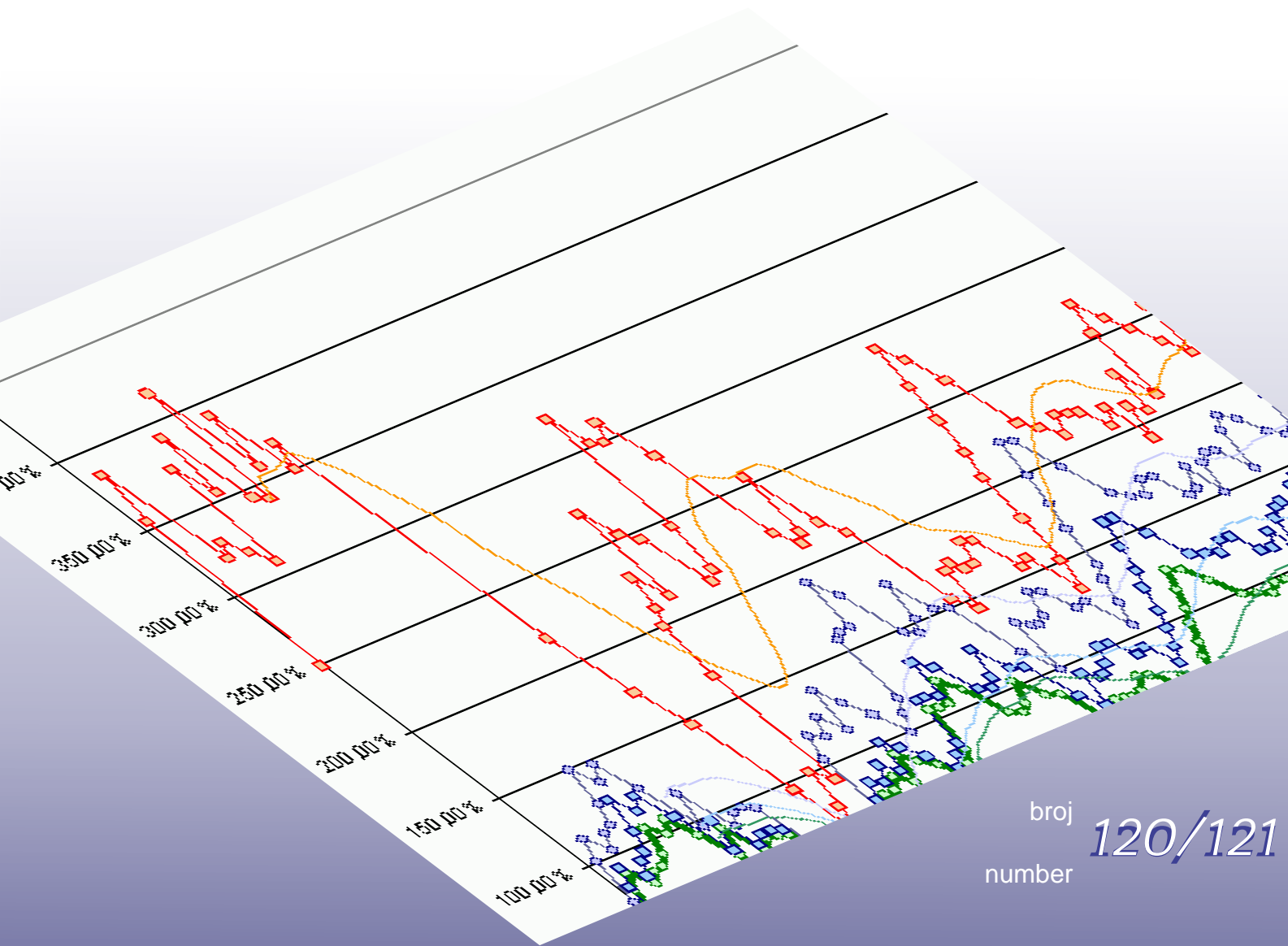


Bosna i Hercegovina  
Odjeljenje za makroekonomsku analizu  
Upravnog odbora Uprave za indirektno-  
neizravno oporezivanje



Macroeconomic Unit of the Governing Board of the Indirect Tax Authority

# *Oma Bilten*



broj **120/121**  
number

## With this double-issue

Analysis of the collection of indirect taxes in the first half of 2015, which is presented in this double issue, shows exceptionally strong growth in revenues, primarily in excise taxes, and in VAT and customs duties. Since it is necessary to explain not only every (un)expected decline in revenue but also the growth, in the analysis are presented drivers of revenue growth in the first half of the year and indicated the expectations regarding the direction of dynamics of the collection in the second half. Positive trends in collection of indirect taxes from the previous two months have continued in July. According to the ITA preliminary report on the cash flow, it was collected 577,4 million BAM of gross revenue in July 2015, which is 5,2% more than in the same month of 2014. There was a decline in refunds of 7,3 million BAM. Net effects of monthly collection amounted to 35,8 million BAM, which led to a monthly increase of 8%. The cumulative nominal growth in gross collection for seven months of 2015 amounted to 146,2 million BAM. Due to the reduction in refunds of 13,5 million BAM, the cumulative net revenue growth amounted to 159.6 million BAM or 5.7%.

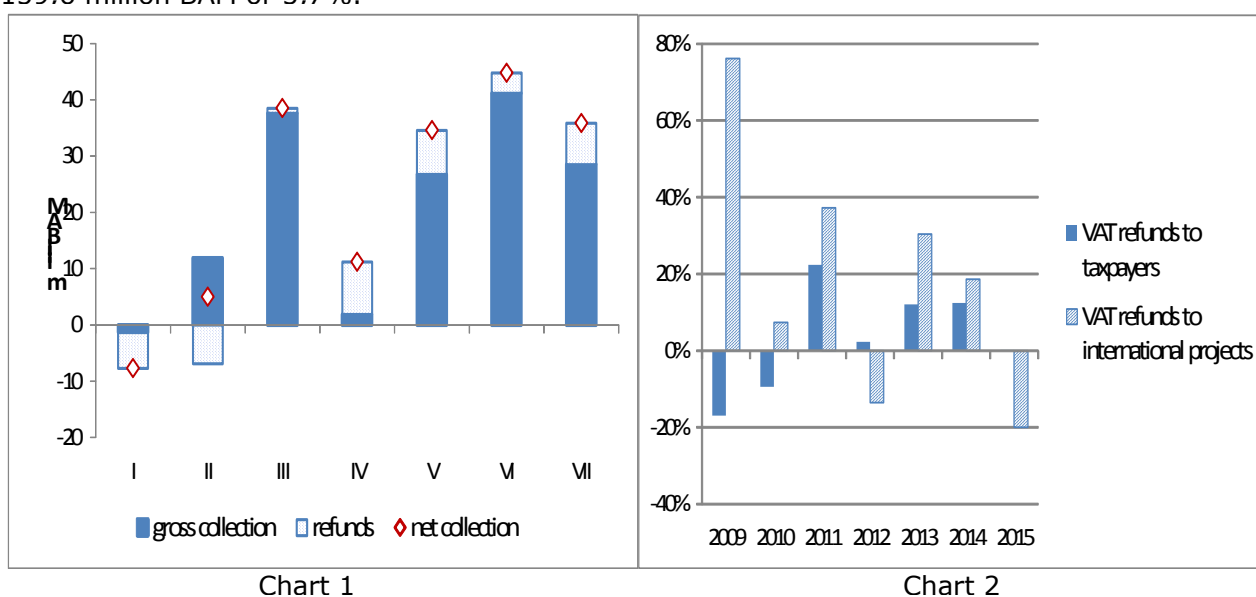


Chart 1 shows monthly nominal growth of gross and net collection of indirect taxes. The growth of refunds is shown as a negative effect, and reduction as a positive effect on revenues. Chart 2 shows changes in the level of seven-month cumulative refunds in the period 2009-2015. It can be concluded that the refunds to taxpayers are stagnating despite the evident growth of export and that the reduction of international aid projects had been the main reason for the reduction of refunds in 2015.

Dinka Antić, PhD  
Head of Unit

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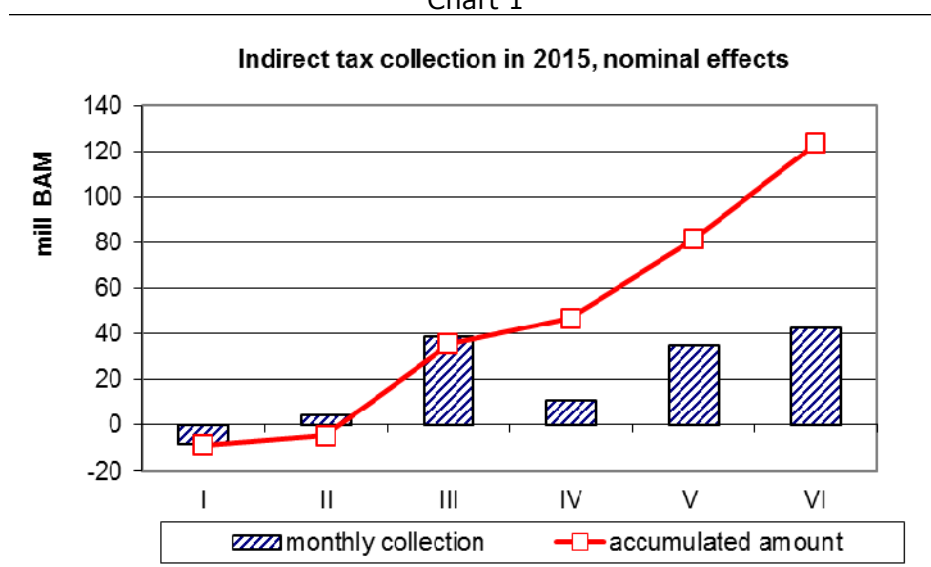
## Analysis of revenue collection of indirect taxes in the period January – June 2015

(Prepared by: Dinka Antić, PhD)

### TOTAL COLLECTION

According to the ITA preliminary report by types of revenue in June 2015 gross revenue collection of indirect taxes increased for 41,2 million BAM or 8,3%. Given that at the same time refund payments were slightly reduced by 3,7 million BAM, net revenue collection of indirect taxes has increased by 44,8 million BAM or 11,1%. Exceptionally strong revenue growth in June increased the accumulated surplus of the gross indirect taxes on 117,7 million BAM. Due to reduced refund payments net cumulative collection was growing faster than the gross collection. At the level of six months, a growth in net collection has been achieved in the amount of 126,27 mil BAM or 5,4% (Chart 1).

