source: Calculation of the MAU based on the ITA data and MAU's projection for 2022

**2.2. Projections for the period 2024-2026**

The projected growth rates of net revenues from indirect taxes for 2024, 2025 and 2026 are 4.5%, 3.7% and 3.9%, respectively. The revenue projection in the mentioned period is based on projected relevant macroeconomic indicators, historical seasonal collection pattern and projections of certain categories of revenue for the year 2023.

Chart 20. Projected share of indirect taxes in GDP and in total consumption

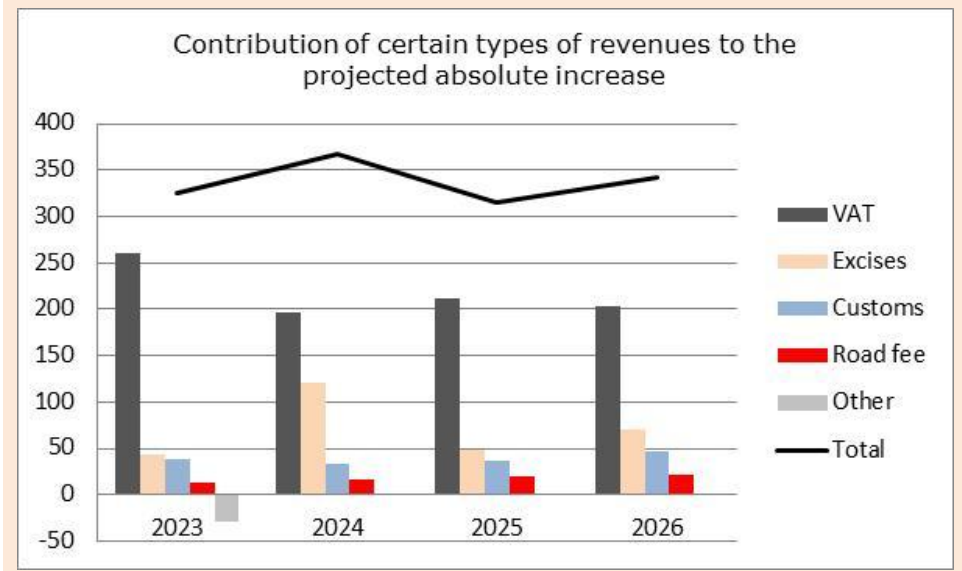


Source: Presentation of the MAU based on indirect tax revenue projections (MAU, April 2023) and projections of the macroeconomic indicators (DEP, March 2023)

In contrast to the projected decline of indirect taxes in GDP in the period 2023-2026 (see Table 4), the projected share of indirect tax revenues (MAU) in consumption (DEP) in the specified period slightly increases from 19.6% in 2023 to 19.9% in 2026. The decline in the projected share

of indirect taxes in GDP in the period 2023-2026 is a cumulative result of a slight increase in indirect taxes in consumption and a decline in the share of consumption in GDP (Chart 20).

Chart 21. Contribution of certain types of revenues to the projected absolute increase



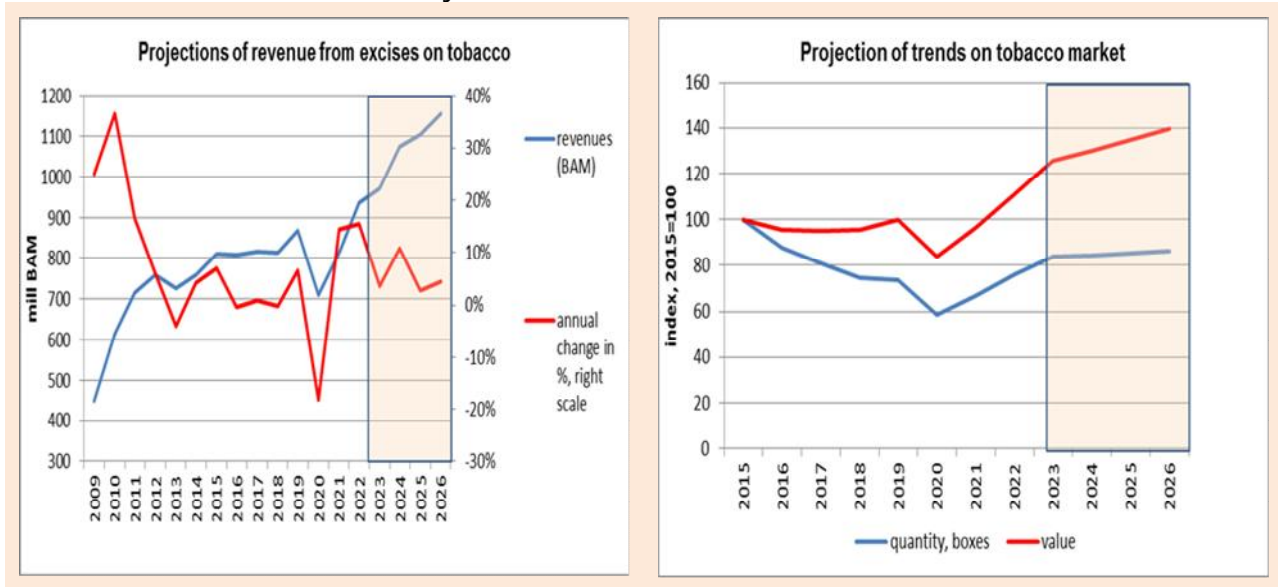
Source: Presentation of the MAU based on indirect tax revenue projections (MAU, April 2023)

The largest generator of annual absolute growth of revenues from indirect taxes in this period is VAT, given its significant share in revenues and projected stable growth rates. In 2024, excise taxes are also a significant generator of absolute growth, due to the strong projected absolute growth of excise taxes on tobacco (see explanation below in the section "Excise duties on tobacco").

#### *Excise duties on tobacco*

Unlike 2023, in which there will be a mixture of two excise tax payment schemes, with a one-time negative effect on excise tax collection, as of 2024, a new excise tax payment scheme will be established, which will be neutral on the collection of excise revenues. An important factor in the realization of excise tax collection projections is the unchanged excise policy and the continuous fight against the black market of cigarettes and tobacco in B&H. In the next three years, the stabilization of the political situation in the world and the stabilization of commodity exchanges and prices on the world market, recovery and growth of the economy, income and consumption are expected in accordance with macroeconomic projections. The growth of the market should follow the macroeconomic projections of consumption, which, with a minimal increase in the weighted average price of cigarettes, should lead to a further increase in the value of cigarette sales and taxed amounts of cigarettes. Under the mentioned assumptions, revenues from excise taxes on tobacco products can be expected to grow by 10.7%, 2.8%, and 4.5% in 2024, 2025, and 2026, respectively (Chart 22, left). The higher growth rate of excise tax revenue in 2024 is a consequence of the lower base from 2023, due to one-time revenue losses during the shift to the new excise tax payment regime.

Chart 22. Projection of revenues from excises on tobacco



Source: Presentation of the MAU based on indirect tax revenue projections (MAU, April 2023)

### 3. Differences compared to previous projections of revenues from indirect taxes

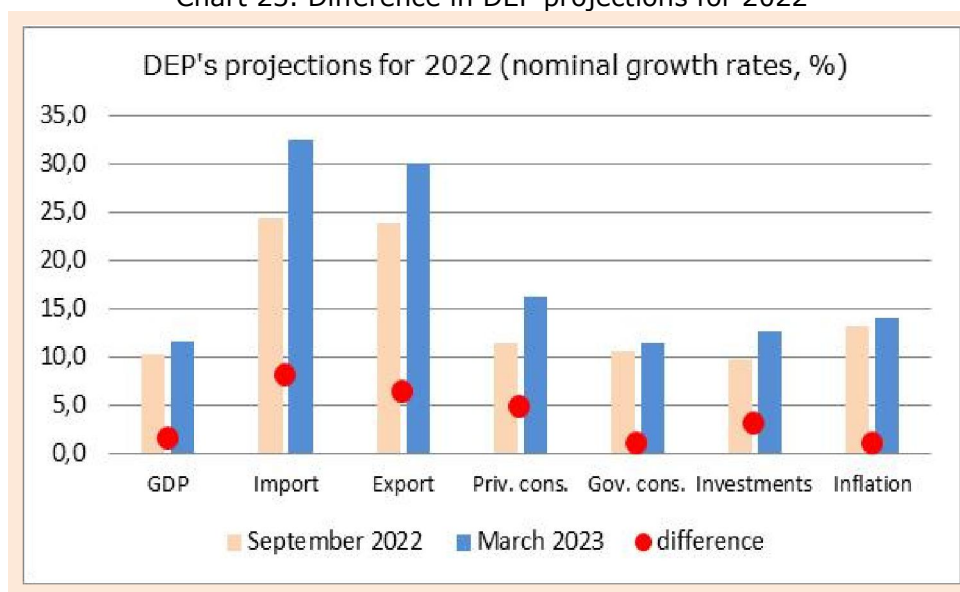
Projections of indirect tax revenues are closely related to the DEP’s projections of GDP and its components. Any deviation of these parameters from the projected value represents the risk for revenue projection.

