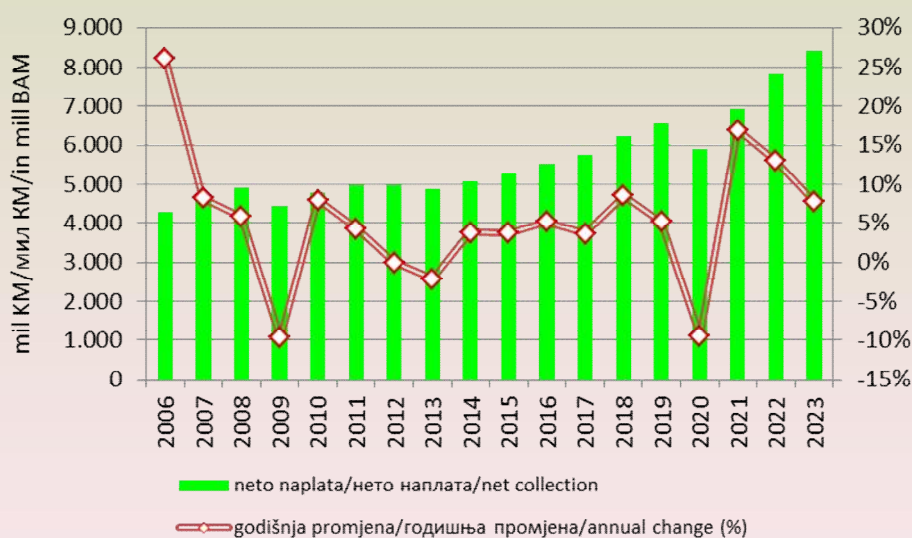




Macroeconomic Unit of the Governing Board of the Indirect Taxation Authority

# ОМЈА Билтен



Broj  
Број  
Number 231/232

septembar/oktobar 2024 – rujan/listopad 2024 – септембар/октобар 2024 – September/October 2024

## With this issue

According to the preliminary report of the ITA, in August 2024, 1.009 billion of gross revenue from indirect taxes was collected on the Single Account, which is 29.4 million BAM more than in the same month in 2023. The refund payments were 19.4 million lower, so the net collection was ultimately higher by 48.8 million BAM (Chart 1, "monthly collection"), or by 6.1%. In August 2024, more modest growth rates of the main types of indirect taxes were achieved. The highest growth rate of 4.7% was recorded in revenue from customs duties, while excise duty collection grew at a rate of 1.2%, and net VAT by 1%. Nevertheless, in August 2024, the collection of indirect taxes recorded a historical maximum, if we observe the months of August since the establishment of the ITA, which had a positive influence on the effects for eight months. Thus, in the period January - August 2024, gross collection increase of 8.3% was achieved, while refund payments were 95.7 million BAM lower. Ultimately, the net absolute increase in the collection of indirect taxes in the period January-August 2024 amounted to 667.6 million BAM (Chart 1, "cumulative"), representing a cumulative growth of 12.2%.

Chart 1

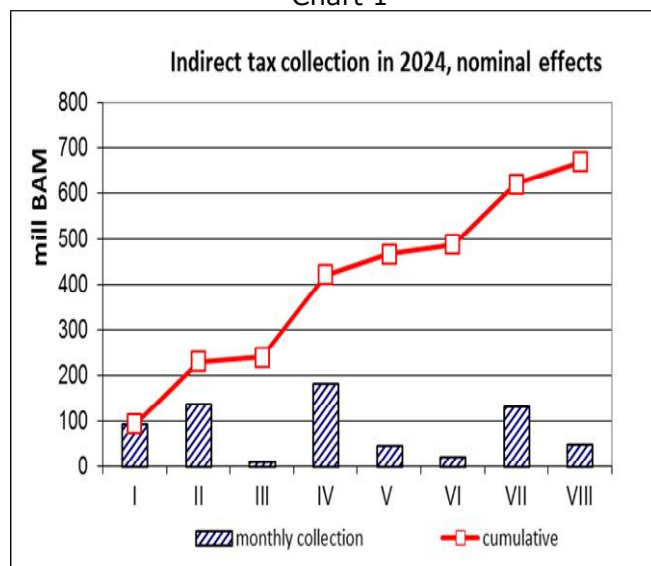
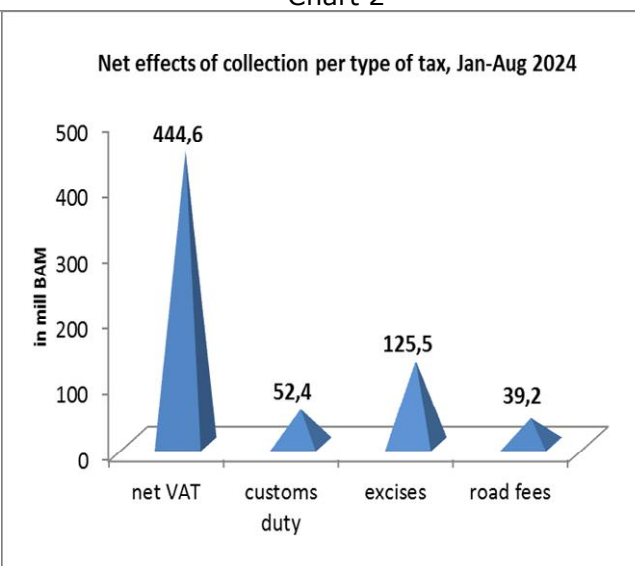


Chart 2



The largest absolute increase for eight months in 2024 compared to the same period in 2023 was achieved in the collection of VAT and excises (Chart 2). Since, during the preparation of the preliminary report, approximately 33.9 million BAM of revenue remained unadjusted, after the final adjustment of revenue collection with applications and declarations in the IT system of the ITA, greater effects can be expected, primarily, in net VAT.

Dinka Antić, PhD  
Head of Unit

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Technical design: Sulejman Hasanović, IT expert  
Reader/translator: Darija Komlenović, professor

## New VAT threshold in Bosnia and Herzegovina: Analysis of the implications of the (too) high threshold on the example of Great Britain

(author: Dinka Antić, PhD)

*The VAT registration threshold is an instrument of the fiscal authorities to ensure the privileged position of small companies in the VAT system. The VAT registration threshold policy should answer the question of what is the optimal threshold for VAT registration, taking into account the costs and benefits/revenues of both taxpayers and the tax administration in the specific country. Bosnia and Herzegovina recently increased the VAT registration threshold from 50,000 BAM to 100,000 BAM.<sup>1</sup> Comparative analyzes show that the new VAT registration threshold is higher than in a large number of EU member states, many of which are more developed than B&H. According to the opinion of most experts, the example of G. Britain shows the effects of too high registration threshold. Professional and academic analyzes and political debates on the registration threshold, which have been conducted in this country for the last six years, have pointed to a phenomenon colloquially called "bunching", which implies the grouping of small companies just below the registration threshold. Analyzes show that "bunching" produces negative micro and macro consequences - micro, because it hinders the business development of small companies, while on the macro level it leads to a slowdown in economic growth.*

### INTRODUCTION

Registration threshold is an important element of VAT taxation, as it indicates the country's policy towards small companies. Countries that have chosen a low threshold prefer wider scope of taxpayers, often ignoring the costs of administering a large number of small taxpayers, which may exceed revenues that can be collected from them. On the other hand, countries that have chosen a higher threshold focus on large taxpayers, who pay the bulk of funds into the budget, while small companies have the option to register for VAT if their business in the VAT system would be economically and financially profitable.

The category of small and medium-sized enterprises, regardless of the individual small economic strength, in all modern countries represents one of the most important cohesive factor in the national economy that contributes to the reduction of local and regional disparities and increase employment in market segments which are not profitable for large companies. Studies have shown that the tax burden in relation to realized revenues is much higher for small and medium-sized companies than for large companies. The high tax burden, which, in addition to the tax liability, also includes the costs of complying with tax regulations, in developing countries is a motive for the migration of small taxpayers from the regular streams of the economy to the gray economy.

Tax systems recognize the specific position of small enterprises in the economy. The good practice of developed countries indicates that there are two ways to ensure the preferential position of small enterprises in the VAT system - by introducing a threshold for VAT registration and by prescribing simplified VAT procedures regarding VAT calculation, payment and other administrative obligations. Along with the rates, the VAT registration threshold is one of the pillars of the VAT policy. The largest number of countries take the annual taxable turnover as a reference value for the registration threshold. Some countries, such as China, take monthly or even daily turnover for certain activities, allowing local tax offices to determine a threshold that fits within the range prescribed by law (Ernst&Young, 2023). However, a smaller number of countries use

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<sup>1</sup> "Official Gazette of Bosnia and Herzegovina" No. 80/2023.

other criteria (e.g. value of assets<sup>2</sup> or number of employees) or complex criteria that may include other criteria in addition to taxable turnover.

Small companies that cooperate with VAT payers (in terms of procurement and sales) will be interested in VAT registration, unlike small companies that procure inputs from non-payers and sell their products or services for final consumption. There is no single formula or pattern for determining the optimal threshold for registration, because the size of the company is also an uneven category. Bearing such limitations in mind, the level of the threshold should be the result of a trade-off between the costs of administration and the revenues that can be collected from small taxpayers.

## FISCAL IMPLICATIONS OF THE VAT THRESHOLD

The fiscal implications of the registration threshold are reflected in reduced revenues because the government forgoes VAT revenues that would be collected on the taxable turnover of companies and entrepreneurs whose turnover is below the registration threshold. The introduction of the registration threshold directly affects revenue collection, and the extent of this impact depends on whether the threshold is set (too) low or (too) high. By introducing a threshold for registration, the government saves significant resources that, in the absence of the threshold, would have to be engaged for the purposes of administering and controlling taxpayers with low economic power, instead of directing them to the control of large taxpayers and detection of tax fraud and evasion. According to studies carried out in a large number of countries, it can be concluded that all countries have a common structure of collected revenues according to the size of the taxpayers. Thus, large taxpayers, who make up only a small percentage of total taxpayers (less than 1%), bring as much as 70% of tax revenues, 5-25% of medium-sized taxpayers contribute to revenue collection with 10-25%, while even 70-95% of small taxpayers contribute only 1-10% revenue collection (IFC, 2007). The situation is similar with VAT. IMF research has shown that in most countries, 10% of the largest companies pay as much as 90% of the total collected VAT revenues, on the basis of which IMF experts conclude that a 1\$ increase in the threshold is very cheap in terms of the amount of lost revenues. However, at higher levels of the threshold, the importance of lost revenue becomes greater, considering that larger companies are included (Ebrill et al., 2001). The conclusion of the IMF research indicates the unjustification of the introduction of a high threshold, but also the harmfulness of a threshold that is too low, and they recommend the introduction of a threshold below which even voluntary registration would not be possible. Despite the recommendations of the IMF, some countries have initially introduced a much lower threshold for registration than recommended, in order to avoid negative effects of the threshold on competitiveness and the equal position of companies on the market.

However, the fiscal implications do not only refer to revenues, but also to budget expenditures, which include the costs of tax administration. If there were no tax administration costs, the greatest fiscal effects would be realized without the existence of a threshold. However, since this is not the case, it is necessary to trade-off between benefits and costs of introducing the threshold. The net fiscal effect of the introduction of many small companies into the VAT system, measured by comparing the costs of tax administration that arise from the administration of small businesses and the modest revenues that are collected, is certainly negative, thus representing the another argument for rationalizing the costs of tax administration through the application of simplified tax collection scheme, and in the area of VAT taxation is an argument for the introduction of a threshold for registration, i.e. for exempting small businesses from paying VAT.