Chart 1



In June 2015, revenue growth was recorded in all groups of revenue, and the highest one was in excise duties. Expressed in nominal terms in the period January – June 2015 the highest growth in revenue was recorded in excise duties (61,1 million BAM), then in VAT (45,1 million BAM). It should be noted that indicators of trends in revenues by type can be changed after the final alignment of currently unadjusted 12,8 million BAM of revenues.

### TRENDS BY TYPE OF REVENUE

#### *Customs duties*

In the first half of 2015 there was an increase of 8,8% in revenues from customs duties compared to the same period of 2014. Revenue growth was slightly below expectations. The reason for that was a decrease of imports from China<sup>1</sup>. Unlike the last year when the high rate of growth in imports from China<sup>2</sup> determined the high rate of increase in customs revenue, gross VAT and refunds, in the first half of 2015 the import from China stagnated.

<sup>1</sup> According to data from the Agency for Statistics of B&H the import from China in the period January–May 2015 was lower by 2,2% compared to the same period in 2014.

<sup>2</sup> According to data from the Agency for Statistics B&H the import from China in 2014 was higher by 48,7% compared to 2013.

Review of monthly collection of customs revenue in 2015 (Chart 2) indicates a stable and high growth in the first four months of 2015, but then there was a drop in revenues, although revenues are still in the positive zone of growth. Quarterly comparison (Chart 3) still shows a slowdown in collection compared to growth in the fourth quarter and in relation to the overall trends in 2014.

Chart 2

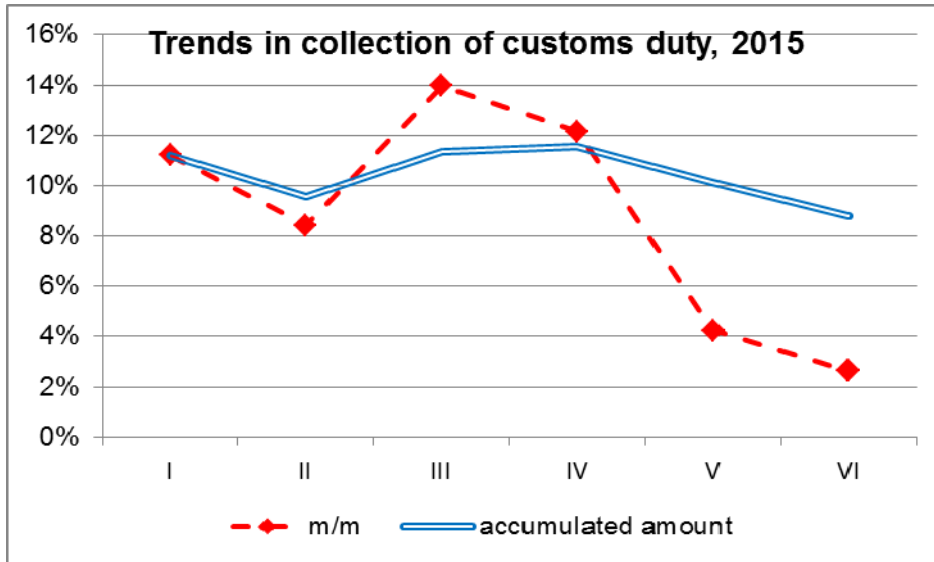
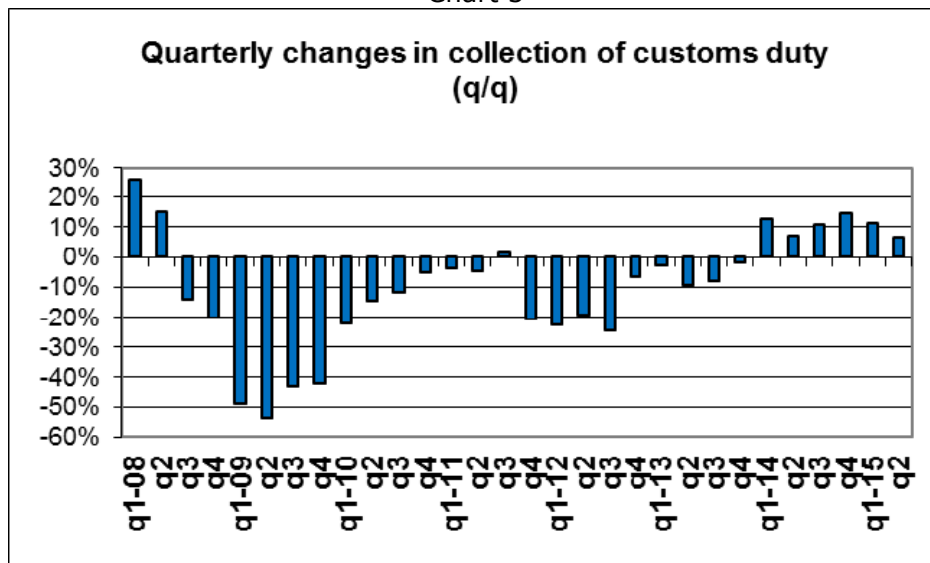


Chart 3



## VAT

In June, positive trends in VAT collection from the previous month continued. Gross collection of VAT increased by 7,3%. Reduction in refunds payments for 4,5% is the reason for the slightly faster growth of net VAT of 11,8%. Strong growth in net revenue from VAT in June contributed to the increase in cumulative net VAT collection, which is, compared to the first half of 2014, increased by 3% (Chart 4).

First half of 2015 was marked by very poor VAT collection in the first two months and then by sharp rise in the last two months. The monthly fluctuations ranged from -11,2% to 11,8%.

Review of quarterly trends shows a decrease in VAT revenues in the first quarter of 2015 of -2,3%, which could not even be neutralized by correction of the base for comparison from 2014 for the amount of collected old VAT debts (Chart 5 – mark „—“).

Chart 4

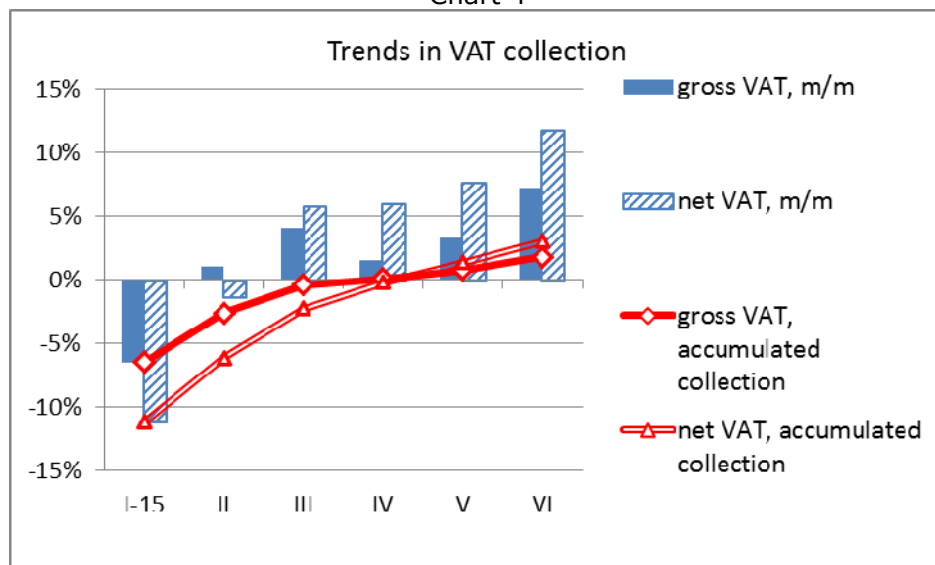
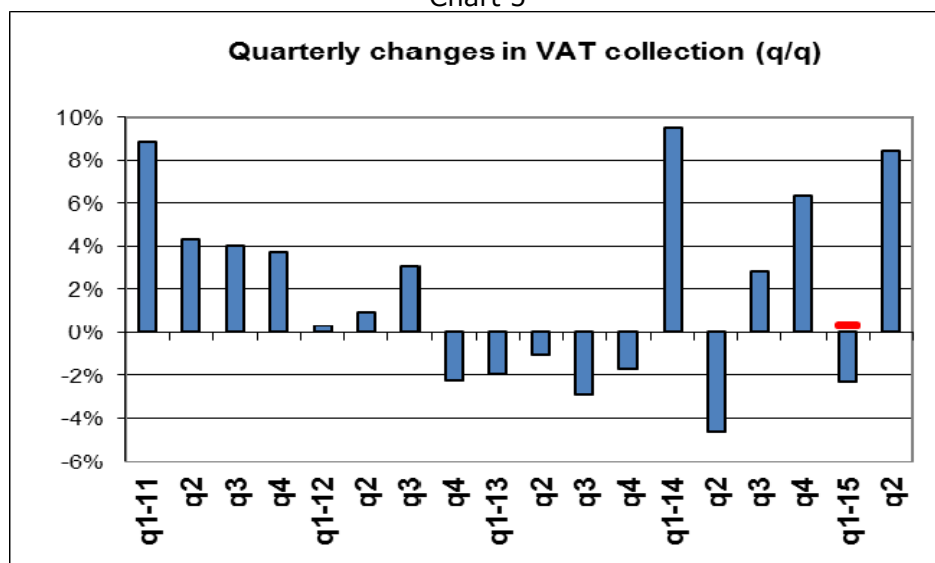


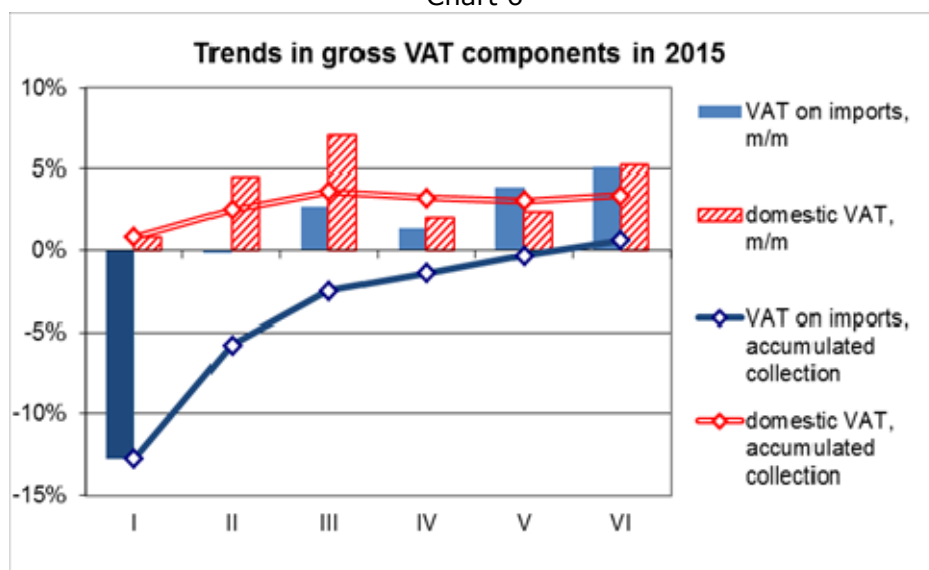
Chart 5



In contrast to the first quarter, the second quarter of 2015 recorded a strong growth of net VAT of 8,4% (Chart 5). If we observe the collection in the second quarter of 2014 a drop of 5% can be seen. The reason for this was the reduced VAT collection due to the floods in May and June of that year. In view of this, strong growth in VAT collection in the second quarter of 2015 can be partly attributed to the low base of comparison.