#### 3.1. DEP, revision of projections of macroeconomic indicators for B&H

##### 3.1.1. Revision of projections of macroeconomic indicators for 2022

The DEP's latest (March 2023) and previous (September 2022) projections of the GDP growth rate for 2022 and its components can be compared based on Chart 23. The nominal GDP growth rate was revised by +1.5 p.p., from 10.2% to 11.7%. The growth rates of imports and exports were revised the most (+8.1 p.p. and +6.3 p.p.). The estimated growth rate of private consumption was revised by +4.8 p.p. and of government by +1.0 p.p.

Chart 23. Difference in DEP projections for 2022

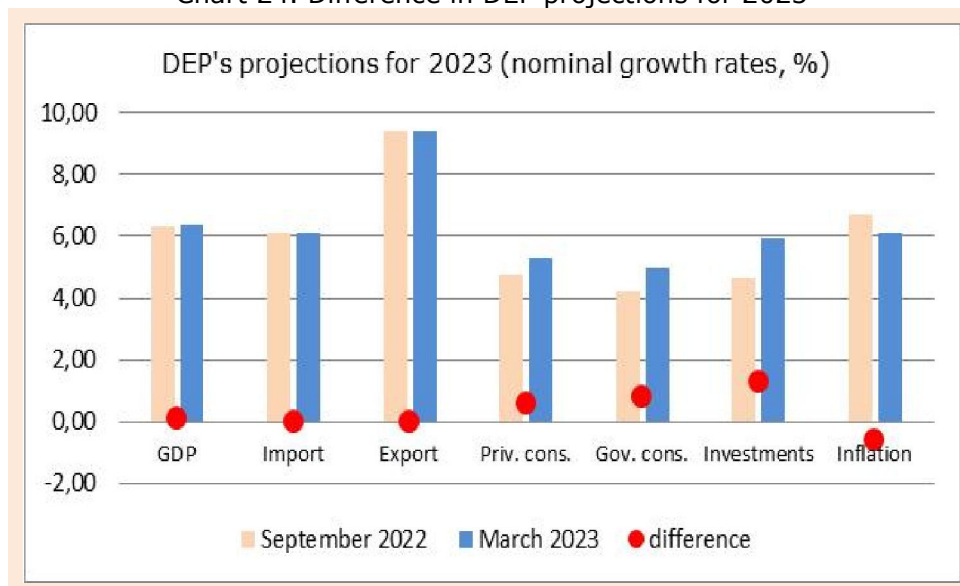


Source: Presentation of the MAU based on DEP's projections

### 3.1.2. Revision of projections of macroeconomic indicators for 2023

There are no significant corrections in the projected growth rates of GDP and its components for the year 2023 in the latest (March 2023) compared to the previous DEP's projections (September 2022). The projected nominal GDP growth rate was revised by only +0.1 p.p. The projected nominal growth rates of imports and exports have not been changed. Private consumption growth rate projection was revised by +0.6 p.p., and the government's by +0.8 p.p. The projected investment growth rate was revised the most, by +1.3 p.p. (Chart 24).

Chart 24. Difference in DEP projections for 2023

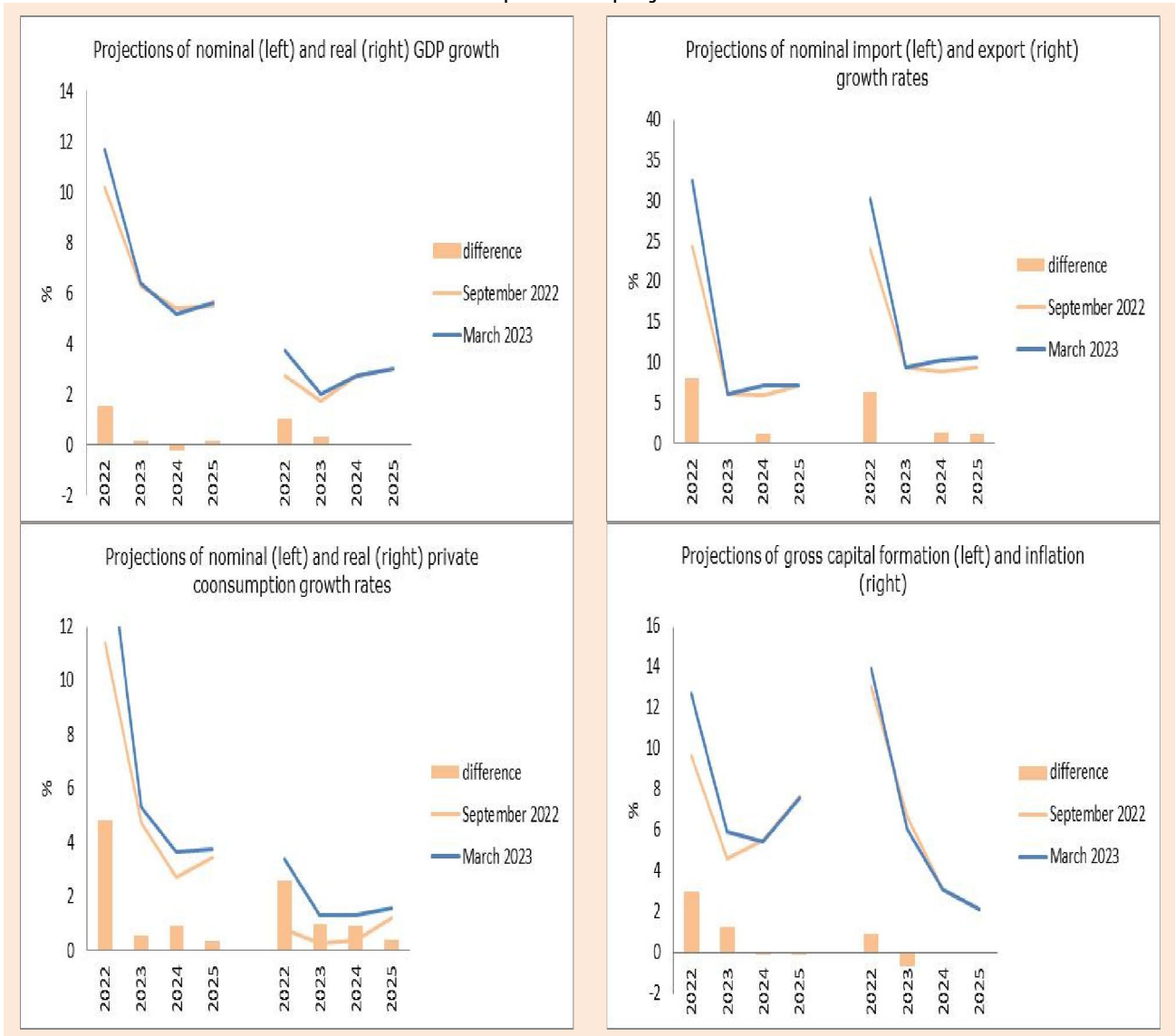


Source: Presentation of the MAU based on DEP's projections

3.1.3. Revision of projections of macroeconomic indicators for the period 2024-2025

Chart 25 shows the March projections of GDP and components for the period 2022-2025 compared to the previous DEP's projections (September 2022), from which it can be seen that the corrections for 2024 and 2025 are not significant. Compared to the previous ones, nominal GDP growth projections were revised by -0.2 p.p., +0.1 p.p. for 2024 and 2025, respectively, while the real GDP growth projections for those years have not been changed. Chart 25 also shows the revision of individual GDP components and the inflation rate.

Chart 25. DEP: latest and previous projections of national accounts



Source: Presentation of the MAU based on DEP's projections from March 2023 and September 2022

### **3.2. MAU, revision of indirect tax revenue projections**

#### **3.2.1. Differences in revenue realization in 2022 compared to projections from October 2022.**

According to the revised revenue projections,<sup>31</sup> prepared by the Unit in mid-October 2022, indirect taxes are projected to be collected in 2022 in the amount of 7,828.1 million BAM. Given that the collection of indirect taxes amounted to 7,826.7 million BAM, it can be concluded that the projections were 99.98% realized.

The analysis by type of revenues showed the following: the net collection of VAT in 2022 was realized 100.68% compared to the October projections, excise duties on oil derivatives 99.82%, excises on tobacco 93.95%, excises on alcohol and beer 99.95%, excises on non-alcoholic beverages 103.49%, excise duty on coffee 100.07%, customs 102.05% and road fees 100.11%. It can be concluded that the realization of all revenues in 2022 in relation to the projections was at a level of around 100%. It should be noted that extremely high rates of accuracy of projections were achieved in the conditions of high uncertainties on the global level and strong price turbulences on the market of oil derivatives and prices in general.