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<sup>2</sup> An example is El Salvador

## **MICROECONOMIC AND MACROECONOMIC IMPLICATIONS OF THE REGISTRATION THRESHOLD**

It is often unjustifiably considered that determining the threshold for taxation represents the exclusive interest of the state. Thus, when considering costs and benefits related to decision on the registration threshold level, governments investigate only the costs of administering the additional taxpayers borne by the state. Taxpayer costs incurred in connection with compliance with regulations in the sphere of VAT taxation are ignored even though they represent consumption for the overall economy due to the redirection of a rare resource - capital outside of profitable placements or additional investment. Although many studies show the inexpediency of including small businesses in the VAT system, from the fiscal aspect (revenue collection and committed resources), it is necessary to carefully consider the registration of small businesses at the microeconomic level. The microeconomic effects of the VAT threshold are manifested in the form of charging costs, and thus profits, with VAT from purchases for companies that are outside the VAT system. VAT basically represents a financial obligation or claim (refund). The neutrality of the VAT concept is ensured by applying the credit (invoice) method, according to which input VAT from purchases is neutralized by VAT calculated on sales, that is, by a recognized tax credit for future VAT obligations or a refund. Doing business outside the VAT system means that companies give up the advantages of the VAT system, which make this tax form superior to sales tax.

From the point of view of small taxpayers, registration for VAT has both advantages and disadvantages. Whether doing business in the VAT system can bring benefits to a small company mainly depends on the type of economic activity that the small company is engaged in, the volume of procurement of inputs from taxable persons and the volume of sales to taxable persons. If the input VAT is minor, and goods and services are sold for final consumption, a small business will have no interest in being in the VAT system. Moreover, the VAT registration of small entrepreneurs with high added value in relation to modest inputs (these are usually service activities that require small investments) would bring about an increase in the price of their goods and services, and thus a worse competitive position on the market. However, if a small business is capital-intensive and plans investments, then inclusion in the VAT system should be considered. Finally, if a small business depends on purchases from VAT payers, and sells goods and services mainly to VAT payers, then it is necessary to be included in the VAT system in order to be able to operate.

The macroeconomic effects of the registration threshold are manifested in the appearance of the cascading effect of VAT, which disrupts the neutrality of the theoretical concept of VAT. The cascading effect of VAT is manifested in the shift of hidden VAT in input costs to subsequent stages of the transaction. In the next phase, double taxation with VAT occurs if customers are liable for VAT. All this leads to a chain increase in sales prices, which adversely affects the general price level, the competitiveness of companies and the social position of consumers - end purchasers. Therefore, it can be concluded that the introduction of the threshold for registration of taxpayers for VAT not only produces positive and negative implications for both parties - the state (tax administration) and taxpayers, but also affects the economic system as a whole.

### **OPTIMIZATION FACTORS OF THE THRESHOLD**

When determining the threshold for registration, it is necessary to ensure that the threshold is not too low or too high. Too low threshold would represent a burden on the work of the tax administration, which, instead of focusing on large taxpayers, would waste resources on many small taxpayers. A larger number of taxpayers also increases the risk of fraud. On the other hand, a too high threshold would act as a disincentive for taxpayers, considering the negative impact of

cascading VAT, which burdens the cost price of companies that are below the registration threshold, on the economic position of these companies. Finally, **the higher the threshold for registration, the more the neutrality of VAT taxation is violated, which is one of the fundamental features of the theoretical concept of VAT.**

A comprehensive analysis of the implications of the VAT registration threshold indicates the need to balance the costs that the VAT threshold produces for tax administrations and the costs borne by taxpayers.

The total costs associated with taxation are also called collection costs. Collection costs consist of administration costs (costs of tax administration - state) and tax compliance costs (costs of taxpayers).

#### *Tax administration costs*

It is very difficult to estimate the costs of administering the tax administration. In the VAT system, costs arise in connection with the registration of taxpayers, the processing of tax returns, controls and audits, as well as the costs of communication between tax administration and taxpayers. Costs can be of a fixed nature - which are independent of the number of taxpayers in the system (e.g. construction and maintenance of IT systems, software programming, logistics) or variable - which grow with the increase in the number of payers (salaries and other costs of employees, material costs and capital costs of equipping workplaces and facilities, costs of controls, tax return processing, archiving, education, etc.). In the case of a young tax administration, the initial establishment costs are necessary, and the budget in the first years of operation can be burdened with large investments in capital, education, material equipment, employment, etc. Likewise, the costs of tax administration are affected by possible reorganizations, functional or territorial, or changes in fiscal policy (e.g. change in the tax base, change in the VAT rate, introduction of differentiated rates, changes in the registration threshold, etc.). Administration costs also depend on the organization of VAT administration. In a large number of countries, the administration of VAT on imports and on domestic sales is carried out by two institutions, the tax administration (which is responsible for the collection of domestic VAT and direct taxes) and the customs administration (which is responsible for all taxes on imports, including and VAT on imports), while in a smaller number of countries the collection of VAT in domestic transactions is carried out by the customs administration. In a small number of countries (such as Bosnia and Herzegovina), the collection of indirect taxes is located in a single institution. Regardless of the complexity of the organizational structure of VAT administration, it is very difficult to estimate the costs directly related to VAT administration and separate them from the costs of other functions (customs, excise duties, direct taxes) and common costs. Administration costs also depend on the characteristics of the VAT system. Higher administrative costs are affected by a wider scale of exemptions, the absence or very low threshold for registration, the existence of differentiated rates or zero VAT rates aside from those on exports, etc.

#### *Costs borne by the taxpayer*

Inclusion in the VAT system brings certain costs to taxpayers as well. The less economic power the taxpayers have, the costs more affect the financial and economic position of the company or entrepreneur. The costs of complying with tax regulations may have a variable and fixed character, measured in relation to the amount of turnover. The fixed component of costs represents the biggest problem in the business of the small companies, especially when it comes to business in the EU, although the variable component can also threaten regular business and trade. The variable component of tax compliance costs is also called transaction-related compliance costs (IFS, 2011). This component of the taxpayer's costs has a great influence on the volume of trade of the small taxpayer and the direction of development in terms of entering new

markets. The process of liberalization of foreign trade exchange is aimed at eliminating fiscal obstacles for companies to enter other markets. However, even in business conditions without fiscal obstacles in integrations such as EU, CEFTA, EFTA, NAFTA, etc. there are still numerous so-called non-fiscal obstacles, as a relapse of protectionist trade policy, which can deter small companies from expanding their sales outside their home market. Non-fiscal obstacles are mainly related to customs, border, sanitary formalities and other approvals and permits that must be fulfilled in order to sale goods in another country. Costs related to non-fiscal barriers are proportional (*ad valorem*) in nature and are generally paid as a percentage of the customs value of the goods, from which it is concluded that they are related to the volume of foreign trade.

The costs of compliance with tax regulations of a fixed nature are not related to the volume of trade, but in the export segment are considered as a type of compensation for exporting to a specific market. In the internal market, fixed costs refer to VAT registration and communication with the tax administration (e.g. inquiries and requests for opinions), tax bookkeeping, issuing VAT invoices, filing reports, etc. Since the amount of the mentioned costs generally does not have a direct correlation with the size of the company, small companies are affected disproportionately more than large companies. The consequence of the high fixed costs of complying with tax regulations is the consolidation of companies and the disappearance of small companies from the market.

#### *Cost implications and trade-offs*

By doing business outside the VAT system, taxpayers save on resources that they would have to hire for inclusion in the VAT system. The non-inclusion of small companies in the system has a positive effect on the costs and profits of taxpayers (retained earnings and dividends), and thus on the amount of income from profit and income tax, which would be lower if there were costs related to inclusion in the VAT system.

According to economists' estimates (IFS, 2011), the costs of tax compliance born by taxpayers amount to 2% of the turnover, which can represent a significant amount for small companies, while for large companies they amount to 0.3% of turnover. Lockwood and Liu (2015) estimated the costs of tax compliance in Great Britain for companies whose turnover equals the threshold for VAT registration at 1-2% of the turnover value.<sup>3</sup>

In the process of deciding on the level of the VAT threshold, Crawford and Freedman (2011) indicate the importance of balancing the costs of complying with regulations and tax evasion. Attempts to reduce the costs for taxpayers and tax administrations may encourage tax evasion. Too high registration threshold makes it easier for small businesses below the threshold to artificially avoid VAT registration. On the other hand, Crawford, Keen and Smith (2011) believe that a high threshold can prevent the occurrence of other forms of VAT fraud, such as chain fraud (the so-called "carousel"). In his study on the optimal VAT threshold, Kim (2005) concludes that tax evasion plays a significant role in real VAT systems, and that the optimal threshold for VAT cannot be determined independently of the behavior of companies regarding VAT fraud. If the VAT threshold is raised, the number of companies that remain below the threshold increases. However, unlike Crawford et al., he believes that the high threshold tempts VAT payers not to register sales to small companies that are not liable for VAT and are not obliged to submit VAT returns. In contrast, the incentives to commit fraud weaken at a lower threshold for VAT registration.

Ultimately, determination of the level of registration threshold should balance the interests of the government and interests of companies. The interest of the government is the achievement of a

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<sup>3</sup> It should be borne in mind that in Great Britain the costs of complying with VAT regulations are lower than in other countries due to the obligation of all active companies to keep bookkeeping and submit profit tax returns, which greatly facilitates obtaining information for completing VAT returns.

net fiscal effect, that is, the goal that the collected net revenues from VAT from small taxpayers exceeds the costs of administering small taxpayers. Interest of the company is that the benefits of VAT registration in the form of turnover or profit exceed the costs of complying with regulations. It is obvious that determining an inappropriate level of the threshold for registration can produce additional costs for the government or companies. The level of the threshold is relative with regard to the economic development of the country. The high threshold for registration implies that a large number of taxpayers will be legally outside the VAT system. Estimates of fiscal authorities in Great Britain show that the high threshold for registration, which is the highest of all EU member states, results in the fact that as many as 2.9 million companies are outside the VAT system as opposed to only 1.95 million VAT payers (IFS, 2011). However, the contribution of excluded companies in terms of additional revenue would be minor if they were in the VAT system, since administering a huge number of additional taxpayers would produce additional costs for the tax administration. Similar conclusions apply to the cost-benefit ratio of registration on the side of small companies, with the fact that the amount of input VAT that cannot be deducted should be added as a cost. The more a small company is dependent on purchases from VAT payers, the more the input VAT (which a small company cannot deduct or pass on to the customer in conditions of strong competition on the market) will burden the company's costs and reduce profits.

From the previous analysis of advantages and disadvantages related to the determination of the registration threshold, it can be seen that the costs of small taxpayers, especially if there are a large number of them, can have significant economic implications on the business of companies, investment and the amount of revenues from profit or income tax. For this reason, the calculation of the optimal level of threshold for registration requires consideration of the total costs, regardless of which party bears them.

### COMPARISON: B&H vs. EU / REGION

After 19 years since the introduction of VAT, Bosnia and Herzegovina increased the VAT registration threshold to 100,000 BAM. Observed in terms of the level of threshold, B&H has been in the second half of the EU member states for years (Chart 1, "B&H-0"), but after the increase in the threshold, only five EU member states have a higher threshold than B&H (Chart 1, "B&H-new threshold").<sup>4</sup>

A comparison<sup>5</sup> of the countries of the region shows that with the increase in the threshold, B&H has reached the region's average, while before it, B&H had the lowest threshold (Chart 2). In any case, it can be concluded that the less developed countries of the region have a higher threshold for VAT registration than some of the more developed EU member states.

<sup>4</sup> Source: Ernst&Young. (2023). Worldwide VAT, GST and Sales Tax Guide 2023; International VAT Monitor. (2023). No 6 (26). Amsterdam: IBFD; Presentation of the author.

<sup>5</sup> Source: Ibid.