Trends of cumulative components of gross VAT (Chart 6) show that domestic VAT was a growth factor of net VAT in the first half of 2015. Domestic VAT was increased by 4,3% at the level of six months. It is known that, in the first quarter of 2014, old debts based on VAT were collected in the amount of approximately 19,5 million BAM. Due to the low growth of debt balance in 2015 it can be assumed that in this part of the year there was also collection of old debt, so that possible correction to the domestic VAT growth depends on the result of offsetting debt collection in this and the previous year.

Chart 6

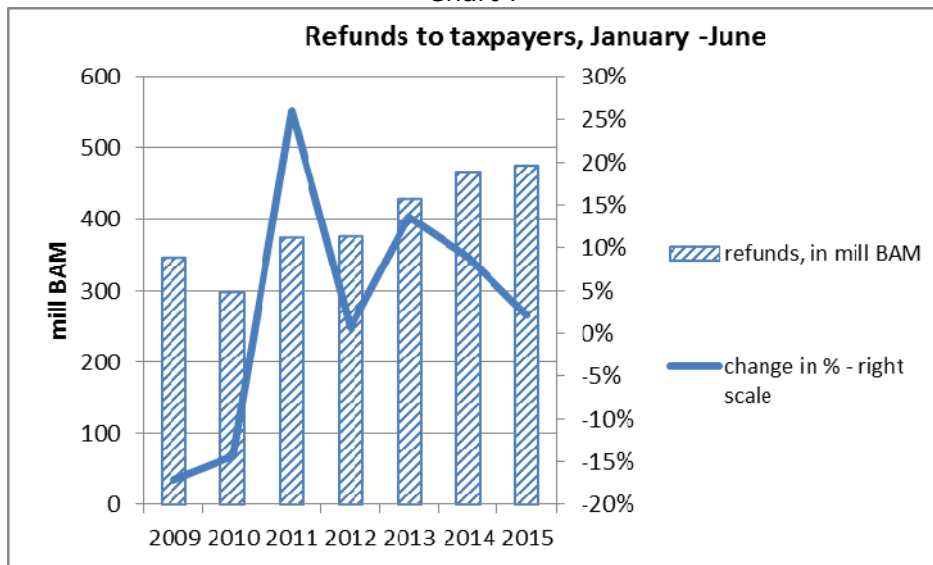


In the first six months it was paid 1,1% less VAT refunds. The structure of refunds though shows that 2,1% more refunds was paid to taxpayers than in the first half of 2014 (Chart 7), while 22,3% less to the international projects. The growth of refunds to taxpayers follows the growth of exports. However, we should bear in mind the high base for comparison of refunds from 2014, which included refunds associated with the investment in TPP Stanari<sup>3</sup> and in relation to some companies with a special customs (and VAT) regime to *lohn* jobs to the standard VAT calculation<sup>4</sup>. Refund payments for *lohn* jobs continued in 2015 as well but the effect of the large investment in TPP Stanari is limited to 2014 only.

<sup>3</sup> According to the ITA data approximately 71 million BAM of VAT refunds has been returned to TPP Stanari in 2014 or 7,1% of total annual refunds paid to taxpayers.

<sup>4</sup> According to the ITA data approximately 62 million BAM of VAT refunds has been returned to the company "Prevent" in 2014.

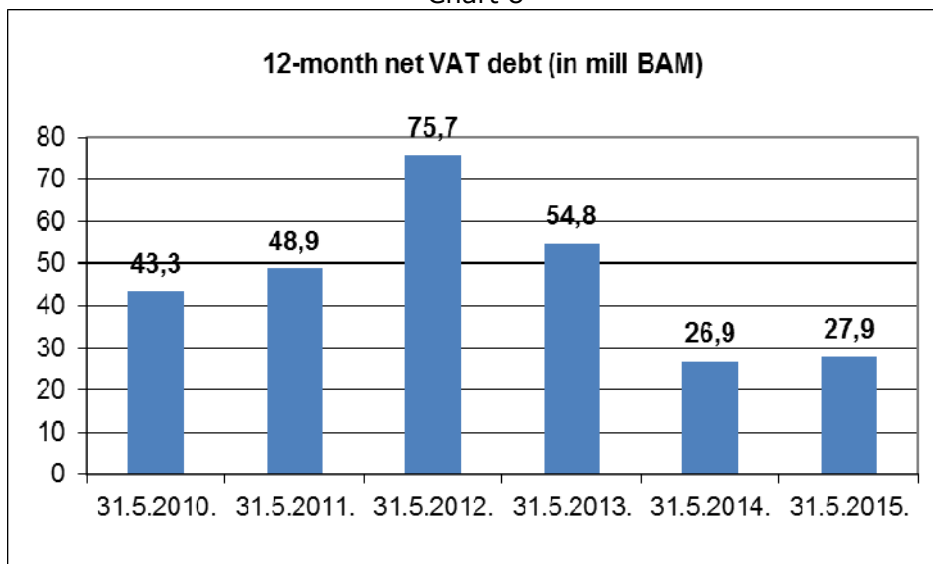
Chart 7



Compared to the previous report, the total debt according to VAT returns increased by only 0,7 million BAM and on the day of 31<sup>st</sup> of May 2015 amounted to 328,6 million BAM. Total VAT debt, which includes automatic cut debt, amounts to 412,1 million BAM.

Comparison with the balance of the debt according to VAT returns 12 months ago (i.e. on the day of 31<sup>st</sup> of May 2014) shows that in the last year debt on the basis of VAT returns increased by 27,9 million BAM (Chart 8). However, only 1 million BAM of this amount is related to the new debt incurred in 2015, and the rest covers the period June-December 2014.

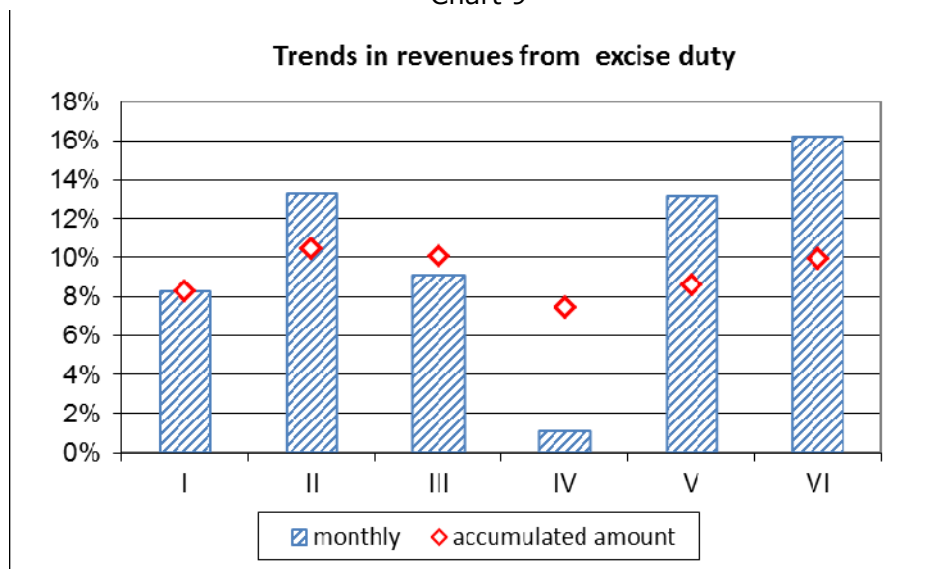
Chart 8



*Excises*

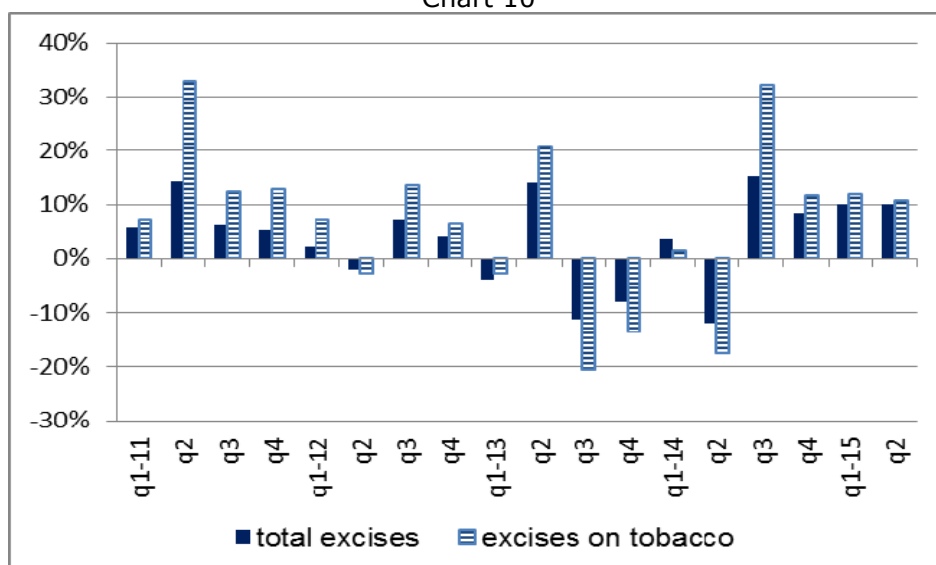
In June 2015 there was a continuation of positive trends in the revenue collection from excise taxes (Chart 9). The monthly collection is increased by 16,3%, which represents a maximum in the last six months. Strong revenue growth in June increased the growth rate of total excise taxes collected to the level of 10,2%.