The slightly higher realization of VAT and customs revenues than projected can be explained by higher collection of these revenues due to a stronger growth of imports in 2022 than projected (see Part 3.1.1. Revision of projections of macroeconomic indicators for 2022).

The growth rate of revenues from excises on tobacco in 2022 of 15.4% is below the October projections. The reason for the discrepancy between projected and collected excises on tobacco is a strong slowdown in the fourth quarter of 2022, both in the growth of the value of the cigarette market and of taxed quantities, most likely as a correction due to the reduced demand of non-residents compared to the expected. Compared to the third quarter, the value of the market and the amount of taxed cigarettes were less by up to 27%. The biggest drop was achieved in December 2022, when in the second half of the month, in anticipation of the change in the excise duty payment regime, there were almost no payments of excises on tobacco products to the ITA SA. It should be borne in mind that the old regime of anticipatory payment of excise duty when taking over excise stamps requires a long time to find out whether there is an adequate demand for the quantities of cigarettes for which the stamps were taken over and which, after a certain time, were imported and placed on the market. Therefore, corrections of the business plans of the tobacco industry, in terms of production and marketing of cigarettes, are not unusual in the fourth quarter, but they have reflections on the collection of excise taxes.

#### **3.2.2. Differences in revenue projections for 2023-2025 compared to projections from October 2022**

The differences in revenue projections for the period 2023-2025 compared to the projections from October 2022 are presented in Table 6. Compared to the projections from October 2022, the revenue projections for 2023, 2024 and 2025 have been revised by +97.6 million BAM, +169.8 million BAM and +207.8 million BAM, respectively.

---

<sup>31</sup> The projections are available in the Unit's bulletin no. 209/210 ([www.oma.uino.gov.ba](http://www.oma.uino.gov.ba))

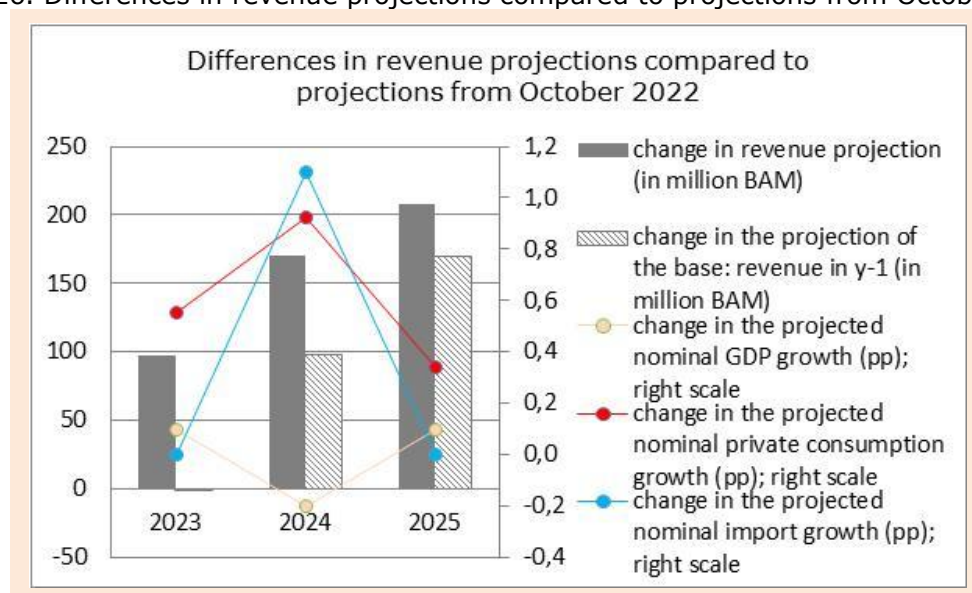
Table 6. Differences in revenue projections for the period 2023-2025 compared to the projections from October 2022

Type of revenue (net)	2023	2024	2025
VAT	52,8	103,8	126,5
Excises	18,8	33,5	46,7
Customs	21,2	27,7	29,6
Road fee	2,6	2,6	2,7
Other	2,2	2,2	2,2
<b>TOTAL</b>	<b>97,6</b>	<b>169,8</b>	<b>207,8</b>

Source: Presentation of the MAU based on indirect tax revenue projections

The revision was the cumulative result of corrections in the base (revenue projection for the previous year:  $y-1$ ) and revision of growth rates of macroeconomic indicators for the current year (Chart 26).

Chart 26. Differences in revenue projections compared to projections from October 2022.



Source: Presentation of the MAU based on indirect tax revenue projections and projections of macroeconomic indicators (DEP)

#### 4. Risks

Considering the huge unknowns at the time of preparing the projections about the further development of the situation on the international level related to the events in Ukraine and the assumptions used (DEP, macroeconomic projections), **we point out that there are significant risks for the realization of projections of indirect tax revenues, where the risks of worse outcome predominate.** Given the basic assumptions of indirect tax projections and the overall economic conditions in B&H and in the world, the realization of the projected level of revenues from indirect taxes in the period 2023-2026 is subject to the following risks: (1) all risks for the realization of projected macroeconomic indicators (DEP) and (2) risks related to the collection of revenues from indirect taxes and fight against the grey economy.

Projections of indirect tax revenues are closely related to the projections of macroeconomic indicators of DEP. All risks mentioned by DEP in their projections automatically represent risks for the projections of indirect taxes, since any deviation of the realization of DEP parameters from their projected values inevitably leads to deviations from the projected indirect tax revenues. The March 2023 DEP projections state that the risks to their projections can be classified into two groups: external and internal. The same document states the following: *„...At the time of preparation of this report, it seems that external risks are much more pronounced and represent a greater risk for the realization of economic growth projections from the baseline scenario, compared to internal ones. Namely, after the stabilization of the epidemiological situation related to COVID19, at the beginning of 2022, there was an escalation of the conflict between Ukraine and Russia, which will undoubtedly have negative economic consequences for the global economy and, therefore, for Bosnia and Herzegovina. Further escalation of the Ukrainian crisis, as well as strengthening inflationary pressures both globally and in Bosnia and Herzegovina would certainly have a negative impact on consumption, investment, foreign trade and thus on the economic growth projections in the baseline scenario.“*<sup>32</sup>

Risks that may jeopardize the realization of indirect tax revenue projections in the area of policy and administration of indirect taxes include the following:

- The weakening of the measures to combat black market of tobacco products after completion of the harmonization of tax burden on cigarettes in B&H with the EU standards;
- Weakening of the fight against VAT fraud, especially in the field of refunds, which, in a situation of falling employment and illiquidity of taxpayers become attractive for fraud;
- Proposed changes in the policy of indirect taxation, such as: differentiated VAT rates; temporary abolition of excise duties on oil derivatives. These changes in legislation could lead to a significant decline in indirect tax revenues.

---

<sup>32</sup> DEP, Macroeconomic Projections 2024-2026, March 2023.



## Annex I: Latest projections of international institutions

### i. Projections of the European Commission (EC)

Based on Table 7, we can see the projections of real GDP growth and inflation for the period from 2022 to 2024 from the latest EC projections. For 2022, it was estimated that real GDP growth of 3.5% was achieved in the EU, while growth rates of 0.9% and 1.5% are projected for 2023 and 2024, respectively. The inflation rate in the EU is estimated to fall from 9.2% in 2022 to 6.4% in 2023, and to 2.8% in 2024.

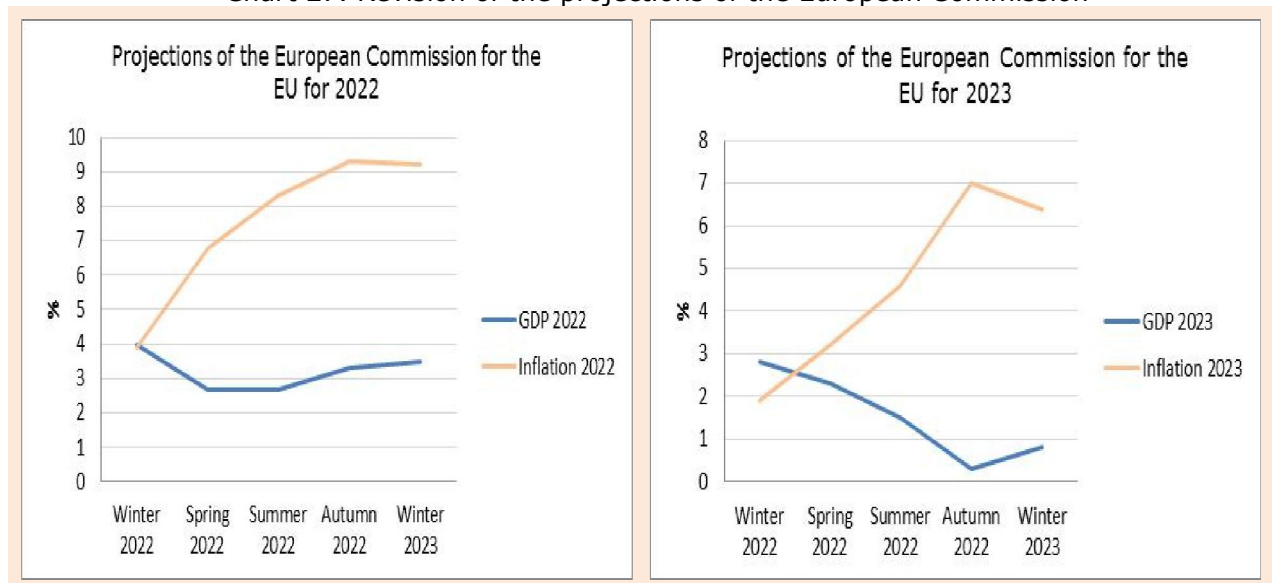
Table 7. Winter projections of the EC, February 2023