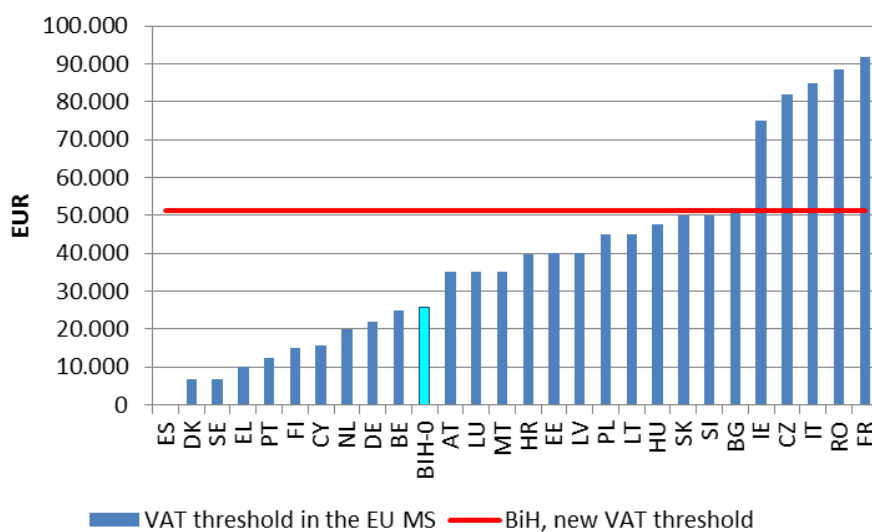
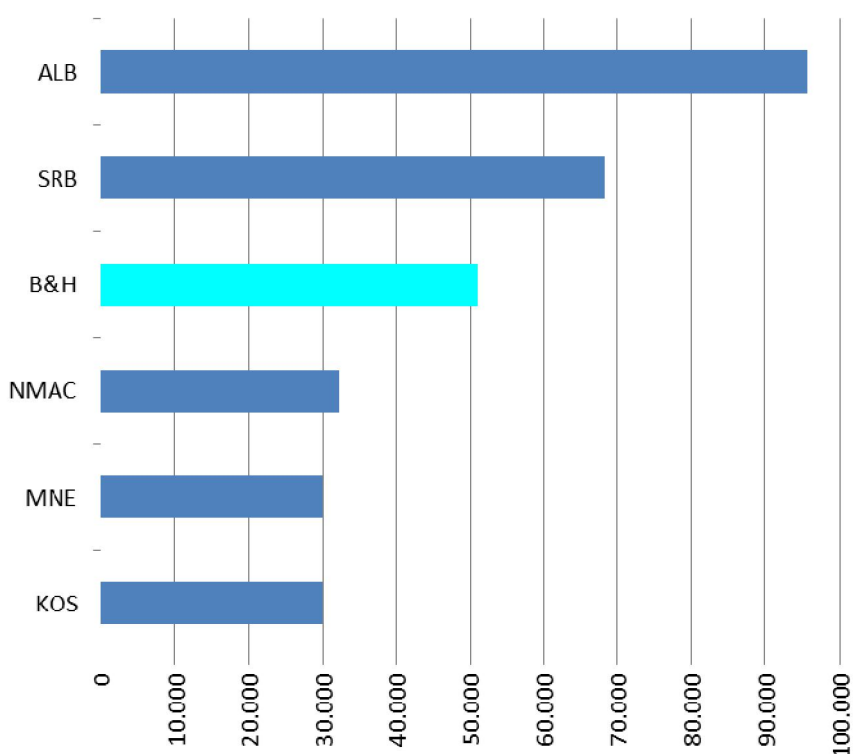
Chart 1<sup>6</sup>

Chart 2

## VAT registration threshold: B&amp;H vs region (in EUR)



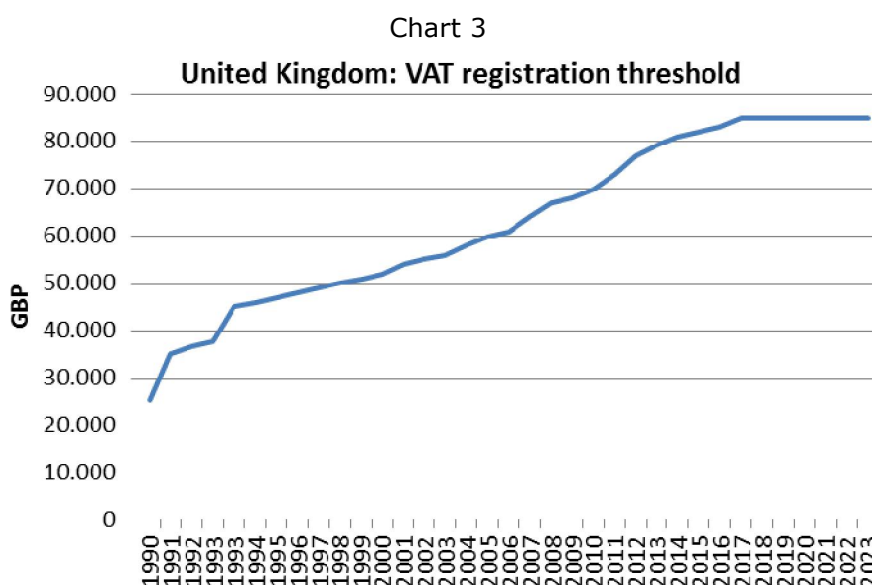
<sup>6</sup> Charts use common member abbreviations: AT-Austria, BE-Belgium, BG-Bulgaria, CZ-Czech Republic, CY-Cyprus, DE-Germany, DK-Denmark, EE-Estonia, EL-Greece, ES-Spain, FI -Finland, FR-France, GB-G. Britain, HR-Croatia, HU-Hungary, IE-Ireland, IT-Italy, LV-Latvia, LT-Lithuania, LU-Luxembourg, MT-Malta, NL-Netherlands, PL-Poland, PT-Portugal, RO-Romania, SE-Sweden, SI-Slovenia, SK-Slovakia.

## THE ISSUE OF HIGH THRESHOLD LEVEL SHOWN ON THE EXAMPLE OF G. BRITAIN

### Evolution and threshold effects in Great Britain

The experience of Great Britain is valuable for conducting the VAT registration threshold policy. It is one of the most developed countries, which introduced VAT more than fifty years ago. The implications of a high VAT threshold have been the subject of many years of analysis by government institutions, as well as the professional academic community, resulting in a series of significant researches and studies. The research is based on long time series and detailed analyzes of the behavior of a large number of small companies. Bearing all this in mind, the experiences of Great Britain should also be an incentive for the fiscal authorities of B&H in the segment of conducting VAT policy.

For many years, the practice of Great Britain was to adjust the VAT registration threshold with inflation every year, during the adoption of the budget<sup>7</sup>. However, regardless of the dizzying increase in prices in recent years, caused by Brexit, the coronavirus pandemic and the war in Ukraine, the VAT registration threshold has not changed since 1 April 2017, amounting to GBP 85,000.



Source: HMRC, VAT Notice 700/1: supplement, Updated 13 February 2024; presentation of the author, <https://www.gov.uk/government/publications/>

G. Britain has by far the highest threshold compared to the EU average<sup>8</sup>, the OECD average<sup>9</sup> and the global average<sup>10</sup>. Even 55% of small companies are outside the VAT system.<sup>11</sup> According to the Government's estimate, the tax expenditure of this measure, which is considered an incentive for small companies in relation to the lowest EU threshold of EUR 10,000, is as much as GBP 2 billion per year<sup>12</sup>. It is about the lost revenue from VAT.

<sup>7</sup>As the budget year in the G. Britain starts on 1 April (unlike most countries where the fiscal year coincides with the calendar year), changes to the VAT registration threshold level have generally been applied from 1 April of the current year to 31 March of the following calendar year.

<sup>8</sup> The EU average is EUR 41,500 if Spain, which does not have a threshold, is included, or about EUR 43,000 without Spain. Source: International VAT Monitor. (2023). No. 6 (26). Amsterdam: IBFD.

<sup>9</sup> The average of OECD member states is about USD 62,000. Source: OECD, database, 1/9/2023.

<sup>10</sup> The global average is around GBP 15,000. Source: OTS (2017).

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

## The response of small companies to the registration threshold

A small company, whose turnover is below the VAT registration threshold, can basically have two responses to the existence of the threshold - to be outside the VAT system or to voluntarily enter the VAT system, if it is provided as an option by law. However, things are not so simple and unequivocal in the business world, since economic growth, as well as inflationary effects on prices, can lead a small company to a situation where it has to register for VAT if it does not want to break the law and commit tax evasion. Analyzing the costs of complying with regulations in the field of VAT, Lockwood and Liu (2015) observed the behavior of small companies in Great Britain with regard to the level of the threshold for registration. According to them, there are the following three responses of small companies to the prescribed threshold for registration:

- voluntary registration,<sup>13</sup>
- keeping the turnover just below the threshold for registration (so-called bunching),
- limiting the growth of the company.

The last two options, which basically represent legal tax evasion, imply doing business outside the VAT system at a certain price or sacrifices that the company is willing to make.

A small company that does not want to enter the VAT system can deliberately maintain its turnover below the threshold for registration, either legally or illegally.<sup>14</sup> This results in the accumulation of taxpayers with turnover slightly below the prescribed threshold for registration, which is colloquially called "bunching" in Great Britain. Academic research by Lockwood et al. (2016) have shown that the bunching effect occurs in the case of small companies that would become uncompetitive and suffer financial losses by entering the VAT system. These are companies that mainly sell goods or services to end consumers or have limited input expenses and would not benefit greatly by deducting input VAT.

Analyses and interviews with small companies conducted by the OTS<sup>15</sup> show that taxpayers whose turnover is close to the threshold have two options to avoid registration: legal and illegal.

The first way to avoid entering the VAT system is to keep sales below the registration threshold. Some of those surveyed stated that they do not contract additional jobs until the end of the year if they estimate that their turnover would exceed the prescribed threshold. Others indicated that they were suspending sales for a period of time to keep turnover below the threshold, while some said they were taking a variety of actions: not hiring additional staff to increase their business even though market conditions are favorable for growth, reduce advertising to decrease demand for their products and services or lower prices, give discounts, etc. to reduce turnover (IPSOS, 2017). The research showed that companies keep turnover below the registration threshold because they believe that entering the VAT system will negatively affect their profit or competitiveness if they pass the VAT burden to customers through higher prices. It is about **legal avoidance of entry into the VAT system**, for which there are no legal sanctions, but it, obviously, have economic and financial damages for small companies, and thus for the economy of the country. Small companies lose considerable time and effort in order to maintain their business below the threshold and thereby avoid paying VAT, which also produces additional administrative and opportunity costs.

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<sup>13</sup> As many as 44% of VAT payers in Great Britain are small companies that chose the option of voluntary registration. Source: OTS (2017).

<sup>14</sup> In a survey by the IPSOS agency in Great Britain, as many as 20% of small companies stated that they deliberately slow down their development in order to stay below the VAT threshold.

<sup>15</sup> OTS - Office for Tax Simplification

**Illegal ways of avoiding VAT registration** include the use of various VAT fraud models, such as incorrect reporting of turnover - by showing it as lower than the VAT threshold, "black" sales or artificial division of the company into several smaller companies, so that the turnover of each of created is below the required threshold. A company decides to remain outside the VAT system if the input costs are low in relation to sales or if it mainly sells goods and services to end customers. In such a situation, the right to deduct input VAT is not of great importance for the company to decide to enter the VAT system. Analyzes by Lockwood et al. (2015) on a larger sample of small companies, whose turnover oscillates around the threshold for VAT registration, showed the same direction of movement in the share of wage costs for both registered taxpayers and small companies outside the VAT system. However, the share starts to grow strongly for companies that are very close to the registration threshold, indicating unrecorded sales.

Expert research (OTS, 2017) has shown that economic distortions associated with the VAT threshold occur in other countries as well, but they produce milder negative effects than the UK due to the enormously high VAT threshold in Britain. The aforementioned theory and research results were confirmed by Harju et al. (2015) by investigating the behavior of small taxpayers in Finland. Based on empirical analysis, the authors showed that small companies, whose turnover is around the threshold for registration (EUR 8,500), deliberately avoid entering the VAT system in a legal way, by reducing the volume of business. The reason for this behavior of small companies is the high costs of complying with the regulations for small companies, which is expected considering the low threshold for entering the VAT system. Since this is a continuous policy practiced by many companies, in the long term, the slowdown in the growth of the small and medium-sized enterprises sector in Finland is evident.

Although too high threshold may encourage small companies to remain below the VAT registration threshold at the cost of slowing down development and business stagnation, according to Lockwood and Liu (2015), these firms when they enter the VAT system can achieve accelerated growth rates (so-called 'catch-up' growth), which are much higher than usual, firstly, because there is no longer a need to limit sales, and secondly, because the base for comparison is low, as it includes the years when the company operated with restrictions for avoiding entry into the VAT system.