Chart 9



In June, the revenue growth was recorded in all types of excise taxes except for excises on domestic oil products. On the whole, the collection of excise taxes in all categories (products) is positive and in some cases (tobacco, derivatives, and alcohol) is extremely high. Positive trends in the collection of excise taxes in June only increased growth from the previous months, while the decline in revenues from excises on domestic derivatives to a lesser extent slowed down the cumulative growth for six months.

Chart 10

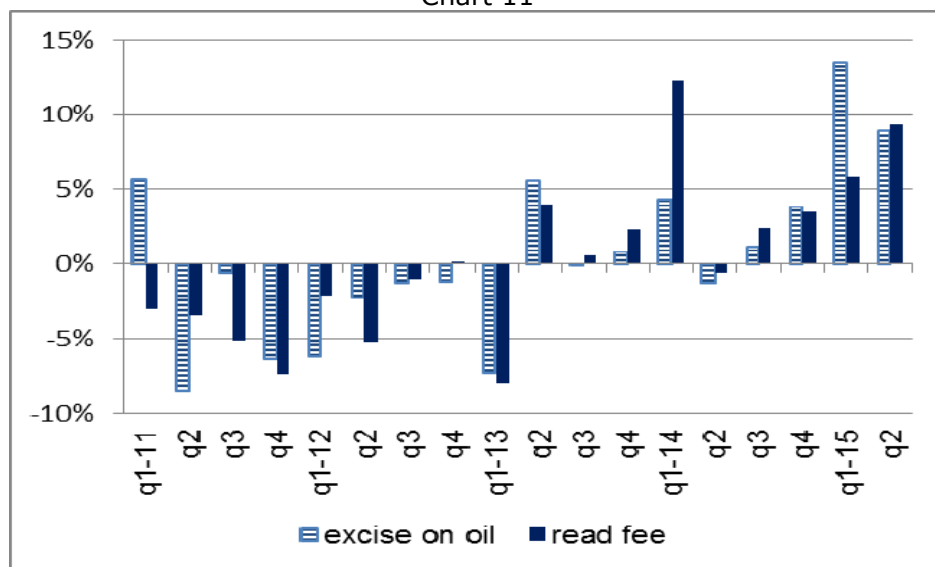




Quarterly comparison of excise collection shows growth in the last four quarters, with the growth stabilized in the last three quarters (Chart 10). This is the result of steady growth in excise taxes on tobacco. Since excise taxes on tobacco account for about 60% of total excise revenues, trends in their collection determine trends in total excise revenue collected. The reason for the increase in excises on tobacco is stabilization of cigarette market after a drastic increase in excise taxes on fine-cut tobacco.

Another factor of growth in total revenue from excises is also the constant growth of revenue from excise taxes on oil products. Quarterly comparison shows an increase in the last four quarters (Chart 11). Such a rapidly growing trend in the beginning can be explained by a significant decline in prices in the oil market. However, since in recent months there has been a gradual increase in oil product prices, possible cause of growth in excise revenue lies in the growth of consumption and industrial production in B&H<sup>5</sup>.

Chart 11



In the second quarter, an increase has also been recorded in excise taxes on coffee, but because of the small weights, impact of this growth on overall growth in excise revenues was minor (Chart 12).

Quarterly trends in collection of excises on group of alcoholic and non-alcoholic beverages (Chart 13) show growth in all categories in the last three quarters. When comparing the collection of excises on beer, collection of old debts in the first quarter of 2014 is excluded from the basis of comparison. The introduction of differentiated excises on beer brought a revenue growth of 21,3%, with revenues from excises on domestic beer increased by 11,8% and revenues from imported beer 26,1%. A higher rate of the excise tax has, as the Unit anticipated, stimulated an increase in consumption of domestic, less taxed beer. Volumes of domestic beer placed on the market increased by 11,8%. Contrary to expectations, there was no reduction in the amount of imported beer, but the quantities placed on the market increased by 0,9%. It can be assumed that it is a result of strong marketing campaigns by foreign breweries in the B&H market.

<sup>5</sup> According to data from the Agency for Statistics in B&H, industrial production in B&H has, for the first five months of 2015, increased by 7,9% compared to the same period of 2014.

Chart 12

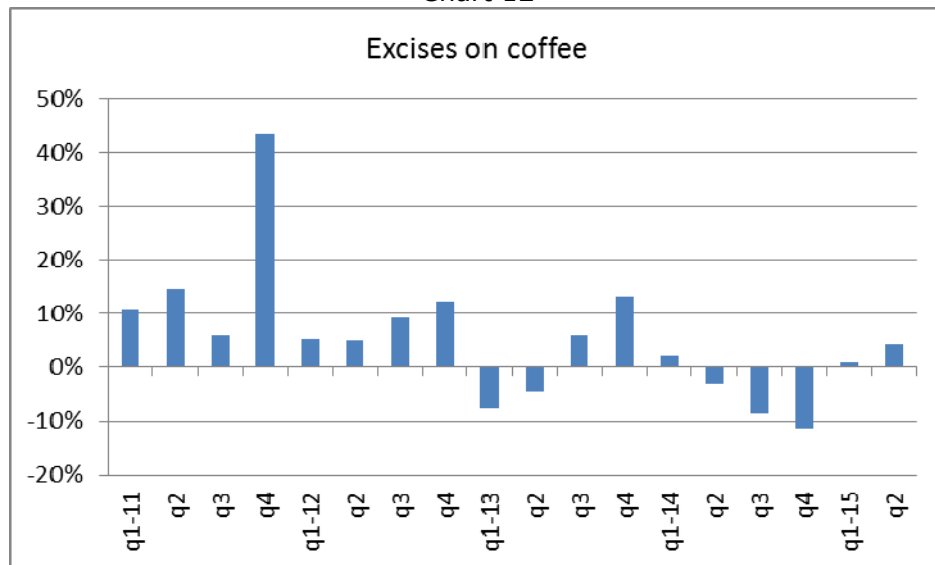
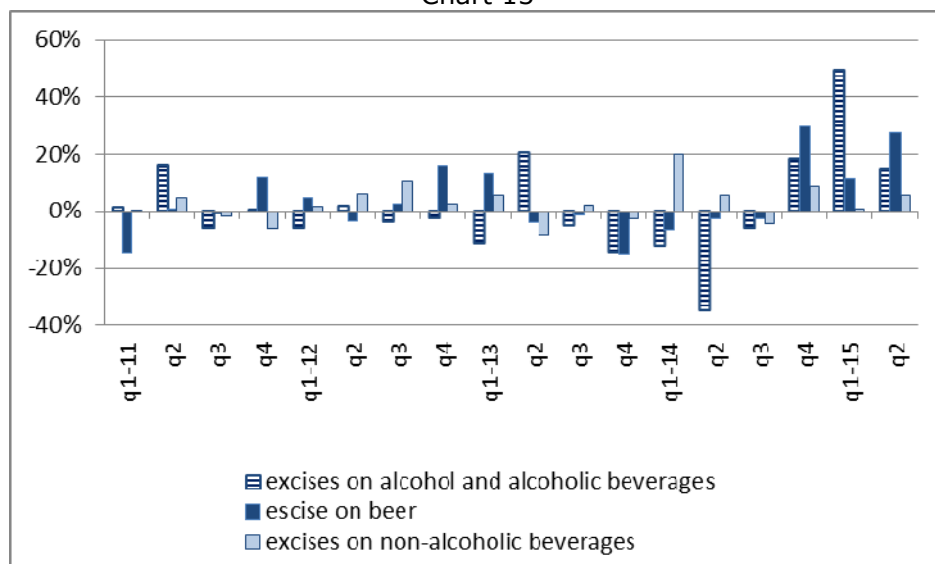


Chart 13



## CONCLUSION

According to the April projections<sup>6</sup> the Unit expected growth in net collection of revenue from indirect taxes in 2015 amounting to 3,2%. After six months, the cumulative net increase has exceeded the annual projections by 2,1 p.p. (Chart 14), with a growth rate ranging from negative growth (-2%) to a high of 5,3%.

In the first two months the net collection was significantly below projections; in March and April slightly below, but since May there has been a strong growth. Such developments have resulted in revenue growth in the first two quarters of 2015 by 3,1% and 7,3% respectively (Chart 15).

<sup>6</sup> MAU Bulletin No. 118, May 2015, [www.oma.uino.gov.ba](http://www.oma.uino.gov.ba).