Projection	Real GDP growth			Inflation		
	2022	2023	2024	2022	2023	2024
EA	3,5	0,9	1,5	8,4	5,6	2,5
EU	3,5	0,8	1,6	9,2	6,4	2,8

Source: European Economic Forecast, Winter 2023

Chart 27 shows the revision of the GDP and inflation projections for 2022 (left) and 2023 (right) compared to the previous four editions of the EC projections.

Chart 27. Revision of the projections of the European Commission



Source: Presentation of the MAU based on European Commission projections

### ii. Projections of the International Monetary Fund (IMF)

The latest IMF projections date from January 2023.<sup>33</sup> According to the source, global growth is forecast to fall from an estimated 3.4% in 2022 to 2.9% in 2023 and then increase to 3.1% in 2024. The forecast for 2023 is 0,2 percentage points higher than the IMF's forecasts from October 2022 (Table 8).

In addition to the projections for the world economy, Table 8 presents the IMF's projections for the Eurozone.

<sup>33</sup> IMF, World Economic Outlook Update, January 2023.

Table 8. Real GDP growth projections, IMF, January 2023

	2021	Estimate 2022	Projections		Difference from October 2022 WEO	
			2023	2024	2023	2024
World Output	6,2	3,4	2,9	3,1	0,2	-0,1
Euro Area	5,3	3,5	0,7	1,6	0,2	-0,2

Source: IMF, World Economic Outlook Update, January 2023.

### iii. Projections of the European Central Bank (ECB)

In the March 2023 ECB projections, it is stated that annual average real GDP growth in the Eurozone should slow down from 3.6% in 2022 to 1.0% in 2023, and then increase to 1.6% in 2024 and in 2025.

Table 9. ECB: GDP growth and inflation projections for the Eurozone

	2021	2022	2023	2024	2025
Real GDP	5,3	3,6	1,0	1,6	1,6
HIPC inflation	2,6	8,4	5,3	2,9	2,1

Source: Projections of the ECB, March 2023

The report notes that the risks to the projections are high because they were completed before the recent emergence of financial market tensions and because of increased risks associated with further worsening of broader credit conditions and deterioration of confidence. Other risk factors are related to the macroeconomic impact of monetary and fiscal policy in the Eurozone, global monetary policy, and energy prices. Uncertainties surrounding the projections are illustrated in the ECB document through symmetric fan charts. The document also contains a scenario in which the consequences of a possible stronger growth of the Chinese economy are assessed, as well as ranges of sensitivity analyses related to alternative paths for energy commodity prices.

Archive of Bulletins:

[http://www.oma.uino.gov.ba/04\\_objasnjenja.asp?l=e](http://www.oma.uino.gov.ba/04_objasnjenja.asp?l=e)

## Analysis of collection of revenues from excise duty on beer in 2022 and current trends

(Author: Mirjana Popović, expert advisor - macroeconomist)

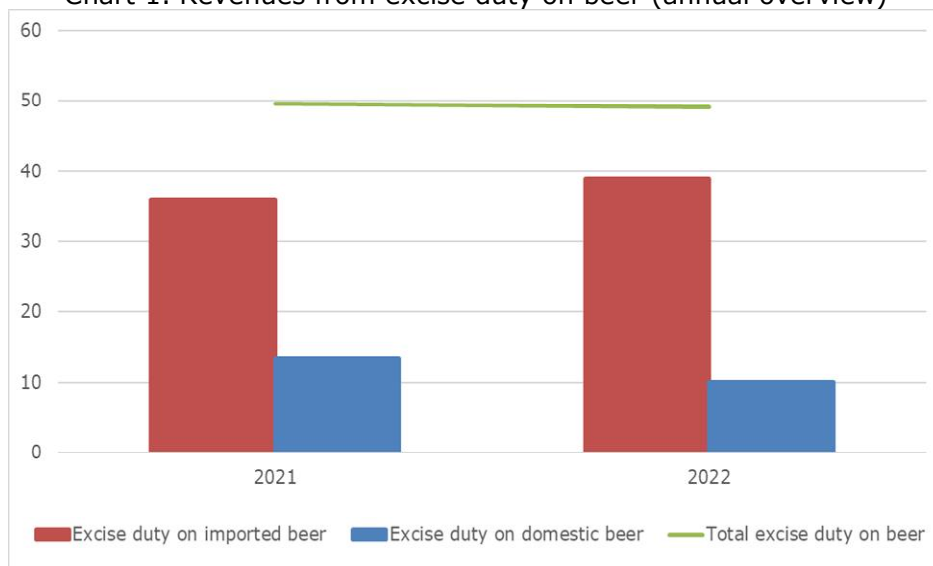
### Summary

The focus<sup>34</sup> of the analysis is the annual collection of total revenues from excise duty on beer as well as the annual collection of revenue from excise duty on beer separated by components - revenues from excise duty on imported beer and revenues from excise duty on domestic beer in Bosnia and Herzegovina in 2022 compared to the 2021<sup>35</sup>. The analysis also shows the quarterly movement of the total collection of revenues from excise duty on beer, as well as the quarterly movement of the collection of revenues from excise duty on beer separated by components - revenues from excise duty on imported beer and revenues from excise duty on domestic beer for the period from the first quarter (Q1) of 2021 to fourth quarter (Q4) 2022. The monthly collection of total revenues from excise duty on beer and the monthly collection of revenues from excise duty on beer separated by components - revenues from excise duty on imported beer and revenues from excise duty on domestic beer for the period January 2021 - February 2023<sup>36</sup>, are also shown.

### 1. Annual movement of revenues from excise duty on beer

Total revenues from excise duty have a significant share in total revenues from indirect taxes, while total revenues from excise duty on beer contribute 3.3% in 2021 and 3.1% in 2022 in total revenues from excise duty on an annual basis.

Chart 1. Revenues from excise duty on beer (annual overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

Chart 1 shows the movement of the annual collection of revenues from excise duty on beer for the period 2021-2022, in millions of BAM (left vertical scale). The annual collection of total revenues from excise duty on beer in the observed period, as well as the annual collection of excise

<sup>34</sup> More about the beer taxation policy and collection of revenues from excise duties on beer: Popović, M. (2022). "Analysis of collection of revenues from excise duties on beer". MAU bulletin no. 205/206.

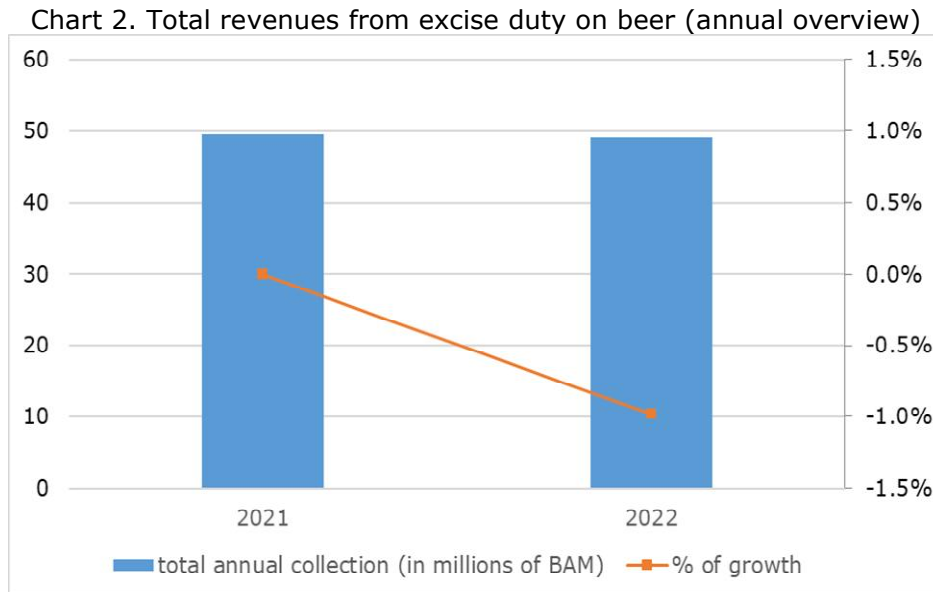
<sup>35</sup> Due to the emergence of the Covid-19 pandemic as well as the measures introduced to combat the spread of the virus, the 2020 is not relevant for comparison, and the analysis does not show a three-year time.