### **Dilemma: partial solutions or a holistic approach?**

The stagnation of the threshold for registration over the past few years resulted in an increase in the number of VAT payers. It is estimated that the cumulative rate of inflation over the previous six years was 20%, which means that the threshold should be GBP 103,000 if the same real value is to be maintained. Experts believe that the fiscal authorities are faced with a big dilemma. On the one hand, keeping the same threshold devalues the threshold for VAT as a policy lever towards small companies, because every day more and more small companies will be forced to enter the VAT system due to the growth of turnover. For taxpayers whose business is dependent on retail sales, it means raising prices by 20%, which is the VAT rate in Great Britain. On the other hand, raising the VAT threshold implies a loss of revenue, which threatens economic growth.

In order to offer an adequate VAT threshold model, the Office for Tax Simplification (OTS, 2017) analyzed several options. The first option implies minor corrections in the threshold level, freezing the threshold, a small increase or a small decrease. Lowering or freezing the threshold would have limited effects as it would affect only a small number of companies whose turnover level is close to the threshold. A small increase in the threshold would have a limited negative effect on VAT revenues, since it would affect a small number of companies whose turnover is close to the threshold, and would not significantly affect the change in the behavior of companies in terms of doing business around the threshold.

Another option would imply a significant increase or decrease in the VAT threshold. A significant increase in the threshold would allow companies to exit the VAT system, reduce administrative costs and become more competitive compared to companies that remained unregistered through various business "skills" and competed with them on the same market. On the other hand, the government would lose significant revenues from VAT. Likewise, the OTS indicates a great danger that the increase in the number of companies outside the VAT system, as a consequence of the increase in the VAT threshold, would give many companies an incentive to operate in the gray economy, be unregistered and thus avoid paying other taxes.

A more significant reduction in the VAT threshold would refer to a larger number of companies, which would reduce the number of unregistered companies, and thus the gray economy. Small companies could not easily avoid inclusion in the VAT system and thus avoid paying VAT. On the other hand, administration costs would increase, both at the micro level for small companies, and for the tax administration, given the significant increase in the number of VAT payers. In the latest research, Liu et al. (2022) conclude that a high threshold for VAT, as is the case in Great Britain, hinders development of small companies. They point out that a relatively high threshold, such as in Great Britain, means that companies operate below the threshold for a very long time, and many want to stay that way permanently. Analyzing official HMRC data for all companies, they came to the conclusion that the annual growth rate of turnover starts to slow down when a company's turnover approaches the level of GBP 65,000, and the slowdown amounts up to 2 percentage points when a company's turnover approaches the threshold, which is  $\frac{1}{4}$  of the average annual growth. In order to prevent this, they believe that lowering the threshold would force companies to register in the early stages of their business operations, which in the long term would have less negative effects on their growth, given that inclusion in the VAT system in any case implies one-time costs, and then the periodic costs of complying with regulations.

Given the fact that the existence of a VAT threshold encourages companies to avoid VAT registration, experts of the Office for Tax Simplification (OTS, 2017) suggest that **solutions are not being sought exclusively within the threshold policy, but within the overall VAT policy** in Great Britain, which would in a certain way mitigate the negative impact of entering the VAT system. This would entail the introduction of financial measures for small companies that would affect the financial position of small companies or measures that would reduce the negative impact of VAT administration costs on small companies. The second measure would be related to the entry of newly founded companies into the VAT system, and would entail the introduction of special incentive measures in the initial period, e.g. relief in terms of VAT payment or enabling a longer period for VAT payment (half-yearly or annual VAT return). Although such measures would increase the overall complexity of the VAT system, it is believed that they would make it easier for small companies to enter the VAT system, without negative effects on economic growth and productivity.

This is in line with what Cnossen (1994) concluded even three decades ago. A decision on the level of the threshold, which could relax the costs of administration and the costs of complying with regulations, does not have to be the only possibility within the VAT policy. Cnossen believes that the total costs incurred by taxpayers and tax administrations in the field of VAT, in addition to increasing the threshold for registration, can be reduced by expanding the tax base and introducing a single VAT rate, i.e. by a solution at the level of the VAT system.

Also, Keen and Mintz (2004) see the problem of determining the optimal threshold level for registration as a result of balancing (trade-off) between three effects, even more broadly, within the framework of the entire tax system. The increase in the threshold reduces the costs of administering the tax administration, but at the same time leads to a decrease in VAT revenues and a strengthening of tax discrimination within the tax system, which affects companies that are

in the VAT system and those that are outside it. Some companies that remain outside the obligation to register for VAT can gain a competitive advantage over companies that are obliged to register for VAT. This is especially the case for those who sell goods and services for final consumption. In the light of the debate about whether to tax income or consumption, the authors go further and point to the fundamental difference between income taxation and VAT taxation, which is reflected in the existence of a threshold, which breaks the continuity of the tax obligation in the sense that those whose turnover is below the threshold they do not pay VAT, while this does not exist in the income taxation scales. The authors further conclude that when determining the threshold, the ratio of added value in relation to the value of sales should be considered, and that one of the options is a scale of thresholds, i.e. that a lower threshold for registration can be determined for highly profitable activities and labor-intensive industries. Second, they believe that a differentiated approach to taxation threatens the principle of fairness of taxation, in the sense of achieving vertical fairness between the tax burden in relation to the added value between large and small companies.

Experts of the Chartered Institute of Taxation (CIOT)<sup>16</sup> believe that digitization has exacerbated the problem of doing business for small companies in the VAT system, because the VAT system has become more complex, requiring additional administration and compliance with the obligations imposed by business and VAT payment in digital era<sup>17</sup>, which increases costs for small companies to a greater extent than is the case with larger companies. However, bearing in mind that studies in Great Britain have shown that keeping the VAT threshold at the same level limits the expansion of business by small companies, and on a macro level does not favor the country's economic growth, freezing the threshold at the same level is not an option either, as it has no effect - the government gives up lost revenues, and small companies have no incentive for growth and keep turnover below the threshold. Experts see the solution in the measures of the Office for Tax Simplification (OTS), which go in the direction of simplifying the VAT system as a whole.<sup>18</sup>

### **INSTEAD OF CONCLUSION: Threshold for registration for VAT in B&H vs. Great Britain**

Studies on the threshold for VAT registration, as an essential element of VAT policy, is not extensive and is mainly related to modeling the optimal threshold level and analysis of the effects of the application of the threshold in specific countries, mainly Great Britain, and recently also Finland. The threshold for registration works as follows: companies and entrepreneurs whose annual taxable turnover is below the threshold for taxation are not liable for VAT and may not show VAT on the invoices they issue to customers. At the same time, companies and entrepreneurs "below the threshold" do not have the right to deduct input VAT included in the procurement of goods and services from VAT payers. Since it cannot be deducted by a small company "below the threshold", it transfers the input VAT to costs and incorporates it into the cost price of the goods it produces or the services it provides. It can be concluded that the introduction of a threshold for VAT registration has the same effect on the economic position of companies below the threshold as the exemption from VAT. On the other hand, the registration threshold also affects the administration costs borne by the tax administration. Administering a larger number of taxpayers under conditions of a lower level of registration threshold requires greater personnel, financial and material-technical resources, which further burdens the government budget and reduces the net effect of revenue collection. On the contrary, a high threshold for registration relaxes administration costs, but creates room for avoiding the VAT payment, thus representing an indirect impact on government budget revenues. Determining the optimal threshold level for

<sup>16</sup> CIOT – The Chartered Institute of Taxation. (2022). "Cruel dilemmas for small businesses over frozen VAT threshold".

<sup>17</sup> In Great Britain, since 2018, a digitalization system for VAT under the name "Making Tax Digital for VAT" has been applied, and all taxpayers are required to register for the given system, apply the prescribed rules and acquire adequate software.

<sup>18</sup> OTS. (2017). „Value added tax: routes to simplification“. **Presented to Parliament pursuant to section 186(4)(b) of Finance Act 2016.**

registration implies a trade-off between the benefits and costs borne by the tax administration and the companies that may be affected by such a policy.

From the comparison of the new threshold for registration in B&H with EU member states, it can be concluded that the new VAT threshold in B&H is among the highest in Europe.<sup>19</sup> Although, at first, it can be stated that the comparison of B&H with Great Britain in terms of threshold VAT policy is not possible due to differences in development, the relative comparisons are possible from which certain conclusions can be drawn. Bearing in mind the different level of development and different currencies (BAM and GBP), relative comparisons were made over the average net salary in 2023. The new VAT registration threshold in B&H amounts to BAM 100,000 or GBP 43,797.26<sup>20</sup>, which means that the threshold for registration in the Great Britain of GBP 85,000 is 94% higher than the threshold in B&H. However, a comparison of the average monthly net salary, as an indicator of the development and economic standard of an individual - the owner of a small business, shows a different ratio. The average net salary<sup>21</sup> in Great Britain in 2023 was 316% higher than the average net salary in B&H.<sup>22</sup> If we express the VAT threshold by the number of average monthly net salaries, then 37 average monthly net salaries can be paid from the threshold of G. Britain, and even 79 monthly net salaries in B&H. In fact, if we were to determine the threshold in B&H according to the number of average monthly salaries that is valid for the threshold in Great Britain, then it should not have been increased. Based on this simple comparison, can it be reliably concluded that the new VAT threshold in B&H is too high? Experiences and detailed studies of trends in G. Britain show that over the years the high threshold has produced negative effects on economic growth, even in recent years when its real value has decreased. In any case, it is too early to draw conclusions, bearing in mind that it takes some time to complete the deregistration procedures for those leaving the VAT system. Therefore, the real answer to the question of whether the new VAT registration threshold in B&H is optimal from the state's point of view (in terms of net fiscal effects: that the net savings on the costs of administering a significantly smaller number of taxpayers exceeds the loss of VAT revenue) and for small companies (in the form of stimulus for the growth of the craft and entrepreneurship sector) will be received only in the coming years. Bearing in mind that the VAT Directive prescribes only framework provisions for determining the threshold for registration, for countries applying for EU membership, the level of the threshold for registration will be an element of pre-accession negotiations with the European Commission. However, regardless of that, EU law, practice and experiences of its member states, in any case, represent a useful guide for creating a desirable VAT policy in a country that is applying for EU membership.

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<sup>19</sup> According to OECD data, from other European OECD member countries, the threshold for VAT is higher than the threshold in B&H only in Great Britain and Switzerland (CHF 100,000), while in Iceland it amounts to USD 13,986 and in Norway it is only USD 5,631. Source: OECD, database, status 1/9/2023.

<sup>20</sup> Exchange rate of the Central Bank of Bosnia and Herzegovina, 21/2/2024

<sup>21</sup> The average monthly net salary in the UK (after tax) in 2023 was GBP 2,297. Source: Annual Survey for Hours and Earnings (ASHE) by the Office for National Statistics (ONS).

<sup>22</sup> The average monthly net salary in B&H in 2023 was BAM 1,263. Source: Agency for Statistics of B&H, Annual average of average monthly net and gross earnings of persons in employment, 19 February 2024.

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## Analysis of revenue from excise duties on alcohol, alcoholic beverages and natural fruit brandy

(Author: Mirjana Popović, expert advisor - macroeconomist)

### Summary

*Collection of revenues from excise duties on alcohol, alcoholic beverages and natural fruit brandy (hereinafter: alcoholic beverages) in Bosnia and Herzegovina (hereinafter: BiH) is a continuation of the analyses published in previous issues of the Unit's bulletin<sup>23</sup>. The focus of the analysis is:*

- *Annual collection for the period 2021<sup>24</sup>-2023<sup>25</sup> and annual growth rate for 2022 and 2023 of total revenues from excise duties on alcoholic beverages, revenues from excise duties on imported and domestic alcoholic beverages.*
- *Quarterly collection for the period first quarter (Q1) 2021 – second quarter (Q2) 2024<sup>26</sup> and the quarterly growth rate for the period first quarter (Q1) 2022 – second quarter (Q2) 2024 of total revenues from excise duties on alcoholic beverages, revenues from excise duties on imported and domestic alcoholic beverages.*
- *Monthly collection for the period January 2021-June 2024<sup>27</sup> and the monthly growth rate for the period January 2022 – June 2024 of total revenues from excise duties on alcoholic beverages, revenues from excise duties on imported and domestic alcoholic beverages.*

### 1. Annual movement of revenues from excise duties on alcoholic beverages

Total revenues from excise duties have a large share in total revenues from indirect taxes, while the share of revenues from excise duties on alcoholic beverages in these revenues in the last three years is not large and ranges from 1.9% to 2.0%. Chart one shows the movement of annual revenue collection from excise duties on alcoholic beverages for the period 2021-2023, in millions of BAM. The annual collection of total revenues from excise duties on alcoholic beverages in the observed period and the annual collection of revenues from excise duties on imported and domestic alcoholic beverages are shown.

