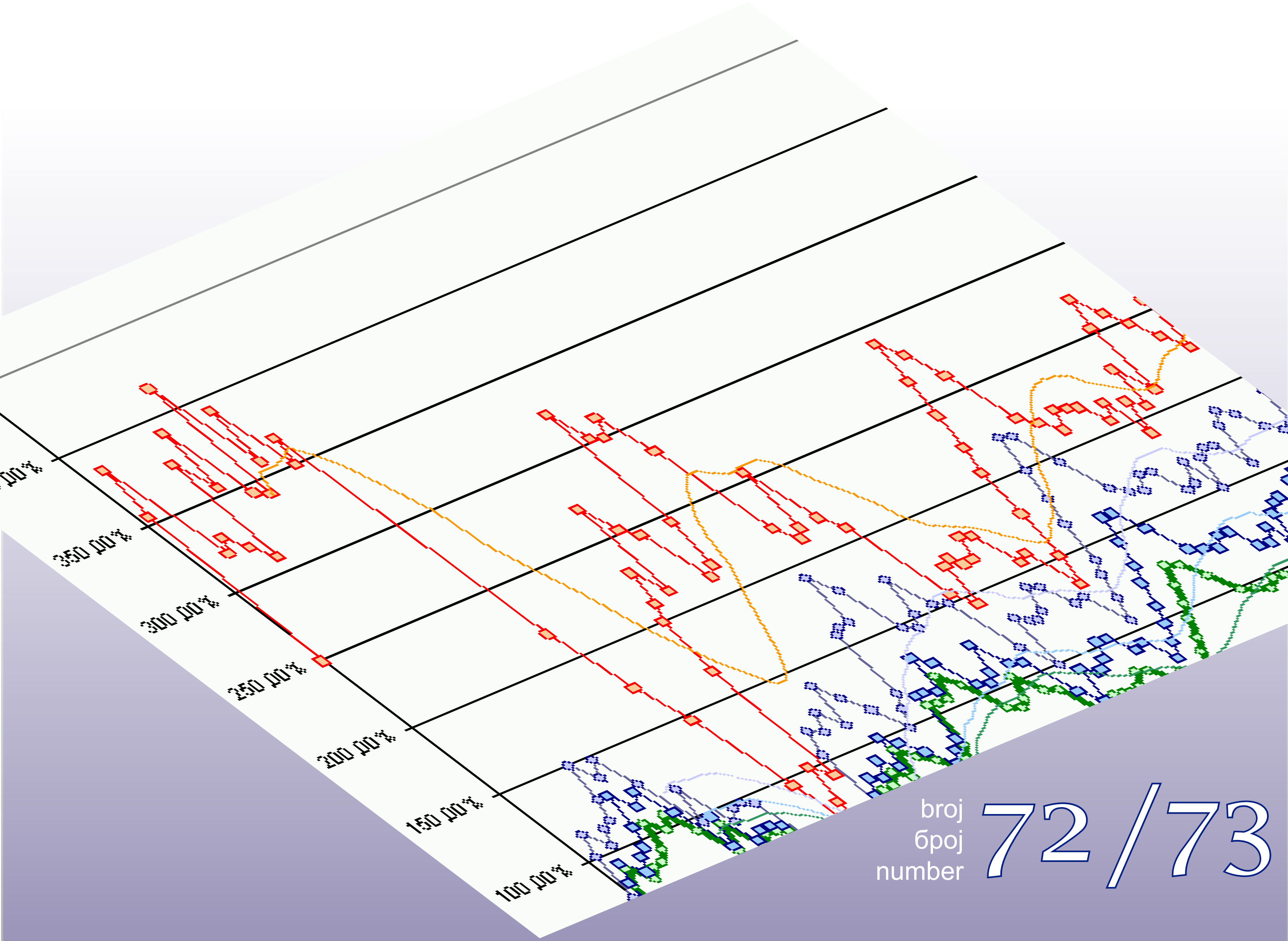
Bosna i Hercegovina
Odjeljenje za makroekonomsku analizu
Upravnog odbora Uprave za indirektno-neizravno oporezivanje

Босна и Херцеговина
Одјељење за макроекономску анализу
Управног одбора Управе за индиректно опорезивање