<sup>36</sup> Latest data available.

revenues separated by components - revenues from excise duty on imported beer and revenues from excise duty on domestic beer - is presented.

### 1.1. Annual movement of total revenues from excise duty on beer

Chart 2 shows the annual movement in the collection of total revenues from excise duty on beer for the period 2021 and 2022, in millions of BAM (left vertical scale), as well as the annual growth rate of these revenues (right vertical scale)<sup>37</sup>.



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

In 2022, the collection of total revenue from excise duty on beer is slightly down, compared to 2021. Thus, in 2022, less of these revenues were collected by 1.0% compared to the previous year (chart 2, % of growth). In addition to the annual collection of total revenues from excise duty on beer in 2021 and 2022, the collection of revenues from excise duty on beer separated by components (import and domestic excise duty) for the same period is shown below. This provides a more detailed picture of consumer preferences and the influence of other external factors, which will be discussed in the continuation of the analysis.

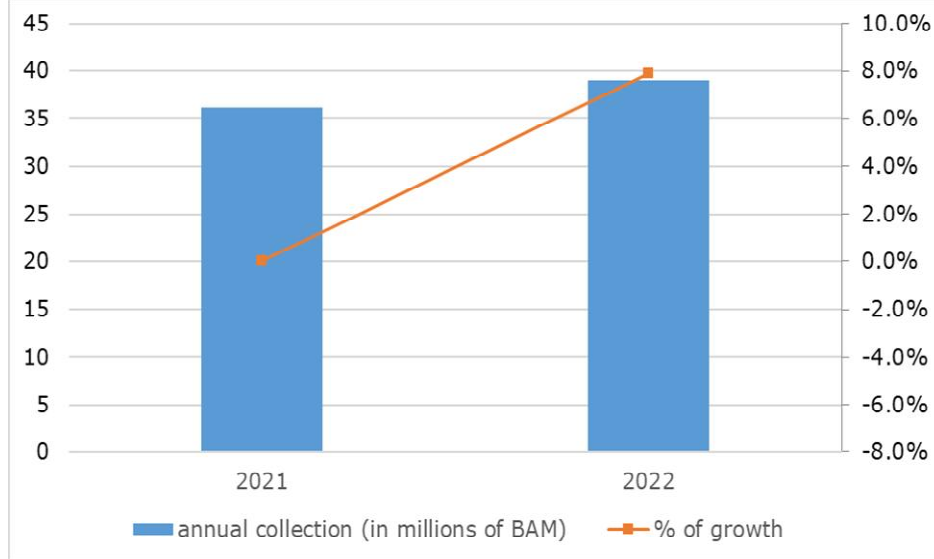
### 1.2. Annual movement of revenues from excise duty on imported beer

Chart 3 shows the annual movement of revenue collection from excise duty on imported beer for the period 2021 and 2022, in millions of BAM (left vertical scale), as well as the annual growth rate of these revenues (right vertical scale)<sup>38</sup>.

<sup>37</sup> the 2021 was used as a base

<sup>38</sup> the 2021 was used as a base

Chart 3. Revenues from excise duty on imported beer (annual overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

Although the total annual collection of revenues from excise duty on beer in 2022 is in a slight decline compared to the previous year, in 2022 there was an increase in revenues from excise duty on imported beer by 7.9% compared to the previous year (chart 3, % of growth). This shows that the collection of revenues from excise duty on domestic beer in 2022 is decreasing, which is shown below. The reasons for increasing of revenues from excise duty on imported beer are largely attributed to consumer preferences, a significantly larger supply of imported beer compared to domestic producers, as well as the affordable price of imported beer.

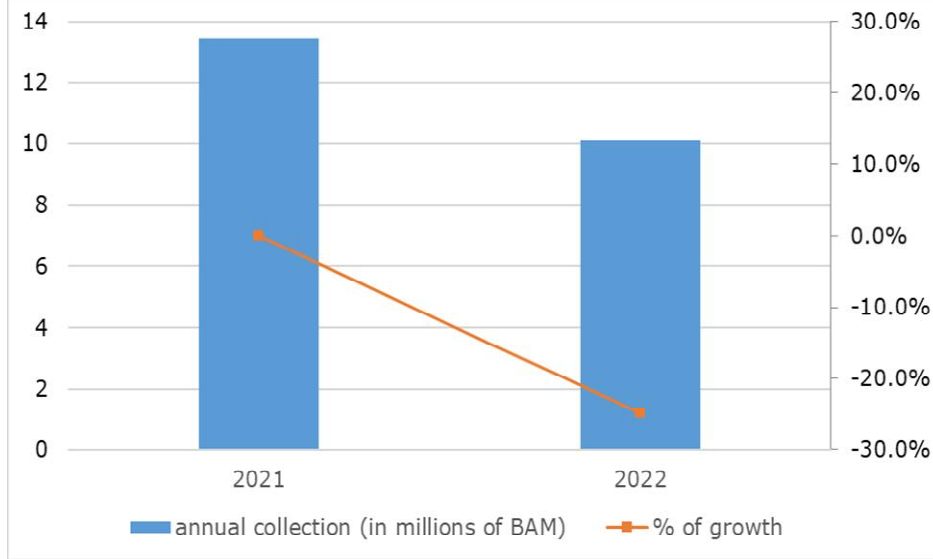
### 1.3. Annual movement of revenues from excise duty on domestic beer

Chart 4 shows the annual movement of revenue collection from excise duty on domestic beer for the period 2021 and 2022, in millions of BAM (left vertical scale), as well as the annual growth rate of these revenues (right vertical scale)<sup>39</sup>.

Thus, the collection of revenues from excise duty on domestic beer in 2022 is lower by 24.8% compared to the 2021 (chart 4, % of growth). The main reason for the decline in revenue from excise duty on domestic beer is the decline in its consumption by the domestic population, which has the effect of reducing the volume of domestic beer production. Although the quality of water greatly affects the quality of beer, and domestic producers have the prerequisites for a quality product, both industrial and craft beer, sales of domestic beer cannot reach the sales of imported beer, and compared to imported beer, it is decreasing.

<sup>39</sup> the 2021 was used as a base

Chart 4. Revenues from excise duty on domestic beer (annual overview)

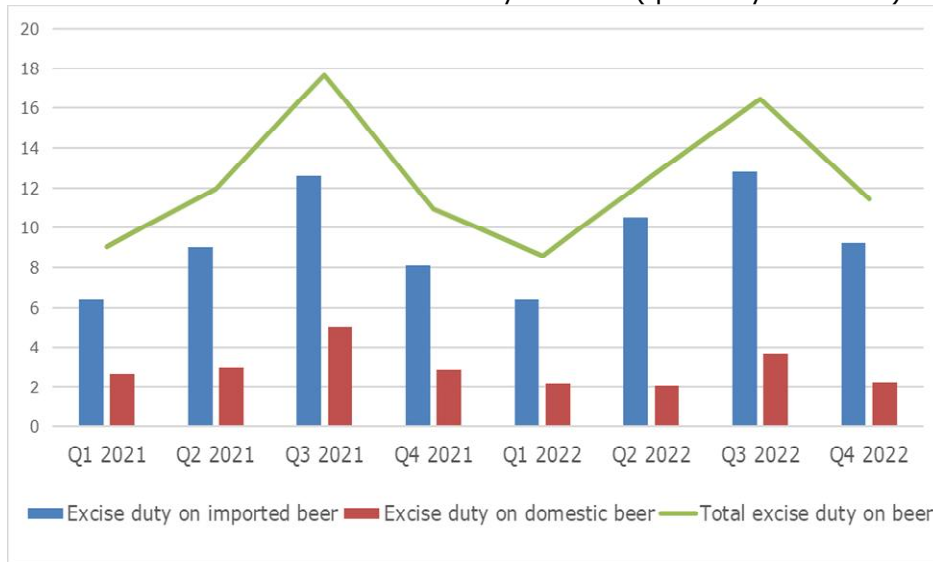


Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

## 2. Quarterly movement of revenues from excise duty on beer

The quarterly movement of revenues from excise duty on beer is of a seasonal nature. The data show a seasonal trend in the collection of total revenues from excise duty on beer, which is a consequence of weather conditions, and the highest consumption of beer was recorded in the third quarters.