<sup>23</sup> More about the policy of taxation of alcoholic beverages and the collection of revenue from excise duties on alcoholic beverages in: Popovic, M. (2022). "Analysis of revenue collection from excise duties on alcohol, alcoholic beverages and natural fruit brandy"; MAU bulletin no. 209/210.

More about trends in the collection of these revenues and current trends in: Popovic M. (2023) "Analysis of revenue collection from excise duties on alcohol, alcoholic beverages and natural fruit brandy and current trends". MAU bulletin no. 219/220

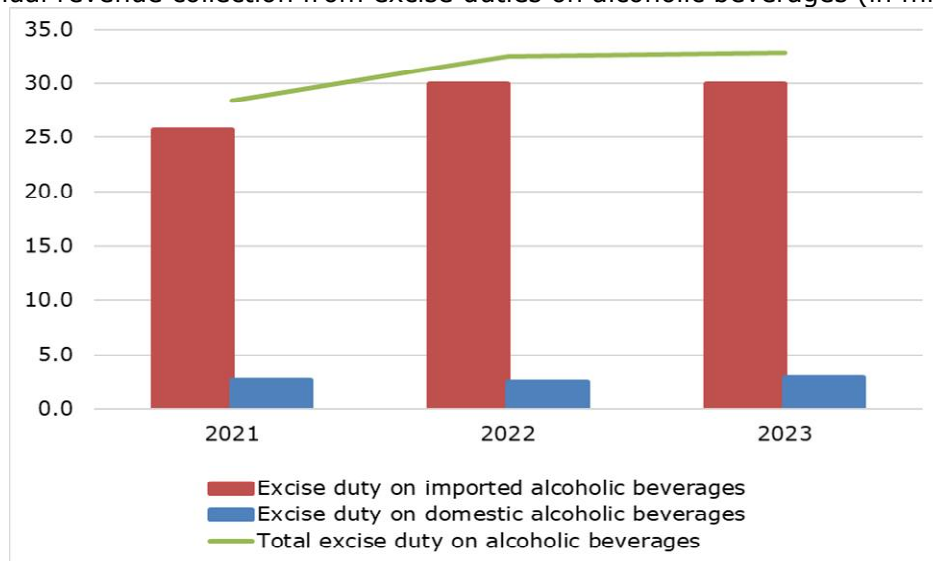
<sup>24</sup> Due to the outbreak of the Covid-19 pandemic, the 2020 is not relevant for comparison

<sup>25</sup> Latest available annual data

<sup>26</sup> Latest available quarterly data

<sup>27</sup> Latest available monthly data

Chart 1. Annual revenue collection from excise duties on alcoholic beverages (in millions of BAM)



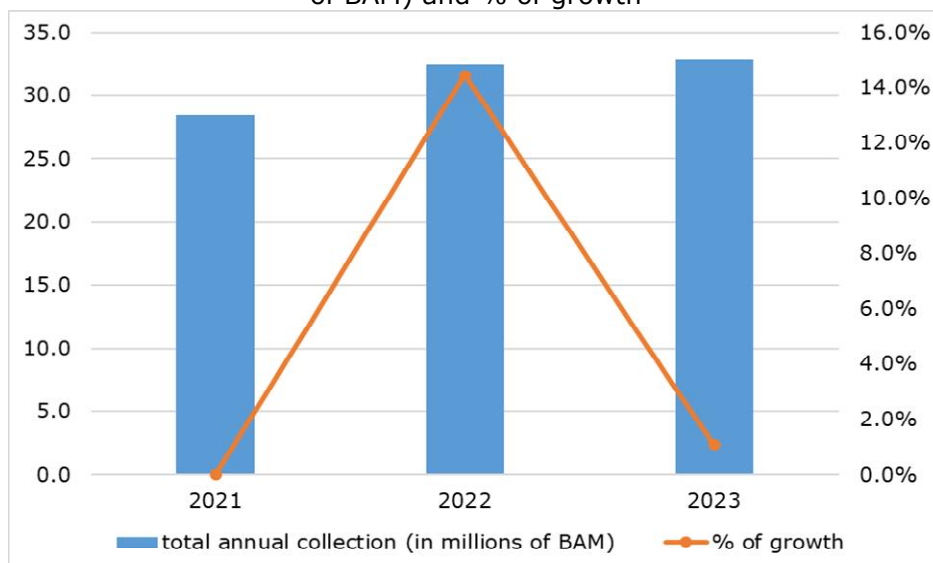
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

In the last three years, total revenues from excise duties on alcoholic beverages in BiH had a growing trend, reaching a record level of collection of these revenues since the establishment of the Indirect Taxation Authority. A sharp jump in the collection of these revenues was recorded in 2022 compared to 2021, while a slight increase was recorded in 2023. Below is a detailed analysis of total revenues from excise duties on alcoholic beverages and revenues from excise duties on alcoholic beverages by component (import and domestic excise duty), as well as the growth rate of these revenues on an annual basis. The analysis of revenue collection from excise duties on alcoholic beverages separated into imported and domestic alcoholic beverages indicates consumption trends, consumer preferences and the influence of other external factors on the consumption of alcoholic beverages that are subject to excise taxation.

### ***1.1. Annual movement of total revenues from excise duties on alcoholic beverages***

Chart two shows the annual collection of total revenues from excise duties on alcoholic beverages for the period 2021-2023, in millions of BAM (left vertical scale) and the annual growth rate of these revenues in 2022 and 2023 (right vertical scale).

Chart 2. Annual collection of total revenues from excise duties on alcoholic beverages (in millions of BAM) and % of growth



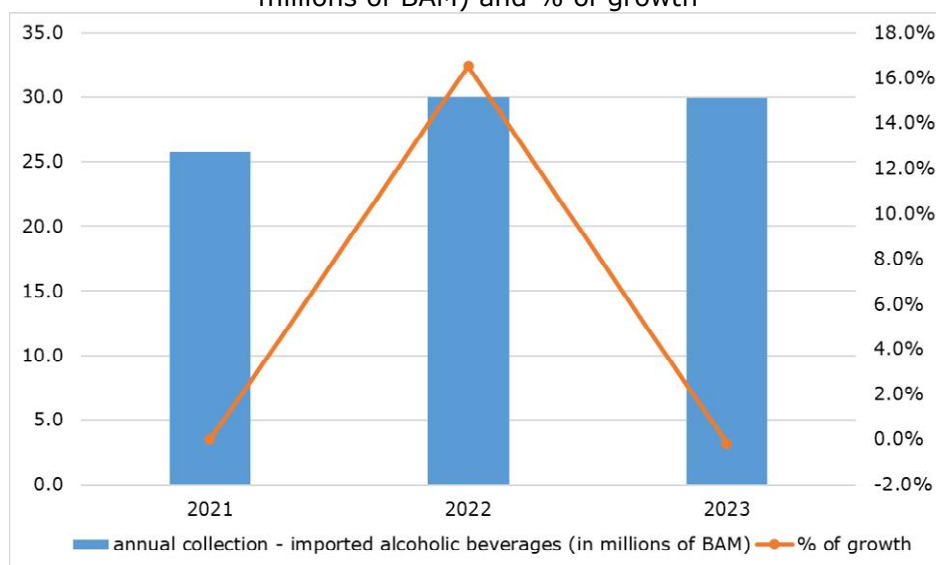
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

The collection of total revenues from excise duties on alcoholic beverages increased slightly in 2023 compared to 2022 by 1.1% (Chart 2, % of growth), while in 2022 a significantly higher growth of these revenues was recorded by 14.4% compared to 2021 (Chart 2, % of growth). This growth was recorded as a consequence of the increase in consumption due to the recovery of the economy after the COVID-19 pandemic and the normalization of the work of catering facilities, which had an impact on the increase in the number of gatherings, the organization of a greater number of events, the increase in tourism, and therefore the higher consumption of alcoholic beverages and the improvement of the collection of excise duties on alcoholic beverages.

### **1.2. Annual movement of revenues from excise duties on imported alcoholic beverages**

Chart three shows the annual collection of revenues from excise duties on imported alcoholic beverages for the period 2021-2023, in millions of BAM (left vertical scale) and the annual growth rate of these revenues in 2022 and 2023 (right vertical scale).

Chart 3. Annual collection of revenues from excise duties on imported alcoholic beverages (in millions of BAM) and % of growth



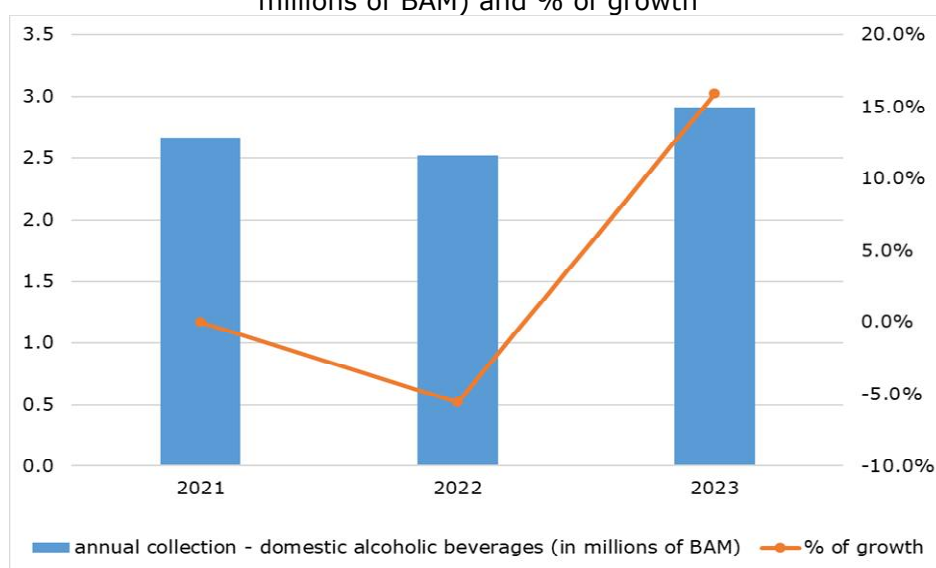
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

The chart shows a slight decrease by 0.2% in revenues from excise duties on imported alcoholic beverages in 2023 compared to the previous year (Chart 3, % of growth), while in 2022 an increase of these revenues by 16.5% was recorded compared to 2021 (Chart 3, % of growth).

### 1.3. Annual movement of revenues from excise duties on domestic alcoholic beverages

Chart four shows the annual collection of revenues from excise duties on domestic alcoholic beverages for the period 2021-2023, in millions of BAM (left vertical scale) and the annual growth rate of these revenues in 2022 and 2023 (right vertical scale).