Macroeconomic Unit of the Governing Board of the Indirect Tax Authority

Oma Bilten



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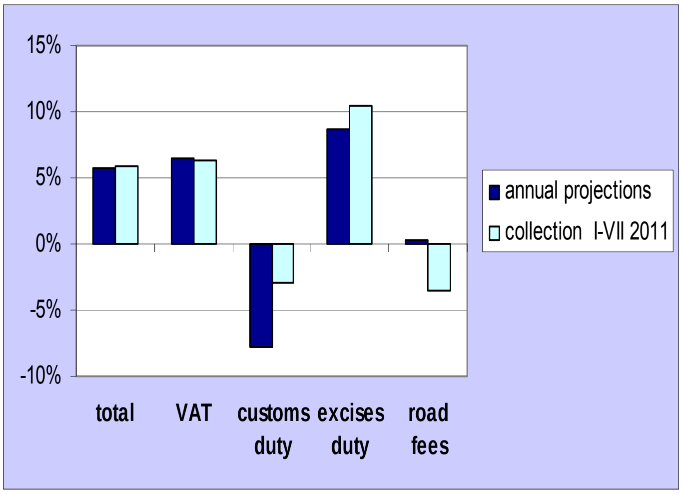
With a double issue

Despite the strong growth of the VAT refunds, in the period of the first seven months of 2011, revenues from indirect taxes increased by 5,9%, which is for 0,2% above annual projections of the Unit (see chart below). Growth of total revenue results from the increase of both net VAT collection and excises on tobacco. Likewise, customs revenue decline was less than expected. Only road taxes recorded decline, which, similarly to dynamics in collection of excises on derivates, results from certain shifts in volume and structure of derivate's consumption as well as from the implementation of the exemptions in accordance with provisions of the Law on excises. These and other issues of revenue collection from indirect taxes are analyzed in detail in the special article in this double issue. In addition, we provide analysis of current trends in revenue collection from excise taxes on cigarettes, whose importance for the overall fiscal balance B&H becomes higher every year.



In this double issue we provide an article concerning issues of fiscal space and public debt, which are currently the burning issues in EU as well as in other countries in the world. In recent years many countries have tried through additional borrowings to close or at least relax uncertainties in fiscal balances, caused by financial and economic crisis. If an economy finds itself on an explosive debt path, the key issue for fiscal authorities is finding appropriate solutions in the area of fiscal policy, which will provide long-term public debt sustainability.

Dinka Antić, PhD
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Collection of indirect taxes, January - July 1011

(Prepared by: Dinka Antić, PhD)

Trends in total revenues

According to the ITA preliminary report for seven months in 2011, it was collected 2,797 billion KM of indirect taxes after the deduction of refunds, which is for 5,9 % more, compared with the same period of 2010. This percentage also includes approximately 20,9 KM of collected revenues that remained unadjusted after adjusting the payments to the Single Account with the submitted returns/declarations in modules of the ITA IT system. The positive trends from the previous month continued in July, so the net revenue growth is slightly above the projected annual growth of 5,7% (Chart 1).