Chart 5. Revenues from excise duty on beer (quarterly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

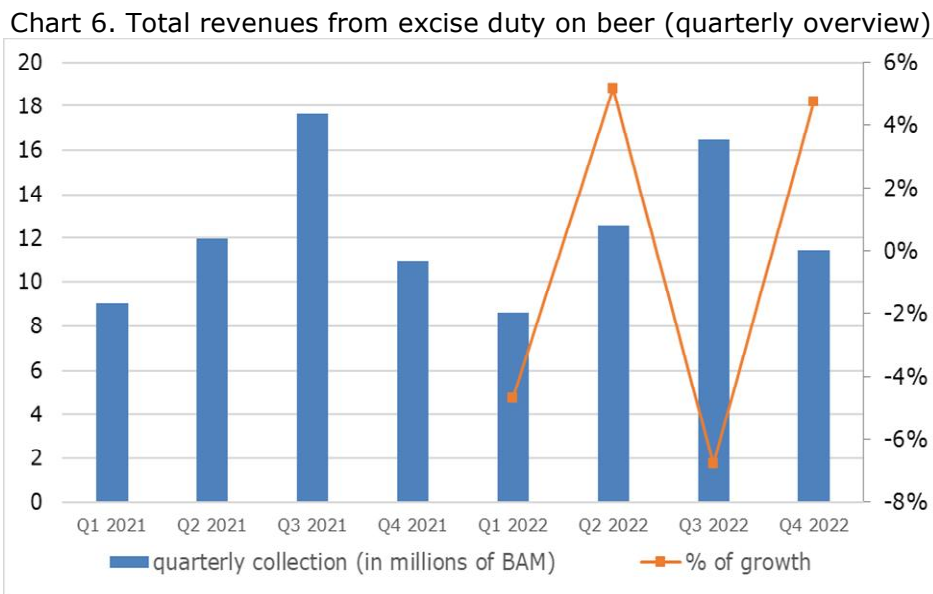
Chart 5 shows the quarterly movement of revenues from excise duty on beer for the specified period in millions of BAM (left vertical scale). The quarterly dynamics of the movement of total revenues from excise duty on beer, as well as revenues from excise duty on beer by component -

revenues from excise duty on imported beer and revenues from excise duty on domestic beer, is shown for the period from the first quarter (Q1) of 2021 to the fourth quarter (Q4) of 2022<sup>40</sup>.

It is evident from the chart that the highest collection of total revenue from excise duty on beer is in the third quarter on a quarterly level, and is influenced by seasonal conditions, that is, weather conditions.

### 2.1. Quarterly movement of total revenues from excise duty on beer

Chart 6 shows the quarterly movement in the collection of total revenues from excise duty on beer, in millions of BAM (left vertical scale), as well as the quarterly growth rate of these revenues (right vertical scale), for the period Q1 2021 - Q4 2022<sup>41</sup>.



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

An analysis of the quarterly movement in the total revenues from excise duty on beer in the first quarters of the last two years shows a decrease in the collection of these revenues in the first quarter of 2022 compared to the first quarter of 2021 by 4.7% (chart 6, % of growth). The collection in the second quarter of 2022 is higher by 5.2% compared to the second quarter of the previous year (chart 6, % of growth). Because of the seasonal influence, the collection of these revenues in the third quarters is significantly higher than the collection of the same revenues in all remaining quarters. However, in the third quarter of 2022, there is a decrease of these revenues by 6.8% compared to the same quarter of the previous year (chart 6, % of growth). The total revenues from excise duty on beer, observed in the fourth quarter of the analyzed two years, are higher by 4.7% in the fourth quarter of 2022 compared to the fourth quarter of 2021 (chart 6, % of growth).

### 2.2. Quarterly movement of revenues from excise duty on imported beer

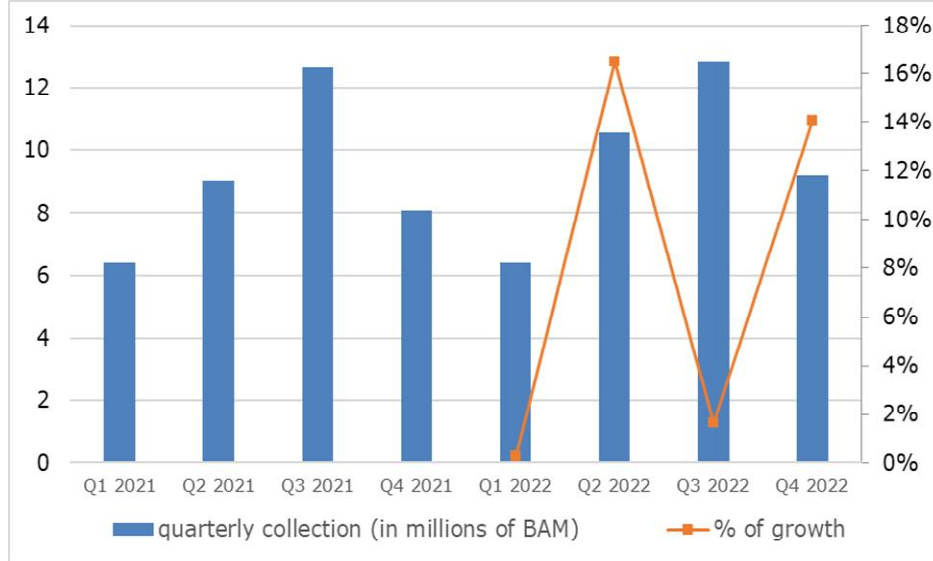
Chart 7 shows the quarterly movement in the collection of revenues from excise duty on imported beer, in millions of BAM (left vertical scale), as well as the quarterly growth rate of these revenues (right vertical scale), for the period Q1 2021 - Q4 2022<sup>42</sup>.

<sup>40</sup> Latest data available

<sup>41</sup> the 2021 was used as a base

<sup>42</sup> the 2021 was used as a base

Chart 7. Revenues from excise duty on imported beer (quarterly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

The quarterly collection of excise duty on imported beer has a positive movement during all quarters in 2022 compared to the quarterly collection in 2021. The trend in the collection of revenues from excise duty on imported beer at the quarterly level in the observed period is also of a seasonal nature, and the collection of these revenues is the highest in the third quarters in the observed two years. In the first quarters of 2021 and 2022, the revenues collected from excise duty on imported beer are at an approximate level, 0.3% higher in the first quarter of 2022 compared to the first quarter of 2021 (chart 7, % of growth). In the second quarter of 2022, revenues from excise duty on imported beer are 16.5% higher compared to the same quarter of the previous year (chart 7, % of growth), while their collection in the third quarter of 2022 compared to the third quarter 2021, is higher by 1.7% (chart 7, % of growth). Also, in the fourth quarter of 2022 there was an increase in the collection of these revenues compared to the same quarter of 2021 by 14.0% (chart 7, % of growth).

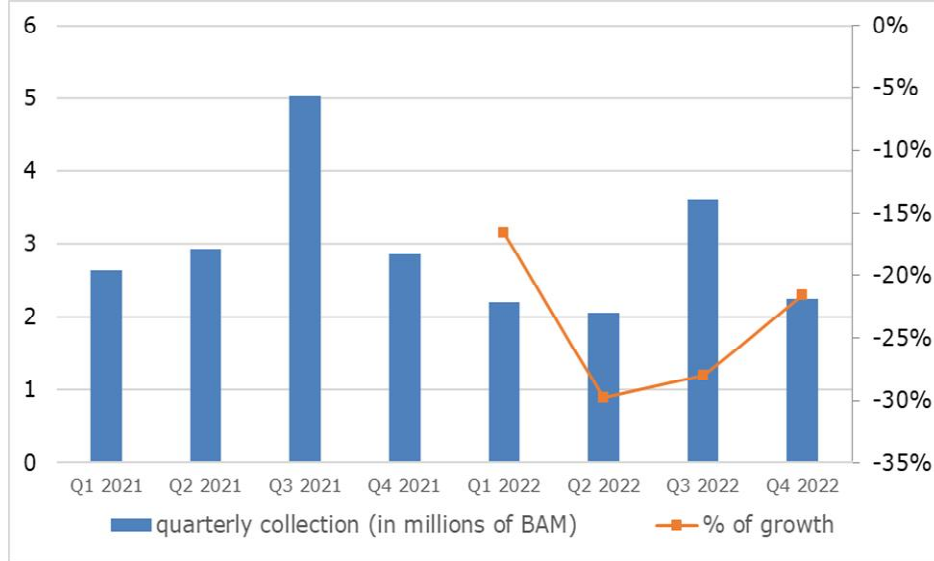
### 2.3. Quarterly movement of revenues from excise duty on domestic beer

Chart 8 shows the quarterly movement of collection of revenues from excise duty on domestic beer, in millions of BAM (left vertical scale), as well as the quarterly growth rate of these revenues (right vertical scale), for the period Q1 2021 - Q4 2022.<sup>43</sup>

<sup>43</sup> the 2021 was used as a base



Chart 8. Revenues from excise duty on domestic beer (quarterly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

A negative trend in the collection of revenues from excise duty on domestic beer on a quarterly basis was recorded in all quarters of 2022 compared to the quarterly collection of these revenues in 2021. Thus, the collection of revenues from excise duty on domestic beer in the first quarter of 2022 is 16.6% less compared to the same quarter of 2021 (chart 8, % of growth). In the second quarter of 2022, a decrease in these revenues by 29.8% was recorded (chart 8, % of growth), while in the third quarter of 2022, their decrease was recorded by 28.1% (chart 8, % of growth), all compared with the same quarters of the previous year. As in the first three quarters, the fourth quarter of 2022 is characterized by a decrease in the consumption of domestic beer, so the collection of excise revenue on domestic beer in this quarter is 21.6% lower compared to the fourth quarter of 2021 (chart 8, % of growth).