Chart 14

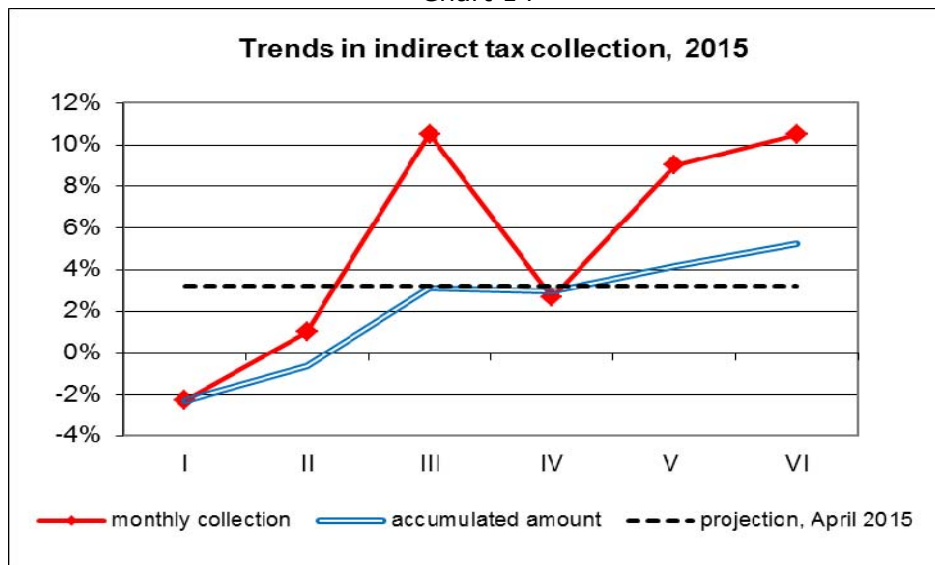
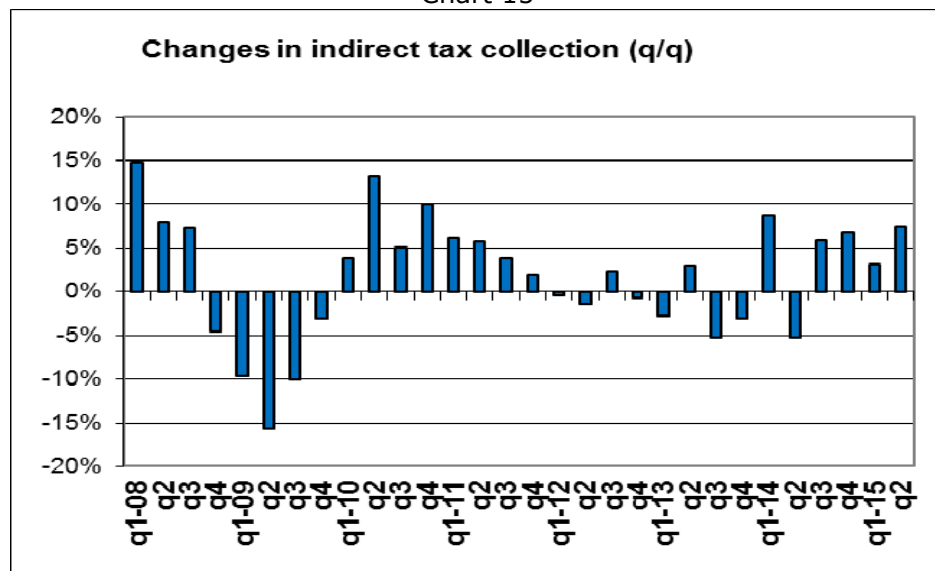


Chart 15



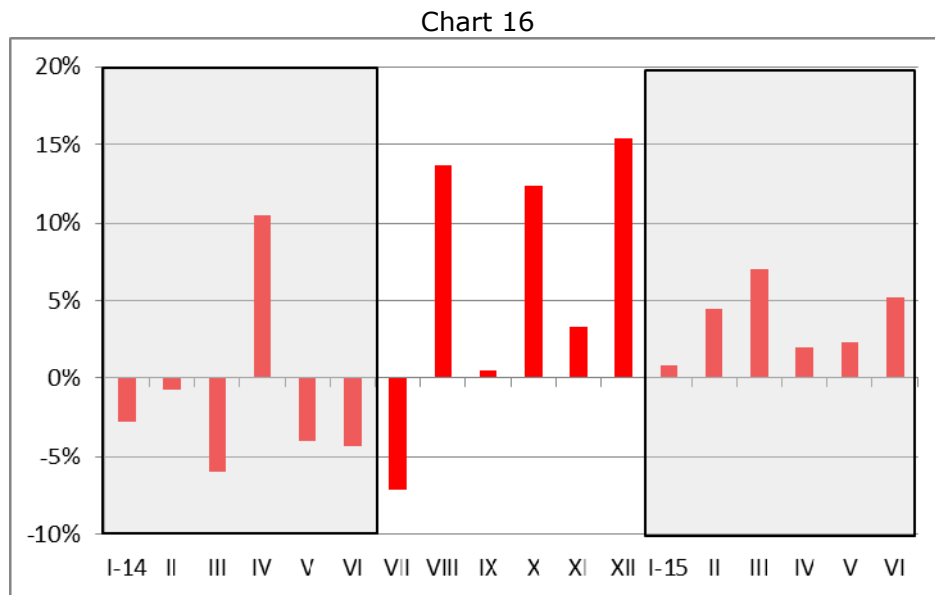
In the first half of the year, the collection of revenues from indirect taxes was mainly influenced by the following factors:

- *The new taxation policy of tobacco*: Contribution of surplus with the excise tax on tobacco (+ corresponding VAT) represents 40,5% of the surplus of gross collection of indirect taxes in the first half of 2015 or 1,6 p.p. of overall growth. The reason for the increase in excise taxes on tobacco is the implementation of the new taxation policy of fine-cut tobacco. Since the new policy is applied from 1 of August 2014, total annual effects on excises have emerged in the first half of 2015, while in the second half of the year, due to the high base, no significant revenue growth is expected;
- *The growth in consumption of derivatives*: Contribution of surplus with the excise tax on derivatives and road taxes (+ corresponding VAT) represents 28,7% of the surplus of gross collection of indirect taxes in the first half of 2015 or 1,2 p.p. of the growth. Possible reasons for the growth of excise and road taxes on derivatives are the decline in derivative prices and economic and industrial production growth. However, we must not ignore the

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effect of the growing cross-border traffic with Croatia where the prices of derivative are higher than in B&H;

- *The effects of floods and renovation*: Floods in 2014 and renovation that followed had a double positive effect on the growth rate in the first half of 2015 for two reasons: (i) due to the lower base for comparison (May/June) and (ii) due to the increased consumption (and hence domestic VAT) because of the realization of reconstruction projects in the first half of 2015. Chart 16 shows the monthly changes in domestic VAT in the last three half-years in the period January 2014 - June 2015;



- *Reduction of VAT refunds based on international projects*: After several years of rapid growth of refunds to international projects (e.g. refunds on this basis in 2014 were doubled compared to refunds paid to international projects in 2010) there was unexpectedly a decrease in refund payments. This reduction, which brought 0,6% of net revenue growth, was partially offset by growth of refunds to taxpayers.

In the second part of 2015, it is expecting a slowdown of positive trends, mainly due to a higher base of comparison from 2014. Because of the entry into force of amendments to the Law on Excise Duties during 2014, the effects of the new taxation policy of tobacco and beer are unevenly distributed (in the second half of 2014 and the first half of 2015). In addition, the comparison base in the second half of the year is higher for the one-off effects of reconstruction projects after the floods that have been realized by the end of 2014.

A special element of uncertainty in the realization of projections of revenues from indirect taxes is VAT refunds to international projects. Due to the inability to predict the volume and dynamics of the realization of projects of international support, governed by the precautionary principle because of the effects of refunds on net collection and allocation of revenue to lower levels of government, projections of refunds on this basis were based on the growing trends from the previous years. Bearing in mind the current trend of reduction, the continuation of the same trends by the end of the year could have a positive impact on the realization of revenues in 2015.

## The role of automatic stabilizers in conducting fiscal policy

(Prepared by: Aleksandra Regoje)

### Introduction

The main goal of fiscal policy is to mitigate the fluctuations in economic activity, and thus to enable economic development. Interest in the instruments of fiscal policy particularly grows in the conditions of the limited scope of monetary policy as it is case, for example, in Bosnia and Herzegovina (currency board).

Fiscal policy influences developments in the economy through tax instruments and government expenditures. Governments have the ability to change the types and level of taxes, the structure and level of expenditures, and the degree and form of borrowing.<sup>7</sup>

Fiscal policy that increases aggregate demand is called expansionary, while in the reverse case it is restrictive. This article, in fact, is a continuation of the one from the Bulletin number 116. In this issue it is explained that the overall government balance (OB) consists of cyclical and cyclically adjusted component. Cyclical component (CB - cyclical balance) is part of the balance that automatically responds to cyclical changes in the economy, while the cyclically adjusted balance (CAB) indicates the fiscal position of the government after excluding the effects of cyclical factors on the revenues and expenditures of the state. The mentioned article<sup>8</sup> describes the role of cyclically adjusted balance, which is in fact the result of discretionary measures of the government, regardless of the temporary, cyclical movements in the economy. In this issue we will focus on another, cyclical, component of the balance. We will see that it results from the operations of so-called automatic stabilizers.

### Stabilization coefficient

The overall government balance shows the impact of fiscal measures on demand. It actually represents the difference of what the government subtracts from the private sector (mainly through taxation) and what the budget contributes to aggregate demand in a given year. In order to have a stabilizing role, fiscal balance should rise when output grows and drop in the opposite case. In this way, fiscal policy creates additional demand at a time when output is falling and reduces demand at the time of the expansion. The "stabilization coefficient" is used as a measure of stabilizing role of fiscal policy and is calculated as the average change in the overall fiscal balance (% of GDP), that is associated with 1 percentage point variation in output gap.<sup>9</sup> The coefficient is positive in the case where the fiscal policy is stabilizing and negative when it is not.<sup>10</sup> Observation of relationship between the budget balance and the output gap allows governments to see how their policies affect the stabilization of output, as well as the comparison with other countries. It should be noted that the stabilization coefficient may be overestimated to the extent to which the budget is affected by other factors, such as interest rates. Besides that, the main objectives of the fiscal policy of all countries are not always aimed at stabilizing the outputs. Priorities could also be the sustainability of public finances, especially in the conditions of the lack of fiscal space.

<sup>7</sup> <http://www.imf.org/external/pubs/ft/fandd/basics/fiscpol.htm>

<sup>8</sup> [http://www.oma.uino.gov.ba/bilteni/Oma\\_Bilten\\_eng\\_116.pdf](http://www.oma.uino.gov.ba/bilteni/Oma_Bilten_eng_116.pdf)

<sup>9</sup> Output gap- difference between the level of actual and potential output (in % of potential)

<sup>10</sup> IMF Fiscal Monitor, April 2015

According to coefficient stabilization data of the IMF (FM, April 2015), fiscal stabilization was more significant in advanced economies than in developing countries. Fiscal policy had a stabilizing role in about three quarters of advanced economies, and in only one quarter of emerging market and developing economies. The results in the last ones may partly be attributed to the lack of quality data and the difficulties of estimating output gaps.

Care must be taken on whether a change of government revenue and expenditure comes automatically, in accordance with cyclical developments in the economy or after special government decisions. For example, growth in economic activity positively affects the government's revenue and may lead to a decline in certain categories of expenditure (eg. unemployment benefits). This would lead to an improvement in the government balance. When observing dynamics of the overall balance indicator it may ostensibly seem that the government has pursued a restrictive policy, even though it took no discretionary measures. It is therefore necessary to separate the two main types of fiscal policy: automatic stabilizers and discretionary government measures.

Automatic stabilizers are incorporated into the fiscal system, and function in a way that they respond to cyclical changes in the economy regardless of the government's decision.<sup>11</sup> In the case of stronger economic imbalances these measures can not completely eliminate the fluctuations. In that case the government must implement changes of the tax policy or public expenditure policy, ie. discretionary policy measures.