Chart 4. Annual collection of revenues from excise duties on domestic alcoholic beverages (in millions of BAM) and % of growth



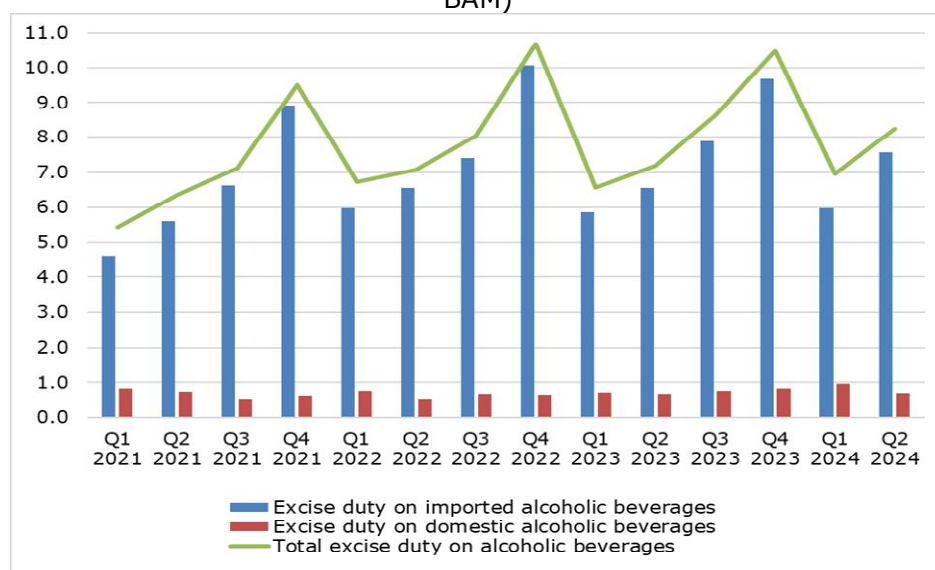
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

In contrast to revenues from excise duties on imported alcoholic beverages, the collection of which was slightly reduced in 2023 compared to the year before, revenue collection from excise duties on domestic alcoholic beverages increased by 15.9% (Chart 4, % of growth), while in 2022, a decrease in the collection of these revenues was recorded by 5.5% compared to 2021 (Chart 4, % of growth). Although in the last analyzed year there was an increase in revenues from excise duties on domestic alcoholic beverages, and a decrease in revenues from excise duties on imported alcoholic beverages, the consumption of imported alcoholic beverages is still much higher than the consumption of domestic alcoholic beverages. The perception of quality, that is, the consumer's belief in the better quality of imported alcoholic beverages compared to domestic ones, which affects consumer preferences, greater choice, the influence of global trends, long-term marketing campaigns of producers and distributors of imported alcoholic beverages, are the main causes of higher consumption of imported, compared to domestic alcoholic beverages.

## 2. Quarterly movement of revenues from excise duties on alcoholic beverages

Chart five shows the quarterly revenue collection from excise duties on alcoholic beverages for the period from the first quarter (Q1) of 2021 to the second quarter (Q2) of 2024, in millions of BAM. The same chart shows the quarterly dynamics of total revenues from excise duties on alcoholic beverages, as well as revenues from excise duties on imported and domestic alcoholic beverages.

Chart 5. Quarterly collection of revenues from excise duties on alcoholic beverages (in millions of BAM)



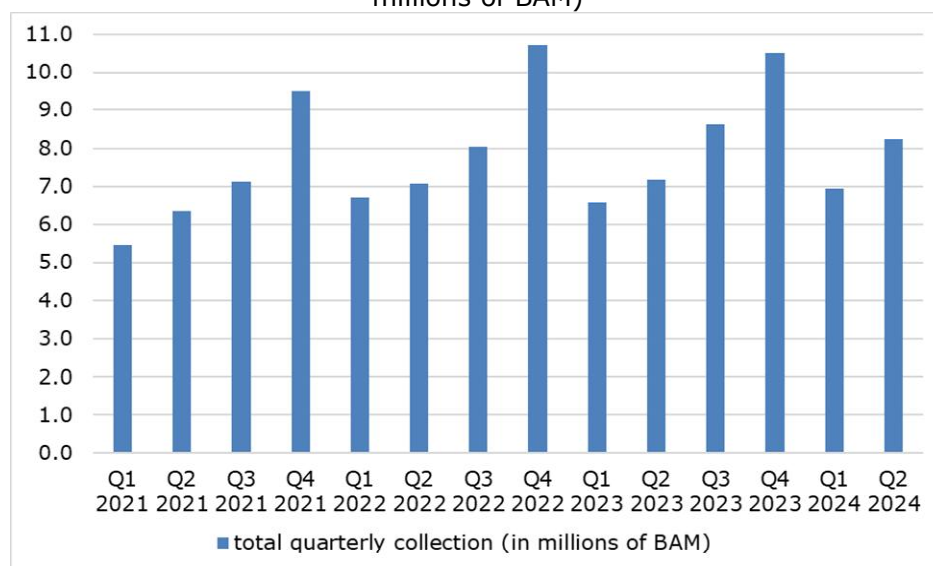
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

The chart shows an interesting trend in total revenues from excise duties on alcoholic beverages on a quarterly basis. In the observed period, the collection of these revenues was the lowest in the first quarters, after which it gradually increased in the second and third quarters, and the highest collection was achieved in the fourth quarters. Factors that together contribute to this phenomenon are the holiday season, promotional actions, preparation and creation of stocks, which affects the increase in revenues from this excise product.

### 2.1. Quarterly movement of total revenues from excise duties on alcoholic beverages

Chart six shows the quarterly collection of total revenues from excise duties on alcoholic beverages for the period Q1 2021 – Q2 2024, in millions of BAM.

Chart 6. Quarterly collection of total revenues from excise duties on alcoholic beverages (in millions of BAM)

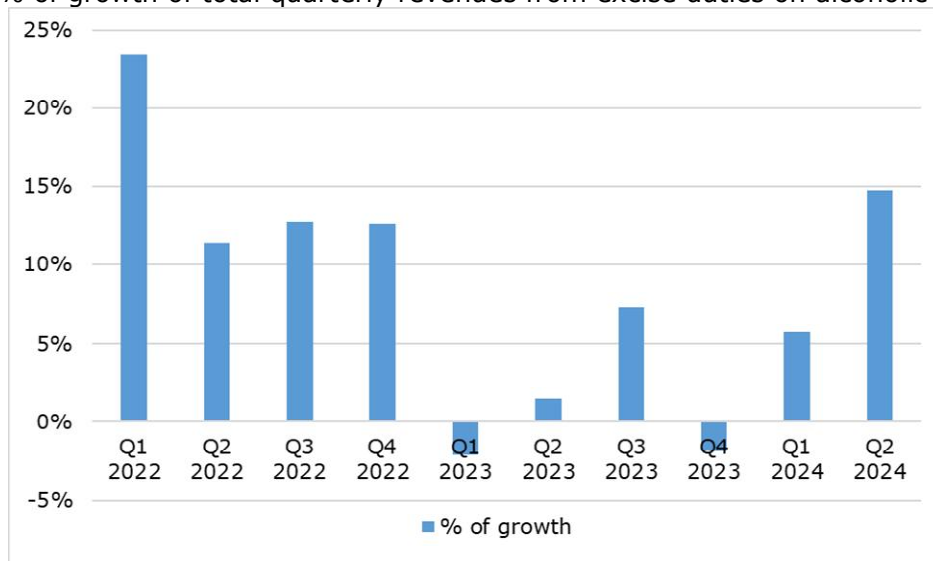


Source: Data from the Indirect Taxation Authority of BiH, MAU overview

As previously stated, the collection of these revenues in the observed period is the lowest in the first quarters, with gradual growth in the second and third quarters, while the peak of the collection of these revenues from year to year was recorded in the fourth quarters. This trend in the collection of these revenues is the result of seasonal and economic factors that affect the consumption and distribution of alcoholic beverages during the year. Thus, in the first quarter there is often a drop in the consumption of alcoholic beverages after the holiday season, which is associated with seasonal depression, fewer social activities and gatherings, which affects the reduced demand for alcoholic beverages. After the seasonal depression in the consumption of this excise product, the second and third quarters are characterized by more frequent participation in social activities and tourist events, which leads to increased consumption of alcoholic beverages, especially in the summer period, i.e. the third quarter, while the fourth quarter is characterized by the holiday season when the consumption of alcoholic beverages is at an annual peak.

Chart seven shows the quarterly growth rate of total revenues from excise duties on alcoholic beverages for the period Q1 2022–Q2 2024.

Chart 7. % of growth of total quarterly revenues from excise duties on alcoholic beverages



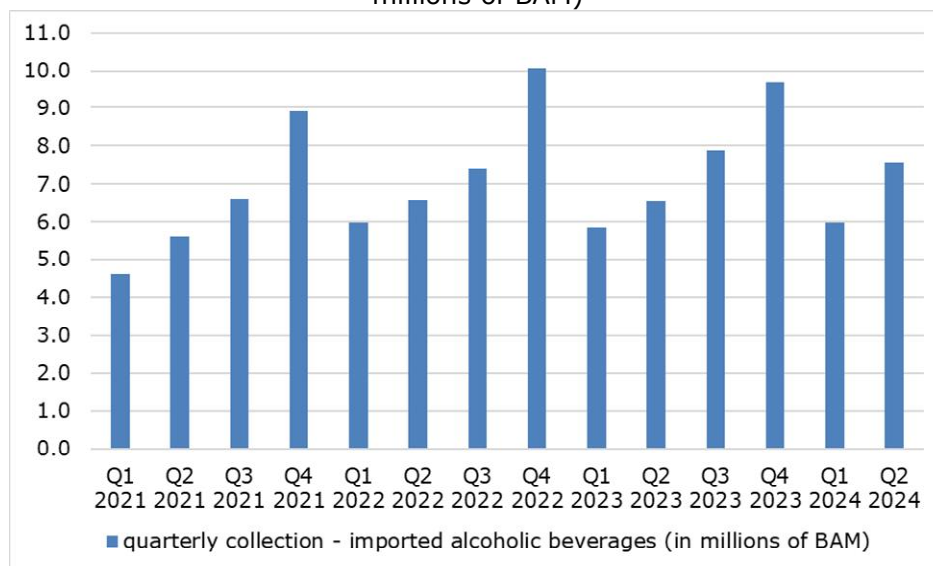
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

In the observed period, revenues from excise duties on alcoholic beverages mostly had a positive growth rate on a quarterly basis, while a slight decrease in the collection of these revenues was recorded in the first quarter of 2023 by 2.1% and in the fourth quarter of the same year by 1.9%. Given that the first quarter of 2021 was affected by the pandemic and the low consumption of this excise product, the highest increase in total revenues from excise duties on alcoholic beverages on a quarterly basis in the observed period was recorded in the first quarter of 2022 by 23.4%, after which positive trend continued in the same year. In the first two quarters of the current year, the collection of these revenues was higher by 5.8% in the first and 14.8% in the second quarter, compared to the same quarter of the previous year.

## **2.2. Quarterly movement of revenues from excise duties on imported alcoholic beverages**

Chart eight shows the quarterly revenue collection from excise duties on imported alcoholic beverages for the period Q1 2021–Q2 2024, in millions of BAM.

Chart 8. Quarterly collection of revenues from excise duties on imported alcoholic beverages (in millions of BAM)

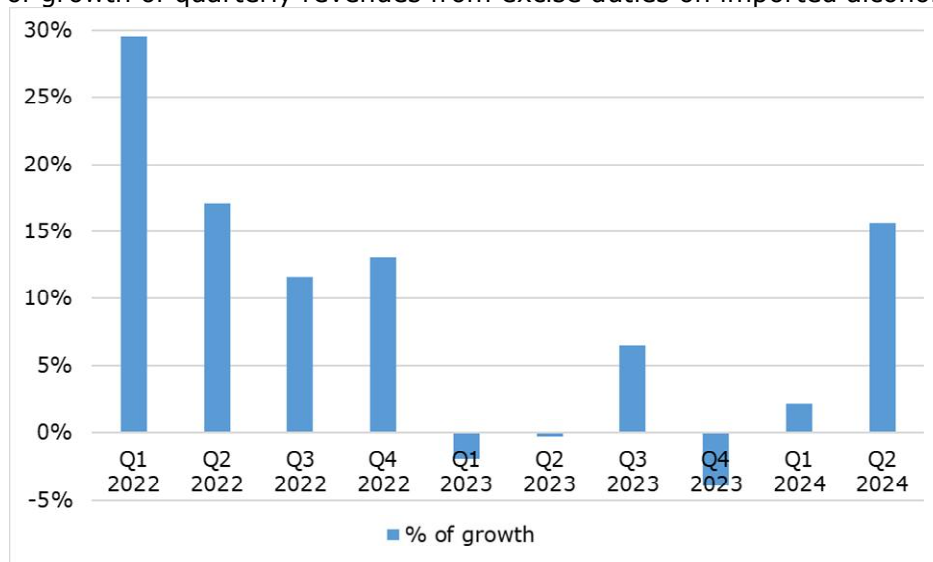


Source: Data from the Indirect Taxation Authority of BiH, MAU overview

Given the large share of revenues from excise duties on imported alcoholic beverages in total revenues from excise duties on alcoholic beverages, the tendency of these revenues does not differ from the tendency of total revenues from excise duties on alcoholic beverages on a quarterly basis. Thus, as with the quarterly collection of total revenues from excise duties on alcoholic beverages, the quarterly collection of revenues from excise duties on imported alcoholic beverages is the lowest in the first quarters, and the highest in the fourth quarters in the observed period.