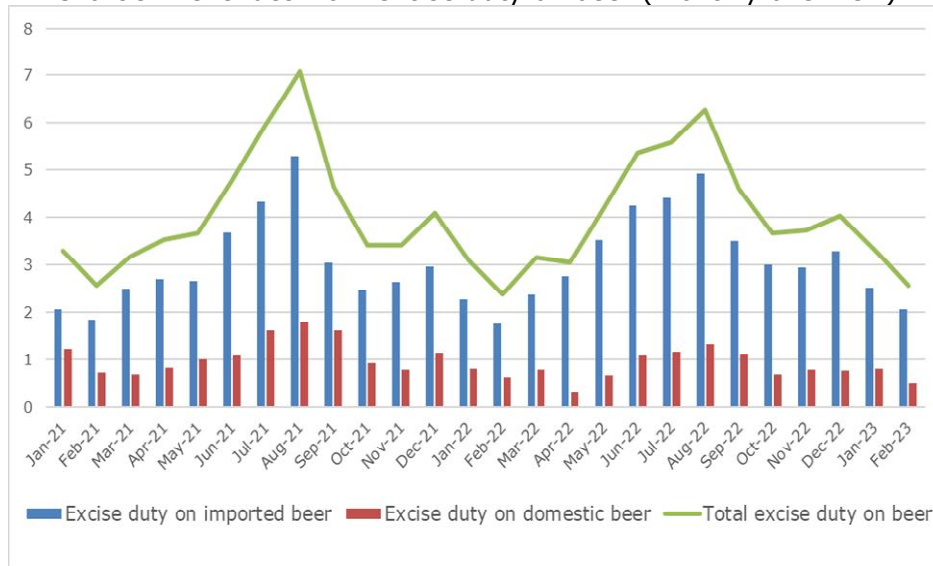
### 3. Monthly movement of revenues from excise duty on beer

The monthly dynamics of the collection of beer excise revenue is shown for the period from January 2021 to February 2023<sup>44</sup>. The goal of the monthly analysis of revenue collection from excise duty on beer is a more detailed presentation of the movement of these revenues under the influence of numerous external factors on the price of beer, the quantity consumed, as well as the behavior and preferences of consumers. The analysis so far has shown that the seasonal influence is the greatest when it comes to these revenues, that is, weather conditions have the greatest impact on beer consumption. The consequences of the Covid-19 pandemic, which are still present through changes in the behavior and habits of consumers, are some of the factors that to a certain extent affect the collection of excise revenue on beer, but the influence of this factor is weaker as life gradually returned to normal flows. However, the war between Russia and Ukraine, which began at the end of February 2022, has resulted in significant inflation and disruptions in supply chains at the global level, which in the observed period was mostly reflected in the increase in the price of this excise product.

Chart 9 shows the monthly movement of revenue from excise duty on beer for the specified period, in millions of BAM (left vertical scale). The monthly movement of the total collection of excise revenue on beer in the observed period, as well as the monthly movement of the collection of excise revenue separated by components, is shown.

<sup>44</sup> Latest data available

Chart 9. Revenues from excise duty on beer (monthly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

As with the quarterly data, it is evident from the chart that the highest collection of total revenues from excise duty on beer is in the summer months. Due to weather conditions, the highest consumption of beer is in the period from June to September, after which the consumption decreases slightly until December, when an increase in the collection of these revenues was recorded because of increased consumption during the holidays. Observed on a monthly basis, the highest collection of total revenues from excise duty on beer on a monthly basis was recorded in August 2021. Thus, compared to that month in the same month of 2022, a decrease of 11.6% was recorded in the total revenues from excise duty on beer. A more detailed analysis of monthly revenues from excise duty on imported and domestic beer is given below.

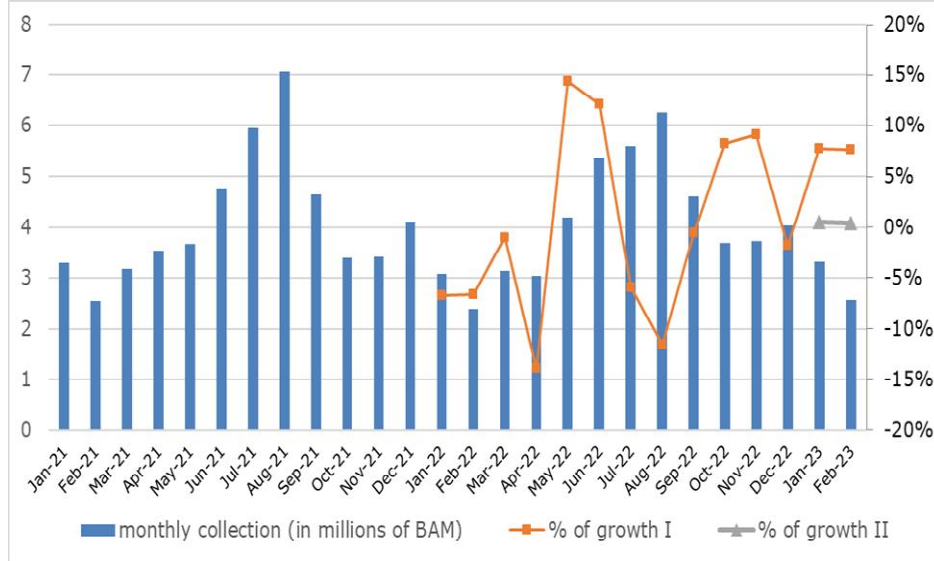
### 3.1. Monthly movement of total revenues from excise duty on beer

Chart 10 shows the monthly movement of the collection of total revenues from excise duty on beer, in millions of BAM (left vertical scale), as well as the monthly growth rate of these revenues (right vertical scale), for the period January 2021 - February 2023<sup>45</sup>.

The biggest decrease in the collection of total revenues from excise duty on beer on a monthly level was recorded in April 2022 compared to the same month in 2021, 13.9% (chart 10, % of growth I), as well as in August 2022 compared to the same month of the previous year 11.6% (chart 10, % of growth I). The highest growth of collected total revenues from excise duty on beer on a monthly basis in the observed period was recorded in May 2022 and compared to May 2021 it is higher by 14.4% (chart 10, % of growth I). The total revenues from excise duty on beer collected in January and February of the current year remained at the level of collection in the first two months of 2021 (chart 10, % of growth II). Compared to January of the previous year, in January of the current year there was an increase in the collection of these revenues by 7.7% (chart 10, % of growth I), while in February of the current year an increase of 7.6% was recorded compared to the same month in the previous year (chart 10, % of growth I).

<sup>45</sup> the 2021 was used as a base

Chart 10. Total revenues from excise duty on beer (monthly overview)

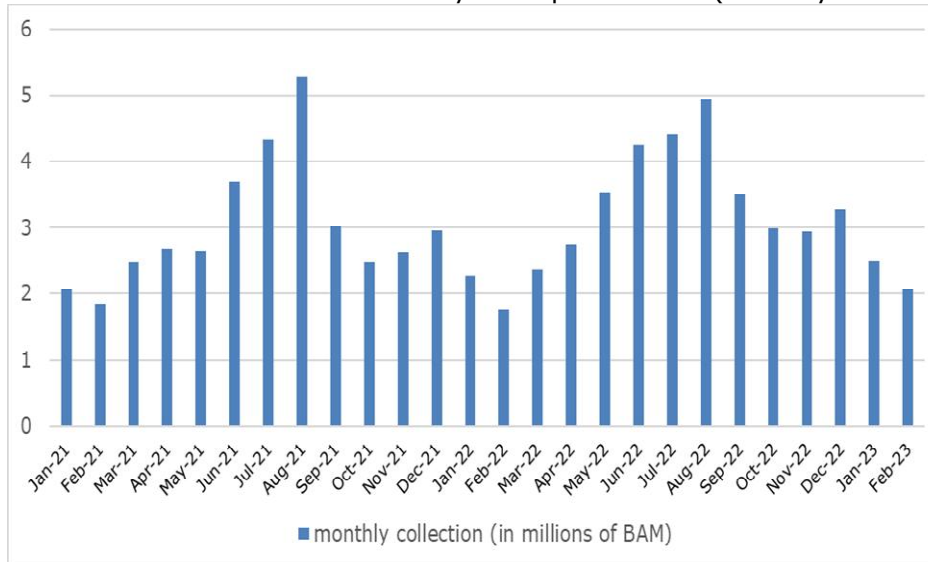


Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

**3.2. Monthly movement of revenues from excise duty on imported beer**

Chart 11 shows the monthly movement of revenue collection from excise duty on imported beer, in millions of BAM (left vertical scale), for the period January 2021 - February 2023<sup>46</sup>.