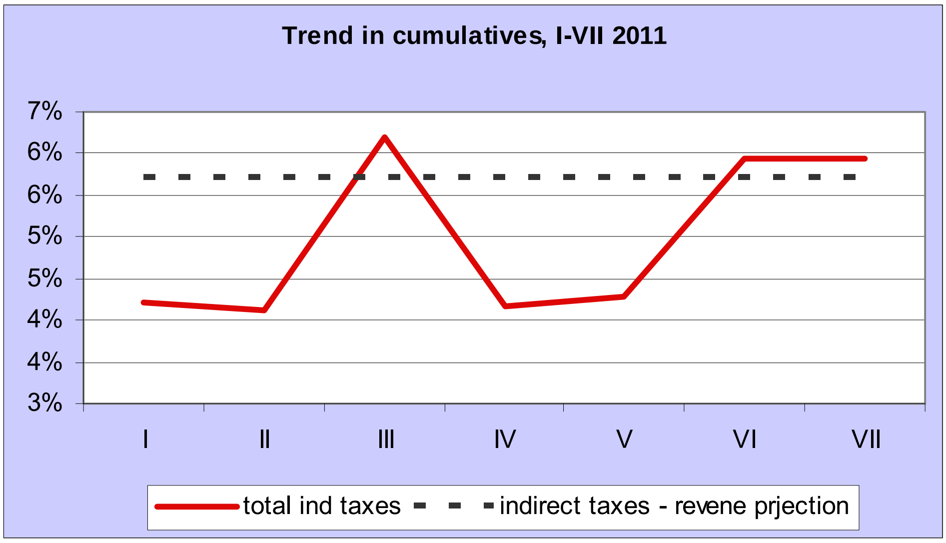


Chart 1

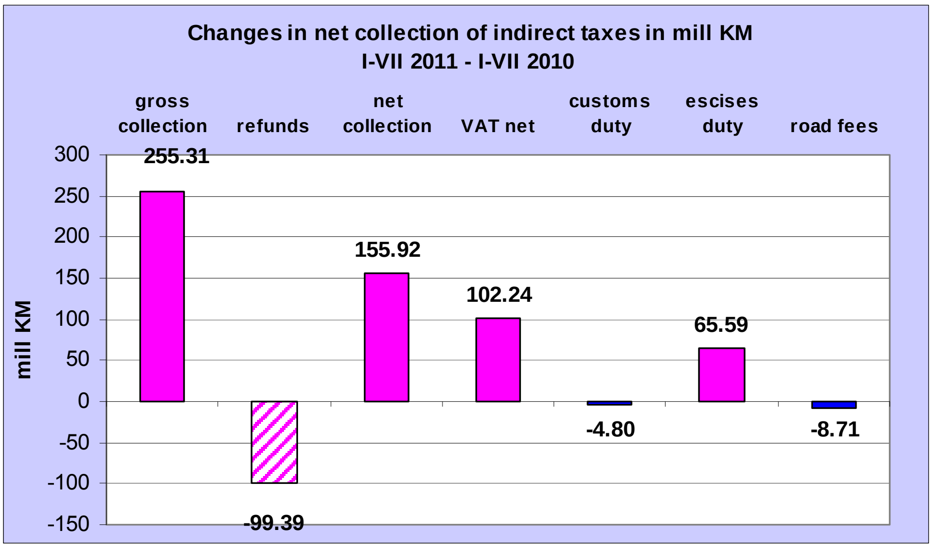


Chart 2

At the level of seven months of 2011, net revenues from indirect taxes are higher for approximately 156 million KM, which is mostly result of the growth of revenues from VAT and excise on tobacco. The growth was reduced by losses in customs revenue due to application of the

Stabilization *and* Association Agreement with EU as well as losses in road tax revenues because of exemptions and payment of refunds from 2009 (Chart 2).

Trends by type of revenue

	VII 2011 / VII 2010	Cumulative I-VII 2011/ 2010
customs	4,83%	-2,98%
VAT	5,32%	6,27%
excises	11,28%	10,37%

VAT

Collection of revenue from VAT is still burdened by high VAT refunds, so the gap between gross and net revenue is high and stable.