### Automatic stabilizers

Automatic stabilizers affect the movements in the economy in a way that they instantly influence the changes in aggregate demand. Their name comes from the fact that they are "automatically" triggered by the rules which are incorporated into the fiscal system and they help the stabilization of economic cycle. No special government decisions (which require political consensus and time to start implementation) are needed for their application. For these reasons the automatic stabilizers are preferred in terms of the timely implementation i.e. responding to cyclical changes without a lag. Besides that, they self-retreat along with different economic conditions.

Automatic stabilizers depend on the size of government and particularly on how much the tax revenue and certain categories of public expenditure are sensitive to cyclical changes. Of the great importance are stable fiscal institutions and well-designed fiscal rules and medium-term budgetary frameworks. Automatic stabilizers are usually stronger in advanced economies. The role of automatic stabilizers is usually smaller in low-income countries and emerging market countries because of the narrow tax base and institutional constraints. In the conditions of powerful automatic stabilizers, the country has less need for the adoption of discretionary measures.<sup>12</sup>

It was mentioned in the Introduction that the total government balance consists of cyclical and cyclically adjusted component. Fedelino et al. (2009)<sup>13</sup> separated also the interest payments in the overall balance, since their dynamics may not be a direct result of discretionary government policy, neither of cyclical movements in the economy.

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<sup>11</sup> In addition to cyclical changes in GDP, the fiscal indicators may react to other factors such as property prices, prices of goods and services, foreign exchange rates, interest rates and others. In the extent that is not the result of cyclical factors, they should be assessed separately.

<sup>12</sup> Horton M. and El-Ganiany A., "Fiscal Policy: Taking and Giving Away", Finance & Development, IMF (2012)

<sup>13</sup> Fedelino et al., "Computing Cyclically Adjusted Balances and Automatic Stabilizers", International Monetary Fund, Fiscal Affairs Department, Technical Notes and Manuals, 2009

## Box 1.

<i>Equations</i>	<i>Legend</i>
(1) $OB = PB - INT$	OB- overall fiscal balance
(2) $OB = CAPB + CPB - INT$	PB- primary balance
(3) $\Delta OB = \Delta CAPB + \Delta CPB - \Delta INT$	INT- interest payments
(4) $\Delta CPB = AS$	CAPB- cyclically adjusted primary balance
(5) $AS = \Delta OB - \Delta CAPB + \Delta INT$	CPB- cyclical component of primary balance
	$\Delta$ - difference between two consecutive years
	AS- automatic stabilizers

Source: Fedelino et al., IMF (2009)

Equation no. 2 shows that the overall balance corresponds to the sum of the cyclically adjusted primary balance and the cyclical component of the primary balance (part of the primary balance that automatically responds to cyclical changes) adjusted for interest payments. According to this formula, the equation no. 3 shows the annual change in these indicators (or difference relative to a particular reference year). Since automatic stabilizers correspond to the change of the cyclical component of the primary balance (equation no. 4), their calculation formula is derived in the equation no. 5.

The mode of operation of automatic stabilizers depends on the manner in which tax revenues and government expenditures react to the changes in economy, which is determined by the characteristics of fiscal system, ie. by fiscal policy and policy of public expenditures of the country. For example, the period of decline in the economy would bring a reduction in corporate profits and the incomes of citizens. If the income tax rates are progressive many taxpayers will move into lower tax brackets. Then the disposable incomes of citizens and their consumption are falling more slowly than the government tax revenue, which has a counter-cyclical effect. In addition, some government expenditures go up automatically, such as unemployment benefits or social transfers to the citizens. That also helps to maintain the consumption, and to mitigate the effects of the decline in the economy. In the period when economy is booming, a taxation of larger share of income and lower social transfers reduce the aggregate demand and inflationary pressures. However, experiences show that many countries often use discretionary measures in the period of booming, which prevents the creation of fiscal space for operations at the occurrence of a recession phase.

Not all automatic adjustments have the stabilizing role. An example can be the indexation of certain expenditure, such as salaries or pensions. In this case, economic growth automatically leads to an increase of public expenditures. An example that has similar effects is the earmarked tax (tax revenues which are in advance allocated for the specific programs or projects), etc.

It should be mentioned that countries often face problems of high public debt and a lack of fiscal space, which complicates the application of automatic stabilizers and countercyclical policy in general. In addition, the growth of automatic stabilizers can lead to adverse effects on other fiscal targets, especially in the case of growth of expenditures and tax rates. Weakening the incentives to find work in the conditions of the excessive and long-term benefits for the unemployed is cited as the main side effect. The main question that arises is how to increase the role of automatic stabilizers without the growth of government sector and reducing its efficiency.

### The size of automatic stabilizers

The size of automatic stabilizers is measured by their impact on the budget balance in relation to changes in economic activity. It mainly depends on the size of the public sector i.e. the amount of public expenditure. Although the size of the public sector is essential to the automatic stabilization it can be harmful because the larger government sector may lead to greater shocks in the economy.

In the absence of other, more detailed data, the share of expenditures in GDP is used to estimate the strength of automatic stabilizers. Tax revenues generally move in line with changes in gross domestic product, while expenditures depend on the government's obligations in accordance with the budget law, and are largely independent of economic cycles. In the simplified example of calculating the strength of the automatic stabilizers, the change of public revenues would correspond to the change in GDP, while the expenditures would not change. Then the change the overall balance would depend on the share of expenditures in GDP (Box 2).

#### Box 2.

<p><i>Equations *</i></p> $(1) \Delta(OB/GDP) = OB_{(n+1)} / GDP_{(n+1)} - OB_{(n)} / GDP_{(n)}$ $(2) \Delta(OB/GDP) = (Rev_{(n)} * r - Exp_{(n)}) / (GDP_{(n)} * r) - (Rev_{(n)} - Exp_{(n)}) / GDP_{(n)}$ $(3) \Delta(OB/GDP) = (Exp_{(n)} * r - Exp_{(n)}) / (GDP_{(n)} * r)$ $(4) \Delta(OB/GDP) = Exp_{(n)} * (r-1) / GDP_{(n+1)}$	
<p><i>Legend</i></p> <p><math>\Delta(OB/GDP)</math> – change of the overall balance share in GDP          Rev – government revenues          Exp – government expenditures          r- index of GDP growth</p>	<p><i>* the assumptions are fixed government expenditures and unitary revenue elasticity</i></p>

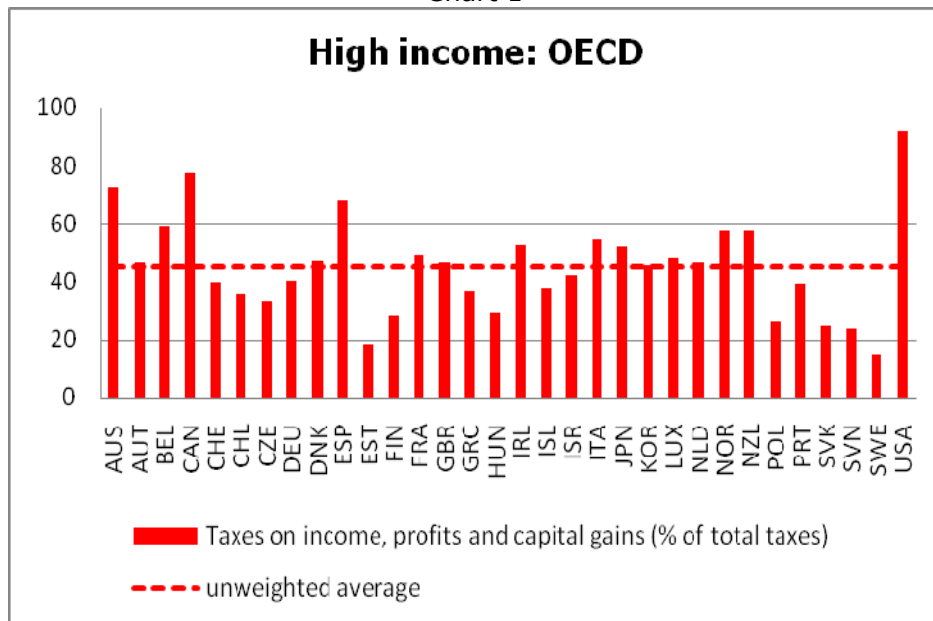
Source: Illustration of the author

Detailed analysis of tax policy and public expenditure policies provide more reliable estimates of automatic stabilizers. The greater the elasticity of tax revenue to the changes in the economy, the greater are "revenue side" automatic stabilizers. In the conditions of progressive rates, the income tax has the greatest elasticity. Consumption taxes are less elastic, especially in cases where consumption varies less than income. Levels of tax revenues and their structures vary considerably in different countries. So the revenue side automatic stabilizers play a bigger role in advanced economies, given that income tax has a greater share in the structure of their revenues, while taxes on goods and services have a higher share in the revenue structure of developing countries. Charts 1-5 show the share of taxes on income, profits and capital gains in total tax revenues, according to the groups of countries with different levels of income.<sup>14</sup> We see that the average (unweighted) share of these revenues is the largest in the high income OECD countries (World Bank database).