Chart nine shows the quarterly growth rate of revenues from excise duties on imported alcoholic beverages for the period Q1 2022–Q2 2024.

Chart 9. % of growth of quarterly revenues from excise duties on imported alcoholic beverages



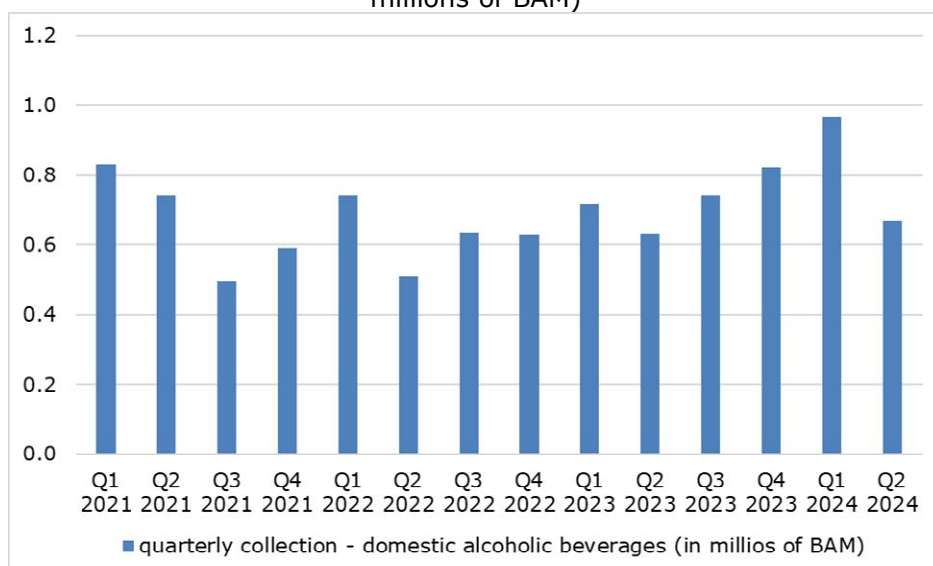
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

As with the quarterly collection of total revenues from excise duties on alcoholic beverages, the largest increase was recorded in the first quarter of 2022 by 29.5% compared to the same quarter of 2021, after which a slightly lower, but also positive rate continued until the end of the same year. In 2023, a slight decrease in the collection of these revenues was recorded in the first quarter by 1.9%, in the second quarter by 0.3% and in the fourth quarter by 3.9%, while in the current year the collection of these revenues recorded an increase by 2.2 % in the first quarter and an increase by 15.7% in the second quarter, compared to the collection of these revenues in the same quarter of the previous year.

### **2.3. Quarterly movement of revenues from excise duties on domestic alcoholic beverages**

Chart 10 shows the quarterly collection of revenues from excise duties on domestic alcoholic beverages for the period Q1 2021–Q2 2024, in millions of BAM.

Chart 10. Quarterly collection of revenues from excise duties on domestic alcoholic beverages (in millions of BAM)

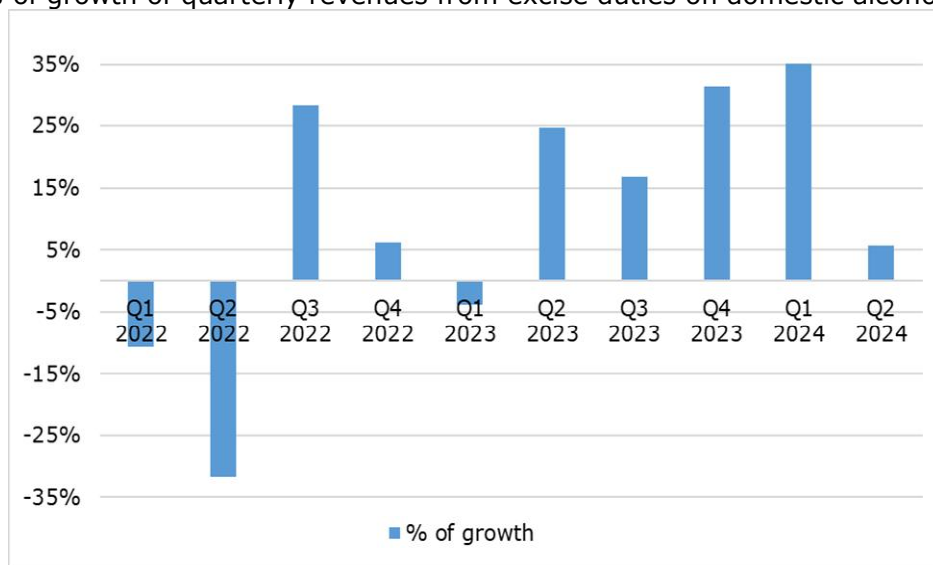


Source: Data from the Indirect Taxation Authority of BiH, MAU overview

Unlike the quarterly collection of total revenues from excise duties on alcoholic beverages and the quarterly collection of excise revenues on imported alcoholic beverages, the collection of excise revenues on domestic alcoholic beverages has a fluctuating trend on a quarterly basis. The highest collection of these revenues in the observed period was recorded in the first quarter of the current year, while the lowest collection was recorded in the third quarter of 2021 and the second quarter of 2022.

Chart 11 shows the quarterly growth rate of revenues from excise duties on domestic alcoholic beverages for the period Q1 2022–Q2 2024.

Chart 11. % of growth of quarterly revenues from excise duties on domestic alcoholic beverages



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

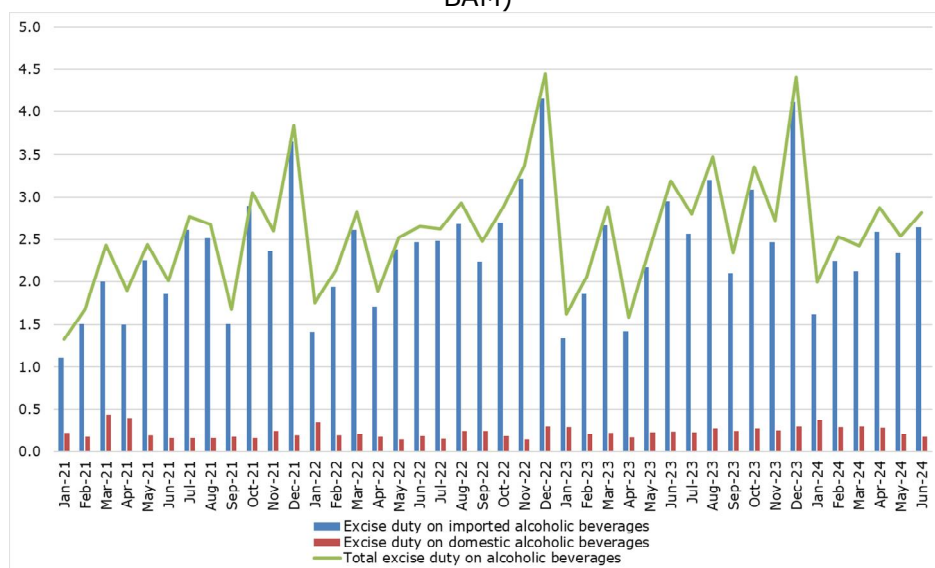
A positive growth rate of revenues from excise duties on domestic alcoholic beverages was recorded in the third and fourth quarters of 2022, the second, third and fourth quarters of 2023, as well as in the first two quarters of the current year. A decrease in these revenues was recorded in the first two quarters of 2022 and the first quarter of 2023, compared to the same quarter of the previous year. The largest decrease in the collection of these revenues was recorded in the second quarter of 2022 by 31.7%, while in the first quarter of the current year, the largest growth of these revenues in the observed period was recorded by 35.0%. The positive trend continued in the second quarter of the current year, however, compared to the collection in the first three months, it was significantly lower by 5.6%.

### 3. Monthly movement of revenues from excise duties on alcoholic beverages

The monthly dynamics of the collection of revenues from excise duties on alcoholic beverages is shown for the period from January 2021 to June 2024. This presentation of the collection of these revenues provides detailed information on the dynamics of consumption of alcoholic beverages under the influence of various external factors such as the seasonal factor, inflation and changes in the purchasing power of consumers.

Chart 12 shows the monthly trend of revenues from excise duties on alcoholic beverages for the period January 2021 - June 2024, in millions of BAM. The monthly movement of the total collection of revenues from excise duties on alcoholic beverages is shown, as well as the monthly movement of collection of revenues from excise duties on imported and domestic alcoholic beverages in the observed time period.

Chart 12. Monthly collection of revenues from excise duties on alcoholic beverages (in millions of BAM)



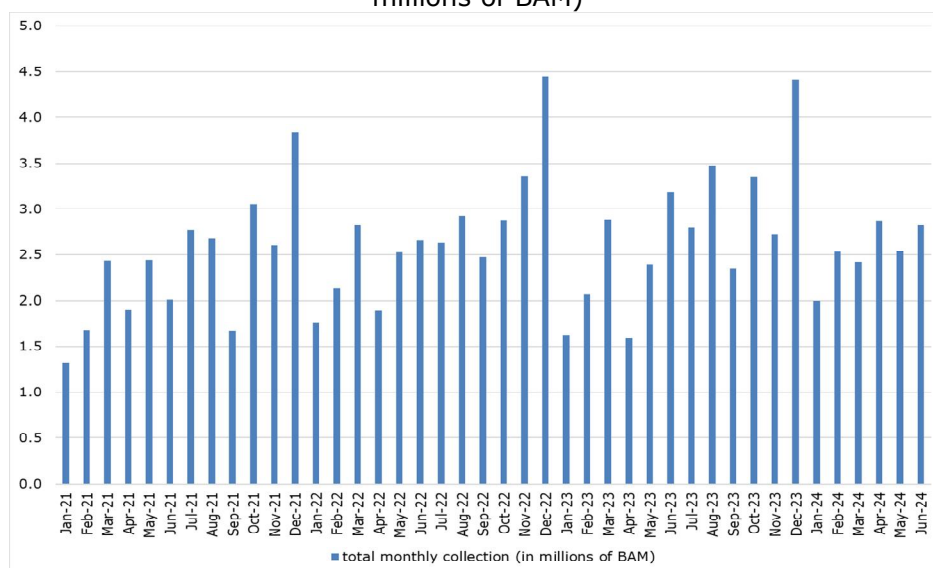
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

In the observed period, the highest monthly collection of total revenues from excise duties on alcoholic beverages was recorded in December 2022 and 2023. Also, the collection of these revenues is not far behind even in December 2021, which makes the last month of the year the period of highest consumption of this excise product. The reason for the increased consumption of alcoholic beverages in December is the festive atmosphere, that is, a large number of social events such as corporate parties and other family gatherings, as well as the creation of stocks of alcoholic beverages. A more detailed analysis of the monthly trends in total revenues from excise duties on alcoholic beverages and revenues from excise duties on imported and domestic alcoholic beverages is presented below.

### 3.1. *Monthly movement of total revenues from excise duties on alcoholic beverages*

Chart 13 shows the monthly collection of total revenues from excise duties on alcoholic beverages for the period January 2021 - June 2024, in millions of BAM.