Chart 11. Revenues from excise duty on imported beer (monthly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

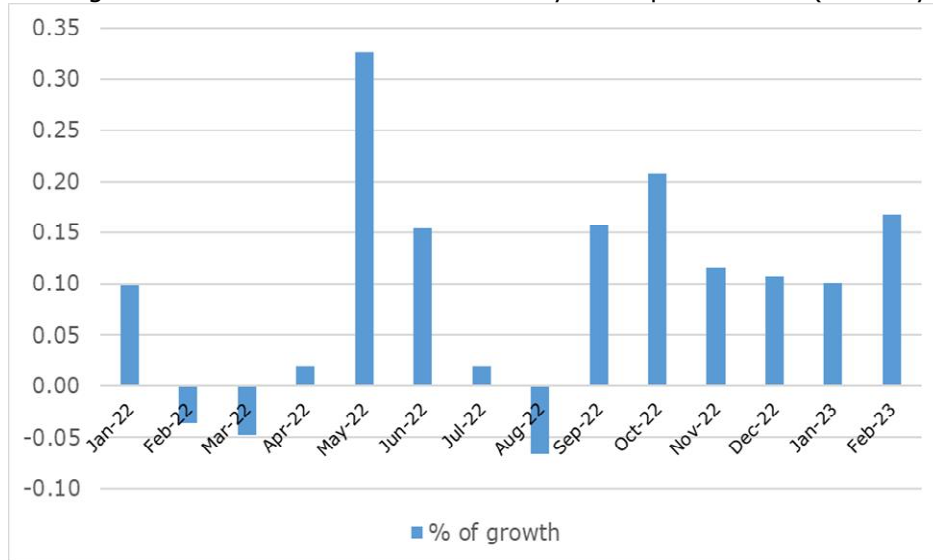
As with the total revenues from excise duty on beer shown on a monthly level, the highest revenue collection from excise duty on imported beer is also in the summer months. From the data shown in the chart, it is evident that the highest collection of revenues from excise duty on imported beer on a monthly basis was recorded in August 2021. Compared to the same month, in August 2022, this revenues decreased by 6.7%. The lowest monthly collection of these revenues

<sup>46</sup> the 2021 was used as a base

was recorded in February 2022, and 16.8% more of these revenues were collected in February of the current year.

Chart 12 shows the monthly growth rate of revenues from excise duty on imported beer for the period January 2022 - February 2023<sup>47</sup>, compared to the same month of the previous year.

Chart 12. % of growth in revenues from excise duty on imported beer (monthly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

The biggest drop in collection of revenues from excise duty on imported beer on a monthly basis was recorded in August 2022 compared to the same month in 2021 by 6.7%, as well as in March 2022 compared to March of the previous year, by 4.8%. The largest increase in revenues from excise duty on imported beer on a monthly basis in the observed period recorded in May 2022 and compared to May 2021 it is higher by 32.7%. Revenues from excise duty on imported beer collected in January of the current year are higher by 10.1% compared to January 2022, while in February of the current year these revenues are higher by 16.8% compared to the same month of the previous year.

### 3.3. Monthly movement of revenues from excise duty on domestic beer

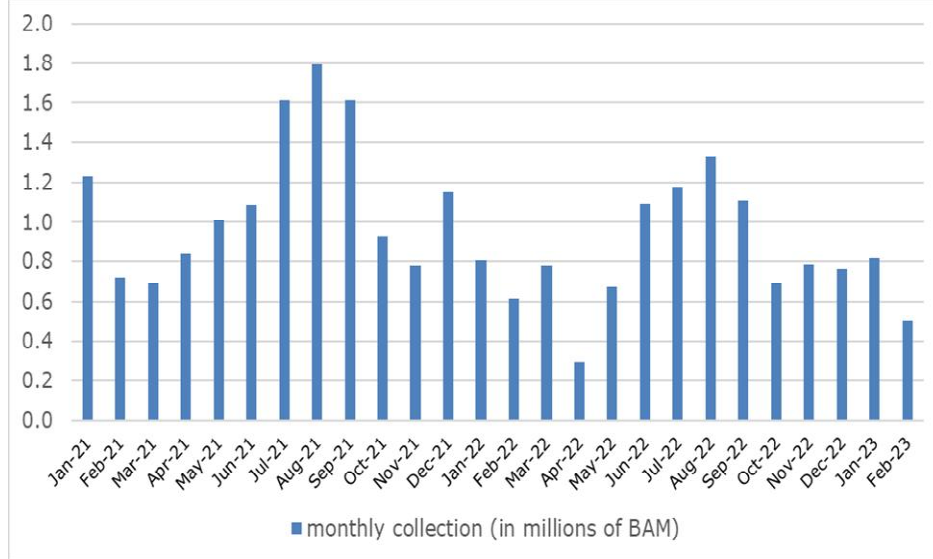
Chart 13 shows the monthly movement of revenue collection from excise duty on domestic beer, in millions of BAM (left vertical scale), for the period January 2021 - February 2023<sup>48</sup>.

The highest revenue collection from excise duty on domestic beer was also recorded in August 2021, and in the same month of 2022, the collection of these revenues is 26.0% lower than in August 2021. April 2022 is characterized by the lowest collection of excise revenue on domestic beer in the observed period, which is 64.3% less compared to the collection in the same month of 2021.

<sup>47</sup> Latest data available

<sup>48</sup> the 2021 was used as a base

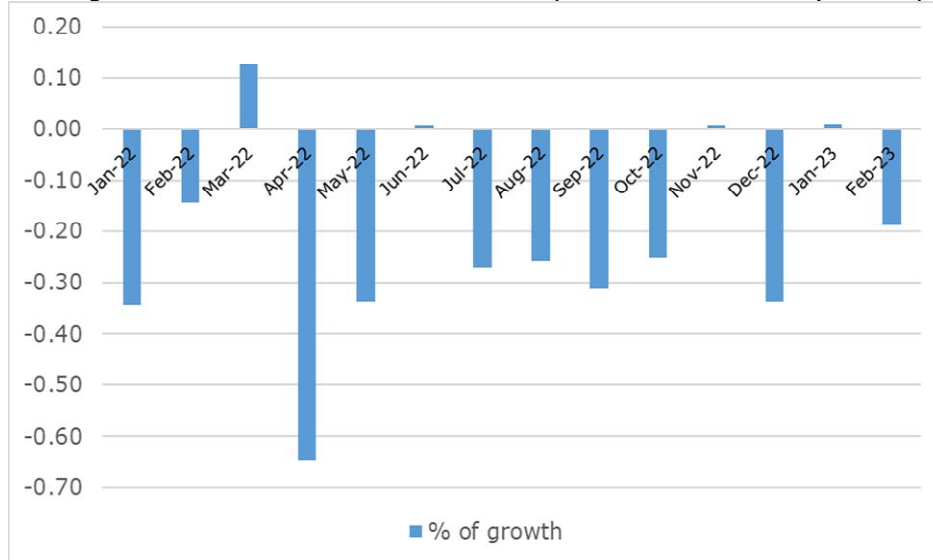
Chart 13. Revenues from excise duty on domestic beer (monthly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

Chart 14 shows the monthly growth rate of revenue from excise duty on domestic beer for the period January 2022 - February 2023<sup>49</sup>, compared to the same month of the previous year.

Chart 14. % of growth in revenues from excise duty on domestic beer (monthly overview)



Source: Data from the Indirect Taxation Authority of BiH, presentation of the MAU

The collection of revenues from excise duty on domestic beer in January of the current year is at an approximate level as the collection in the same month of the previous year, while in February of the current year, a lower collection of these revenues was recorded by 18.8% compared to February of the previous year. The largest decrease in revenues from excise duty on domestic beer on a monthly basis was recorded in April 2022 compared to the same month in 2021, by 64.7%. The largest increase in these revenues on a monthly basis in the observed period was recorded in March 2022 and it is higher by 12.6% compared to the same month in 2021.

<sup>49</sup> Latest data available