<sup>14</sup> There are illustrated the data for the countries for which data are available for year 2012. For countries for which data are not available for 2012, data were taken for year 2011 if available. Dashed line shows the unweighted average (author's calculations) for the countries in the illustrated sample for which data are available (does not include all the countries of a particular group of income)

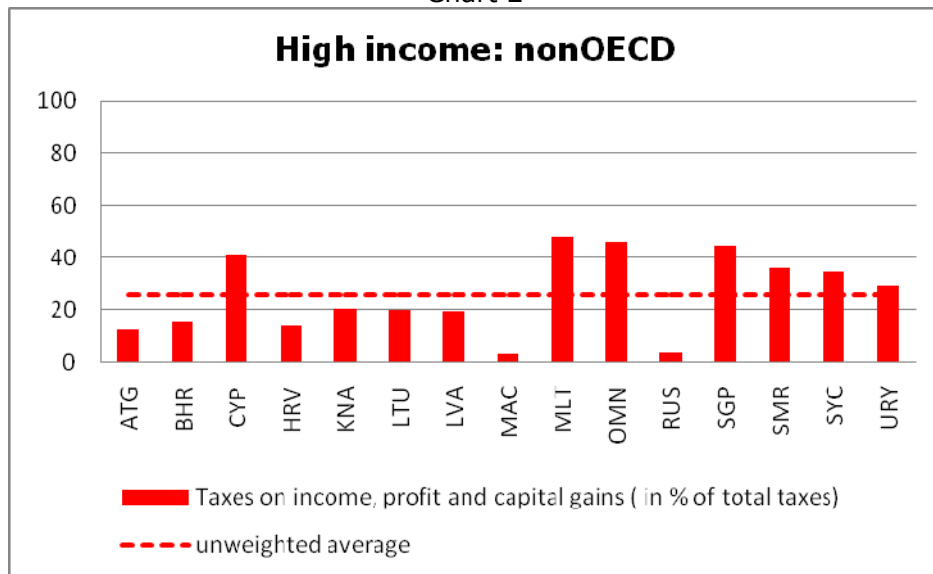


Chart 1



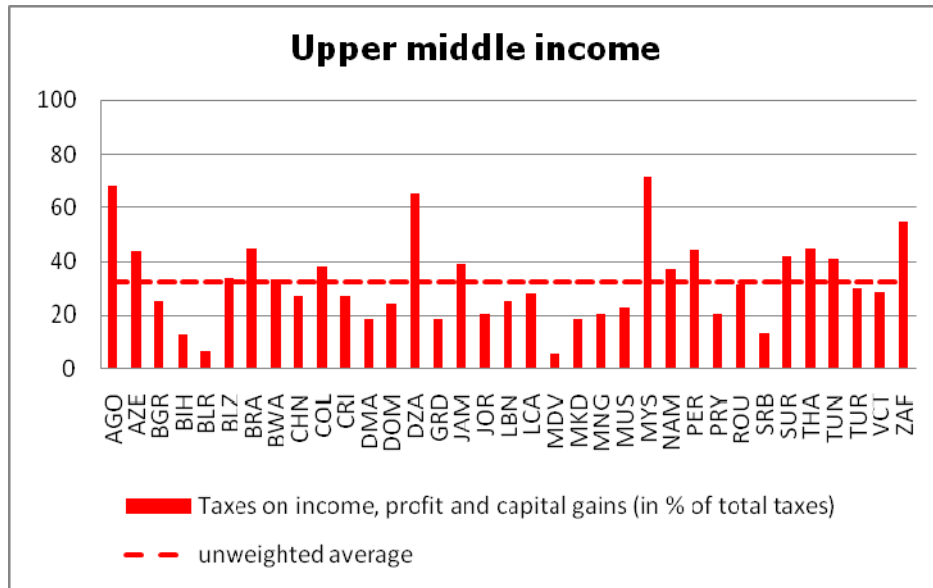
Source: World Bank database, data for 2012 (15 July 2015)

Chart 2



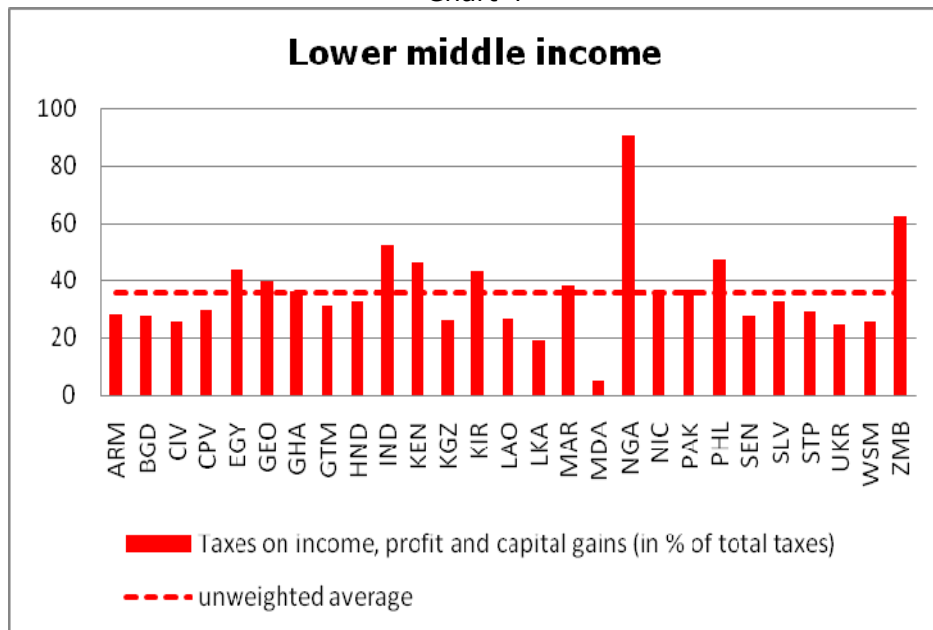
Source: World Bank database, data for 2012 (15 July 2015)

Chart 3



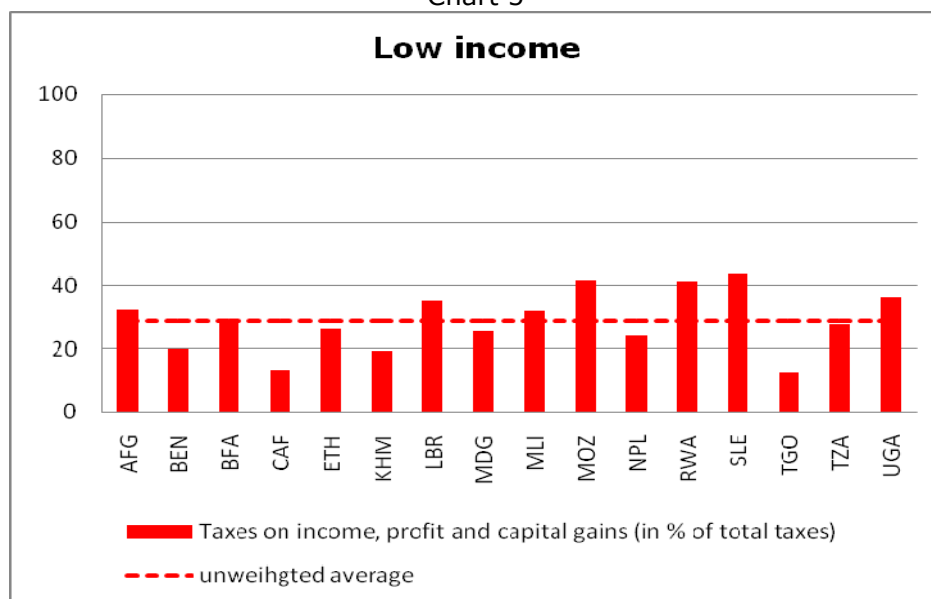
Source: World Bank database, data for 2012 (15 July 2015)

Chart 4



Source: World Bank database, data for 2012 (15 July 2015)

Chart 5



Although the role of automatic stabilizers can be increased by strengthening the share of income taxes in revenues, researches show that those increases are very small. Reduction of the share of indirect taxes in the structure of tax revenues of 5 percentage points in favour of the personal income tax across G-20 countries would increase the automatic stabilizers on average only by about 0,05% of GDP (IMF Staff Position Note, 2009).<sup>15</sup>

On the other hand, strengthening the automatic stabilizers can be achieved from increases in the level of progressivity of the income tax (tax brackets, deductions, reduction of tax liability).<sup>16</sup> However, it should be taken into account the restrictions in terms of negative impact on labour supply and on the level of tax evasion. As in the case of changes in the tax structure, the changes in the level of progression would not bring significant effects on the strength of the automatic stabilizers. Increasing the elasticity of income tax by 10 percent would increase the automatic stabilizers by 0,01 percent of GDP (in response to one percentage point increase in the output gap).<sup>17</sup>

On the expenditure side, the strength of automatic stabilizers depends on the development of social programs i.e. policies of social transfers, unemployment benefits and so on. In addition, the policy of rigid wages in public sector automatically protects disposable incomes from the macroeconomic shocks.

### The contribution of automatic stabilizers to overall fiscal stabilization

It was mentioned that, in addition to incorporated automatic stabilizers, fiscal policy also uses discretionary measures to stabilize movements in the economy. By comparing the size of automatic stabilizers with the stabilization coefficient we can analyze their contribution to overall fiscal stabilization. According to IMF estimates from 2015 the role of automatic stabilizers is much higher in the advanced economies, due to the relatively large public sectors and developed social programs. It is said that in about 60% of the advanced economies in the analyzed sample the

<sup>15</sup> Symansky, S. A., & Baunsgaard, T., "Automatic Fiscal Stabilizers", IMF Staff Position Note, 2009

<sup>16</sup> The level of progressivity can be measured by so called *Kakwany* index

<sup>17</sup> IMF (Ibid)

automatic stabilizers contribute over half of overall fiscal stabilization. In emerging market and developing economies the automatic stabilizers account for only about 30% of total fiscal stabilization.<sup>18</sup>

### Instead of conclusion

According to the IMF analysis (Fiscal Monitor, April 2015), fiscal policy had a stabilizing role in a large number of advanced countries, and much less in the group of emerging market and developing economies. The role of automatic stabilizers is not significant in the last ones due to the narrow tax base and institutional constraints. In these countries fiscal stabilization has been significantly expressed in the phases of the recession, while largely absent in the phases of economic expansion. It is also important to conduct a stabilizing policy in the phases of the economic expansion, in order to reduce the risks of "overheating" the economy, to enable the creation of fiscal reserves for reacting in some future phases of the economic downturn, and so to ensure the stability of government finances and public debt.

In emerging market and developing economies fiscal policy is generally pro-cyclical during expansion (negative stabilization coefficients), for the following main reasons:

- In conditions of strong growth of revenues, the interests of the budgetary institutions to capture a large part of the funds increases;
- Policymakers can interpret the temporary revenue increase as a permanent, and then increase expenditures or reduce tax rates, which further accelerates the growth of aggregate demand;
- In the emerging market and developing economies growth in revenue can be recognized as an opportunity for access to financing the implementation of poverty reduction programs, etc.

Conducting fiscal stabilization only during the recession could lead to the expansion of public debt, because the government misses opportunities to reduce deficits at a time of economic growth in order to provide fiscal space to react in bad times. One should keep in mind the limitations of an individual economy in terms of fiscal space. Many countries face problems of high public debt, which hampers the implementation of automatic stabilizers and countercyclical policy in general.