Chart 13. Monthly collection of total revenues from excise duties on alcoholic beverages (in millions of BAM)

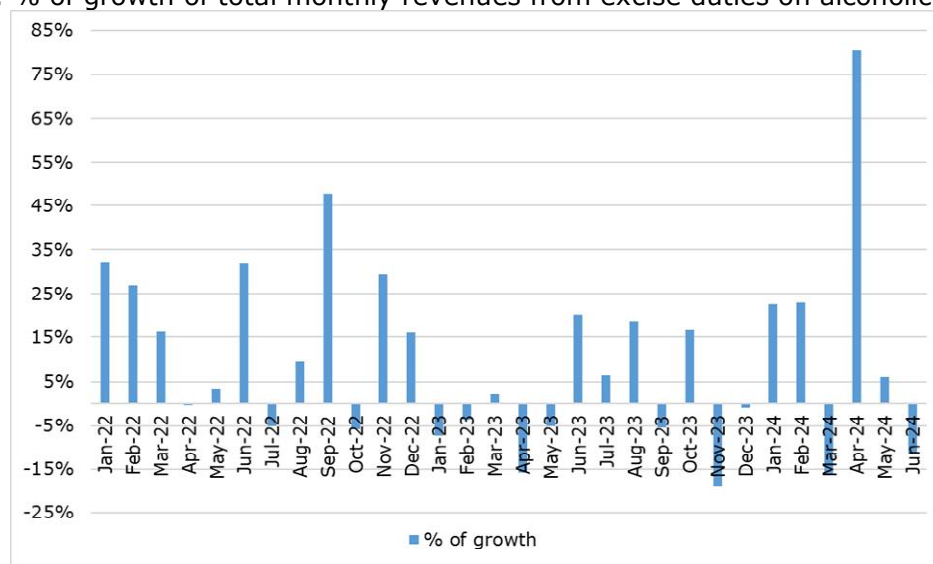


Source: Data from the Indirect Taxation Authority of BiH, MAU overview

The record monthly collection of these revenues was recorded in December 2022, which is 16.0% higher than the collection in the same month of 2021, followed by the collection in December 2023. The lowest monthly collection of total revenues from excise duties on alcoholic beverages in the period shown was recorded in January 2021, February and April 2023.

Chart 14 shows the monthly growth rate of total revenues from excise duties on alcoholic beverages for the period January 2022 - June 2024, compared to the same month of the previous year.

Chart 14. % of growth of total monthly revenues from excise duties on alcoholic beverages



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

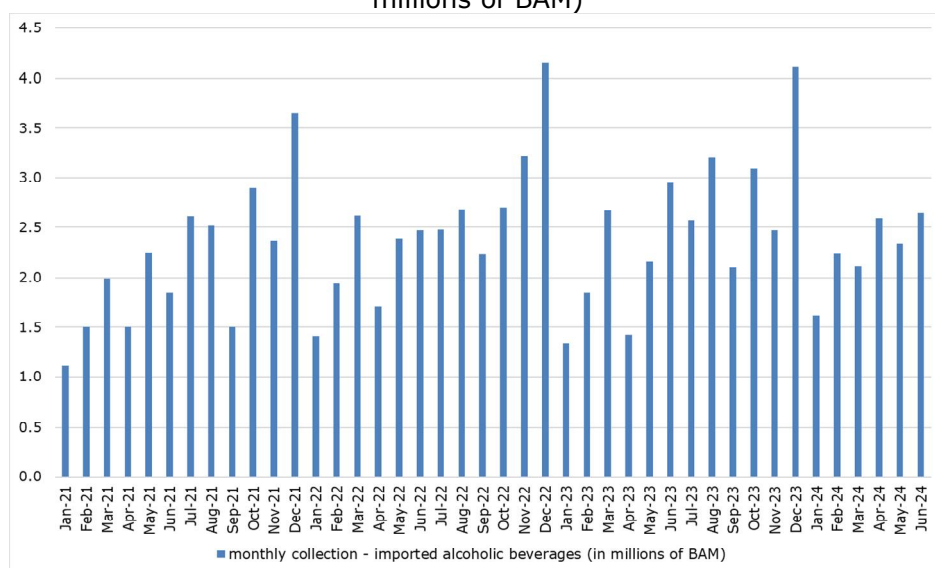
In the observed period, the highest increase in total monthly revenues from excise duties on alcoholic beverages was recorded in April of the current year by 80.6%, compared to the same

month of the previous year, as a result of the increased procurement of alcoholic beverages before the Labor Day and the Orthodox Easter. Also, a significant increase in these revenues was recorded in September 2022 by 47.6%. Observing the collection in the current year, a decrease by 16.1% and 11.6% was recorded in March and June, respectively, while an increase in the collection of these revenues was recorded in the other months.

### 3.2. *Monthly movement of revenues from excise duties on imported alcoholic beverages*

Chart 15 shows the monthly collection of revenues from excise duties on imported alcoholic beverages for the period January 2021 - June 2024, in millions of BAM.

Chart 15. Monthly collection of revenues from excise duties on imported alcoholic beverages (in millions of BAM)

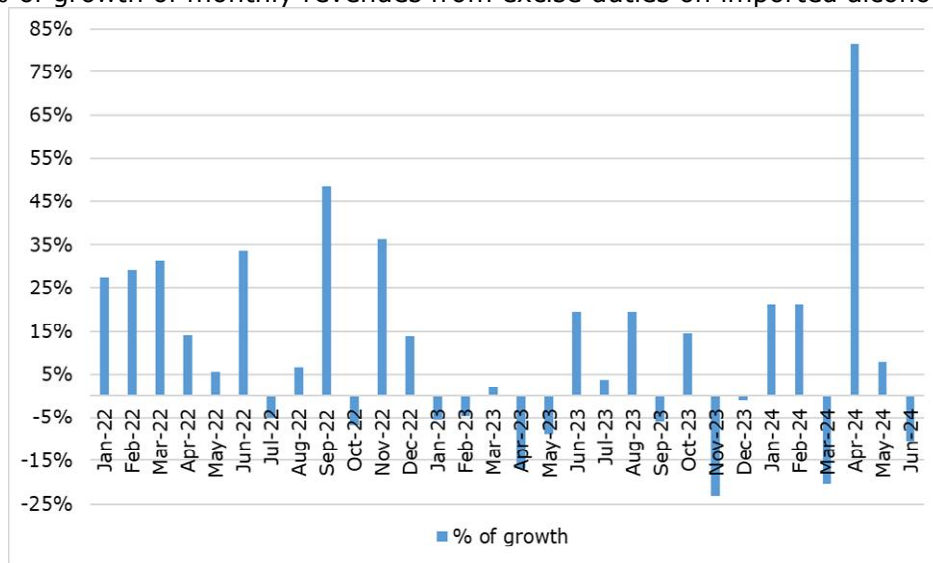


Source: Data from the Indirect Taxation Authority of BiH, MAU overview

Given the large share of revenues from excise duties on imported alcoholic beverages in the total revenues from excise duties on alcoholic beverages, the trend in the collection of these revenues is very similar. Thus, the collection of revenue from excise duties on imported alcoholic beverages is also the highest in December 2022 and 2023, as well as in December 2021, when a slightly smaller collection was recorded but the highest monthly collection in that year. The lowest collection of these revenues in the observed period on a monthly basis was recorded in the same period as the collection of total revenues from excise duties on alcoholic beverages, in January 2021, January and April 2023.

Chart 16 shows the monthly growth rate of revenues from excise duties on imported alcoholic beverages for the period January 2022 - June 2024, compared to the same month of the previous year.

Chart 16. % of growth of monthly revenues from excise duties on imported alcoholic beverages



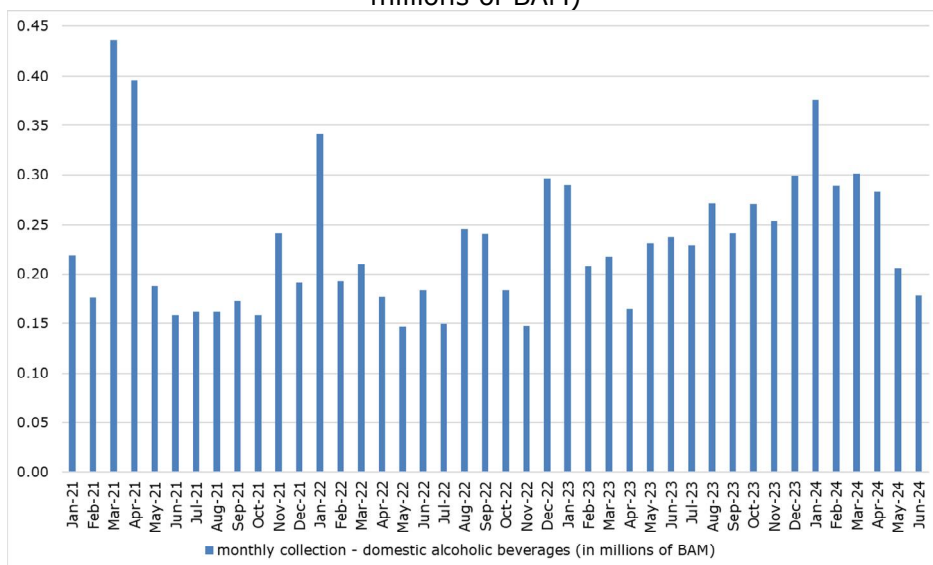
Source: Data from the Indirect Taxation Authority of BiH, MAU overview

A record growth in the collection of revenues from excise duties on imported alcoholic beverages on a monthly basis was recorded in April of the current year by 81.5% compared to April of the previous year. Also, a large growth of these revenues was recorded during a large number of months in the current year as well as in 2022, while in 2023 their decrease was mostly recorded. The largest decrease in revenues from excise duties on imported alcoholic beverages in the observed period was recorded in November 2023 by 23.2%, compared to the same month of the previous year.

### 3.3. Monthly movement of revenues from excise duties on domestic alcoholic beverages

Chart 17 shows the monthly collection of revenues from excise duties on domestic alcoholic beverages for the period January 2021 - June 2024, in millions of BAM.

Chart 17. Monthly collection of revenues from excise duties on domestic alcoholic beverages (in millions of BAM)

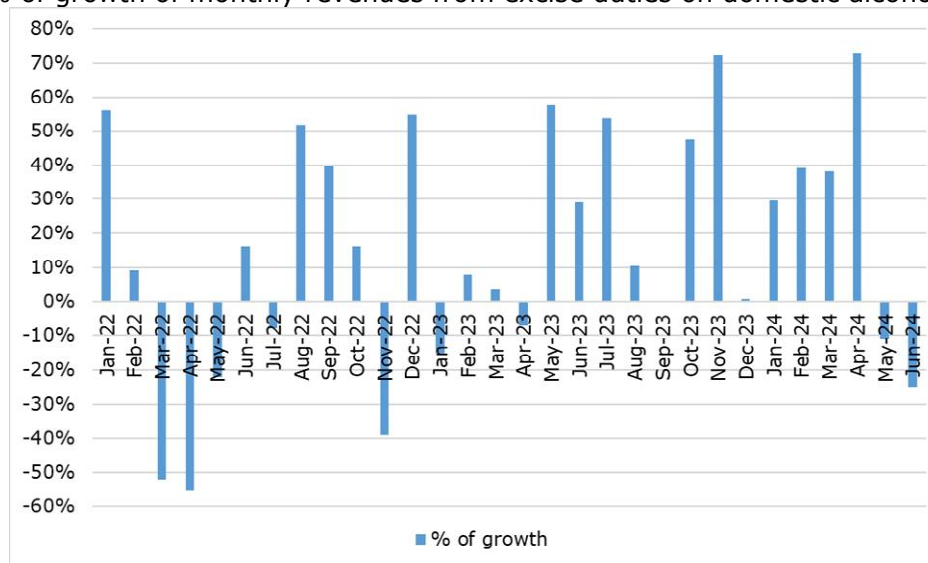


Source: Data from the Indirect Taxation Authority of BiH, MAU overview

In contrast to the total revenues from excise duties on alcoholic beverages and revenues from excise duties on imported alcoholic beverages, which collection in the observed period is the highest at the end of the year, the collection of revenues from excise duties on domestic alcoholic beverages is highest in March and April 2021, January 2022 and January 2024. The lowest monthly collection of these revenues in the observed period was recorded in May, July and November 2022.

Chart 18 shows the monthly growth rate of revenues from excise duties on domestic alcoholic beverages for the period January 2022-June 2024, compared to the same month of the previous year.

Chart 18. % of growth of monthly revenues from excise duties on domestic alcoholic beverages



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

Revenues from excise duties on domestic alcoholic beverages recorded the highest growth of 73.0% in April of the current year compared to the same month of the previous year, as well as in November of the previous year when a growth of 72.4% was recorded. The largest decrease in these revenues on a monthly basis was recorded in March 52.0%, April 55.4% and November 39.0% in 2022, compared to the same month in 2021. In the current year, the reduction in revenues from excise duties on domestic alcoholic beverages was recorded in May by 11.0% and in June by 24.8%, compared to May and June 2023.