### Literature

- IMF Fiscal Monitor, April 2015
- Horton M. and El-Ganiany A., "Fiscal Policy: Taking and Giving Away", Finance & Development, IMF (2012)
- Fedelino et al., "Computing Cyclically Adjusted Balances and Automatic Stabilizers", International Monetary Fund, Fiscal Affairs Department, Technical Notes and Manuals, 2009
- World Bank database
- Symansky, S. A., & Baunsgaard, T., "Automatic Fiscal Stabilizers", IMF Staff Position Note, 2009
- Debrun X., & Kapoor, R., "Fiscal Policy and Macroeconomic Stability: Automatic Stabilizers Work, Always and Everywhere", IMF WP (2010)

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<sup>18</sup> IMF Fiscal Monitor, April 2015

## Consolidated reports

(Author: Aleksandra Regoje)

### Table 1 (Consolidated report: B&H institutions, entities, SA)

The preliminary consolidated report includes

- revenues from indirect taxes collected by the Indirect Tax Authority on the Single Account,
- transfers from the ITA Single Account,
- revenues and expenditures of the institutions of Bosnia and Herzegovina,
- revenues and expenditures of the budget of the Federation of Bosnia and Herzegovina,
- revenues and expenditures of the budget of the Republika Srpska.\*

Report doesn't include unadjusted revenues collected on ITA SA.

### Table 2 (Consolidated report: General Government)

Preliminary consolidated report includes:

- revenues and expenditures of the budget of Institutions of Bosnia and Herzegovina,
- revenues and expenditures of the budget of the Federation of Bosnia and Herzegovina, cantons, cantonal directorates for roads, municipalities and funds in FB&H,
- revenues and expenditures of the budget of the Republika Srpska\*, directorates for roads/highways, municipalities and funds,
- revenues and expenditures of the budget of Brčko District and funds in BD

### Table 3 (Consolidated report: B&H Institutions, entities, BD)

Preliminary consolidated report includes:

- revenues and expenditures of the budget of Institutions of Bosnia and Herzegovina,
- revenues and expenditures of the budget of the Federation of B&H,
- revenues and expenditures of the budget of the Republika Srpska\*,
- revenues and expenditures of the budget of Brčko District.

*\*Includes: (A) Budget of the Republic and extra-budgetary funds recorded in Treasury General Ledger of the RS, (B) total foreign debt for the projects realized through municipalities and companies, and (C) Budget users who have their own bank accounts (including foreign project implementation units established by ministries)*

## Preliminary report: B&amp;H Institutions, entities and SA, I-VI 2015

<i>(in million BAM)</i>	I	II	III	IV	V	VI	Total
<b>Revenue</b>	<b>465,8</b>	<b>461,3</b>	<b>504,8</b>	<b>558,8</b>	<b>493,6</b>	<b>536,1</b>	<b>3.020,3</b>
Taxes	422,5	422,5	443,1	481,9	453,7	476,3	2.699,9
Direct taxes	21,7	26,5	47,1	48,7	30,1	30,2	204,3
Taxes on income, profits and capital gains	20,8	25,4	45,6	47,1	28,7	28,7	196,2
Taxes on property	0,9	1,1	1,5	1,6	1,4	1,6	8,1
Indirect taxes (net)	373,6	395,9	395,9	433,2	423,0	445,9	2.467,5
VAT	217,9	254,1	254,3	266,8	264,5	267,1	1.524,7
Excises	118,6	97,7	94,5	117,1	112,7	130,9	671,4
Road fee	21,6	23,1	22,0	26,1	26,1	27,0	146,0
Customs	14,3	19,8	23,6	21,7	18,1	19,3	116,8
Other indirect taxes	1,2	1,3	1,5	1,6	1,6	1,5	8,6
Other taxes	27,2	0,1	0,1	0,0	0,6	0,2	28,1
Social security contributions	5,9	5,5	6,3	7,2	5,3	6,8	37,0
Grants	1,0	0,3	7,0	1,8	1,4	1,4	12,7
Foreign grants	0,8	0,3	7,0	1,7	1,4	1,3	12,5
Transfers	0,2	0,0	0,0	0,0	0,0	0,0	0,2
Other (non-tax) revenue	36,4	33,0	48,4	67,9	33,3	51,7	270,8
<b>Expenditure</b>	<b>398,0</b>	<b>447,5</b>	<b>441,0</b>	<b>459,5</b>	<b>454,5</b>	<b>492,4</b>	<b>2.692,9</b>
Expense	394,1	443,9	433,5	455,6	452,5	484,8	2.664,3
Compensation of employees	129,5	130,6	131,9	131,7	131,6	133,4	788,7
Use of goods and services	11,2	21,8	27,3	25,6	24,9	27,3	138,1
Social benefits	55,5	52,2	49,5	66,2	57,0	61,3	341,7
Interest	7,1	9,7	18,3	15,0	16,5	27,7	94,3
Interest payments to non-residents	3,8	6,7	13,3	7,1	8,1	15,0	54,0
Interest payments to residents	3,3	3,0	5,0	7,9	8,4	12,7	40,4
Subsidies	2,2	3,0	8,1	1,8	9,1	5,7	29,9
Grants, transfers (incl. transfers from SA**)	187,8	222,7	195,2	212,7	205,9	222,0	1.246,2
Other expense	0,9	4,0	3,2	2,5	7,5	7,3	25,4
Net acquisition of nonfinancial assets	3,9	3,6	7,5	4,0	2,0	7,6	28,6
Acquisition of nonfinancial assets	4,5	3,8	12,2	6,5	2,8	10,5	40,4
Disposal of nonfinancial assets	0,6	0,3	4,7	2,6	0,8	2,9	11,8
<b>Gross/Net operating balance (revenue minus expense)</b>	<b>71,7</b>	<b>17,4</b>	<b>71,3</b>	<b>103,2</b>	<b>41,1</b>	<b>51,3</b>	<b>356,0</b>
<b>Net lending /borrowing (revenue minus expenditures)</b>	<b>67,8</b>	<b>13,8</b>	<b>63,8</b>	<b>99,3</b>	<b>39,1</b>	<b>43,6</b>	<b>327,4</b>

\*\* transfers from SA include unconsolidated transfers to BD, cantons, municipalities and road funds

Table 1

**Preliminary report: General Government, I-VI 2015**

<i>(in million BAM)</i>	Q1	Q2	Total
<b>Revenue</b>	<b>2.724,3</b>	<b>2.997,2</b>	<b>5.721,5</b>
Taxes	1.420,0	1.553,9	2.973,9
Direct taxes	243,1	272,6	515,7
Taxes on income, profits and capital gains	209,9	236,7	446,6
Taxes on payroll and workforce	3,4	2,7	6,1
Taxes on property	29,8	33,3	63,1
Indirect taxes	1.148,0	1.276,9	2.424,9
Other taxes	28,9	4,5	33,4
Social security contributions	1.000,8	1.069,8	2.070,6
Grants	11,4	10,0	21,5
Foreign grants	11,3	7,4	18,7
Transfers	0,1	2,6	2,8
Other (non-tax) revenue	292,0	363,5	655,5
<b>Expenditure</b>	<b>2.590,4</b>	<b>2.826,2</b>	<b>5.416,6</b>
Expense	2.547,1	2.717,3	5.264,4
Compensation of employees	818,2	824,5	1.642,7
Use of goods and services	473,2	494,6	967,8
Social benefits	1.100,1	1.157,2	2.257,3
Interest	47,7	72,0	119,7
Interest payments to non-residents	25,3	31,4	56,7
Interest payments to residents	22,4	40,6	63,0
Subsidies	33,2	53,5	86,7
Grants, transfers	11,9	22,4	34,3
Other expense	62,8	93,2	156,0
Net acquisition of nonfinancial assets	43,3	108,9	152,1
Acquisition of nonfinancial assets	52,6	122,8	175,4
Disposal of nonfinancial assets	9,4	13,9	23,3
<b>Gross/Net operating balance (revenue minus expense)</b>	<b>177,2</b>	<b>279,9</b>	<b>457,1</b>
<b>Net lending /borrowing (revenue minus expenditures)</b>	<b>133,9</b>	<b>171,0</b>	<b>304,9</b>
<b>Net financing = (Minus) Net lending /borrowing</b>	<b>-133,9</b>	<b>-171,0</b>	<b>-304,9</b>

Table 2

**Preliminary report: B&H Institutions, entities and BD, I-VI 2015**

<i>(in million BAM)</i>	Q1	Q2	Total
<b>Revenue</b>	<b>1.014,6</b>	<b>1.121,2</b>	<b>2.135,8</b>
Taxes	867,1	941,8	1.808,9
Direct taxes	101,6	115,5	217,1
Taxes on income, profits and capital gains	96,4	108,3	204,7
Taxes on payroll and workforce	1,5	2,1	3,6
Taxes on property	3,7	5,1	8,8
Indirect taxes	737,9	825,3	1.563,1
Other taxes	27,7	1,0	28,7
Social security contributions	17,7	19,2	37,0
Grants	8,3	4,2	12,6
Foreign grants	8,0	4,5	12,5
Transfers	0,3	-0,2	0,1
Other (non-tax) revenue	121,4	156,0	277,4
<b>Expenditure</b>	<b>852,1</b>	<b>941,4</b>	<b>1.793,5</b>
Expense	835,2	925,2	1.760,4
Compensation of employees	407,7	412,5	820,2
Use of goods and services	74,1	84,4	158,5
Social benefits	162,2	189,6	351,8
Interest	35,2	59,3	94,5
Interest payments to non-residents	23,7	30,2	54,0
Interest payments to residents	11,4	29,1	40,5
Subsidies	15,4	26,2	41,6
Grants, transfers	131,5	135,9	267,4
Other expense	9,1	17,4	26,5
Net acquisition of nonfinancial assets	16,9	16,2	33,1
Acquisition of nonfinancial assets	22,5	22,4	44,9
Disposal of nonfinancial assets	5,6	6,2	11,8
<b>Gross/Net operating balance (revenue minus expense)</b>	<b>179,4</b>	<b>196,0</b>	<b>375,4</b>
<b>Net lending /borrowing (revenue minus expenditures)</b>	<b>162,5</b>	<b>179,9</b>	<b>342,3</b>
<b>Net financing = (Minus) Net lending /borrowing</b>	<b>-162,5</b>	<b>-179,9</b>	<b>-342,3</b>

Table 3