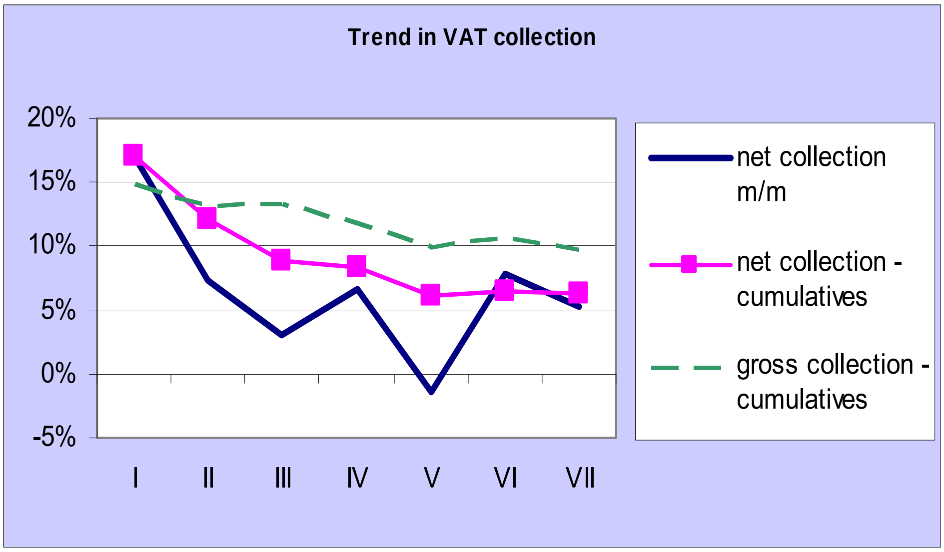


Chart 3

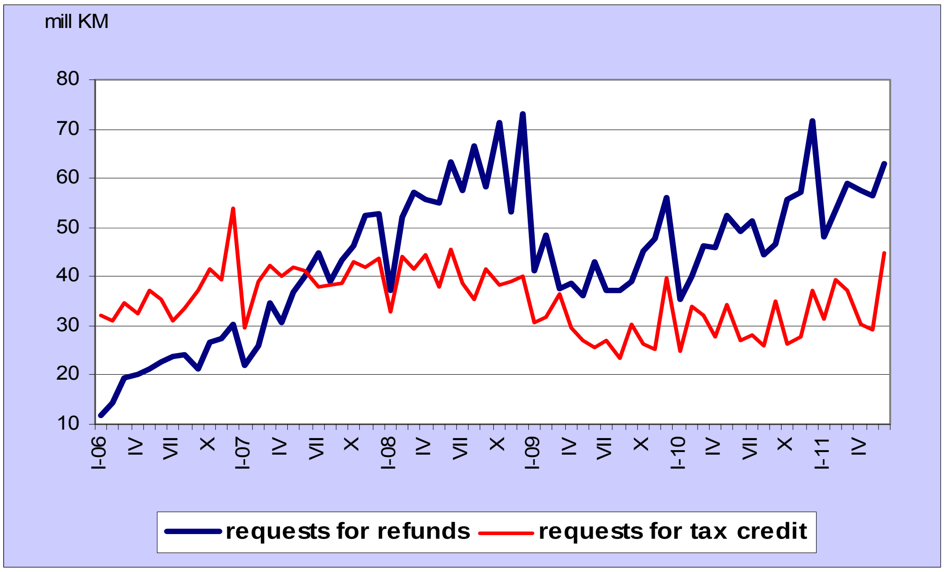


Chart 4

The situation with VAT refunds is still worrying, taking into account that both components, refunds to taxpayers and refunds to international organizations and institutions, have a stable growth. Moreover, it is likely that the implementation of the growing requests of taxpayers for refunds according to VAT returns for the last month, could lead to a strong outflow from the Single Account in the next month or two (chart 4). The other component of refunds refers to international organizations and projects, which are for 37% higher in the first seven months compared to the same period of 2010, and even for 161% higher compared to the pre-crisis year 2008.

Customs

In the current period of 2011, there was a further reduction in customs revenue, although the decrease amounted to only 3%, since the large part of imports is already under the duty-free regime.

	2008	2009	2010	2011
Customs revenues in the period I-VII (million KM)	399	198	161	157
As a percentage of 2008 revenue	-	49,59%	40,41%	39,21%

Excises and road taxes

In July 2011 there was a slowdown in the growth trend of excises on tobacco, which was expected given the current oscillations and enormous growth in the previous two months. The higher increase of oil derivate excises (15%) was finally recorded, due to the strong growth of excises on domestic derivates (approximately 39%). On the other hand, excise on coffee decreased, but kept the positive trend on the level of seven months. The fall of excises on beer, vine, alcohol, alcoholic and soft drinks in July annulled the good collection of recent months. Comparing with dynamics of excises on oil derivates, it is evident that decrease in road taxes is higher than decrease in excises on oil derivates. It results from the application of exemptions for mines, power stations and railways, and residual payments of refunds for 2009.

	VII 2011 / VII 2010	Cumulative I-VII 2011/ 2010
Total tobacco	11,50%	18,79%
Tobacco - imported	21,60%	22,09%
Tobacco – domestic	-9,32%	11,65%
Oil derivates	15,15%	0,25%
imported	3,74%	6,46%
domestic	38,72%	-7,92%
Coffee	-9,94%	9,04%
alcohol, beer	-0,24%	-0,21%
Road tax	-5,44%	-3,61%

Besides that, it is evident from the Chart 8 that excise revenues do not follow the trend of imported and produced derivates. There are several reasons. Firstly, there were certain changes in the derivate consumption structure.[1]

[1] It should be noted that calculations of derivate consumption can not be precise, due to methodological difficulties when converting quantity data of imports of various kinds of derivates, which are expressed in kilograms, to liters, which are the basis for calculation of excise duties and road taxes.

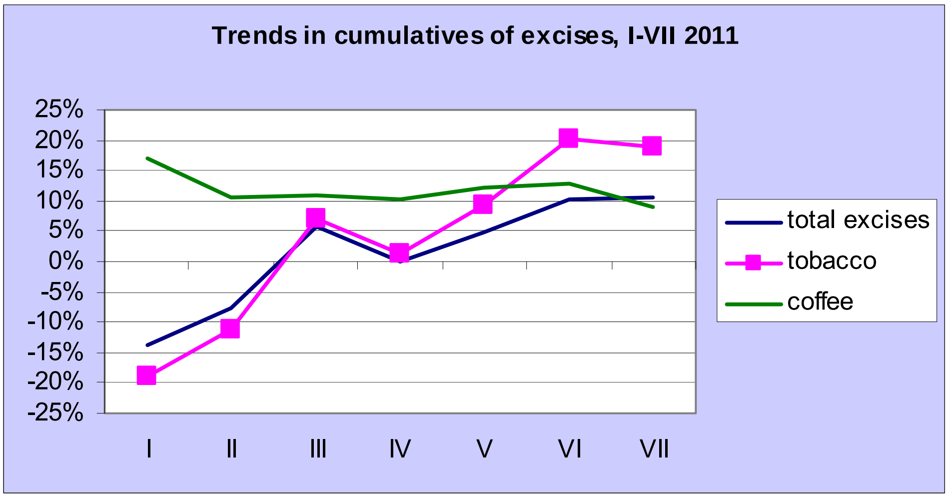


Chart 5

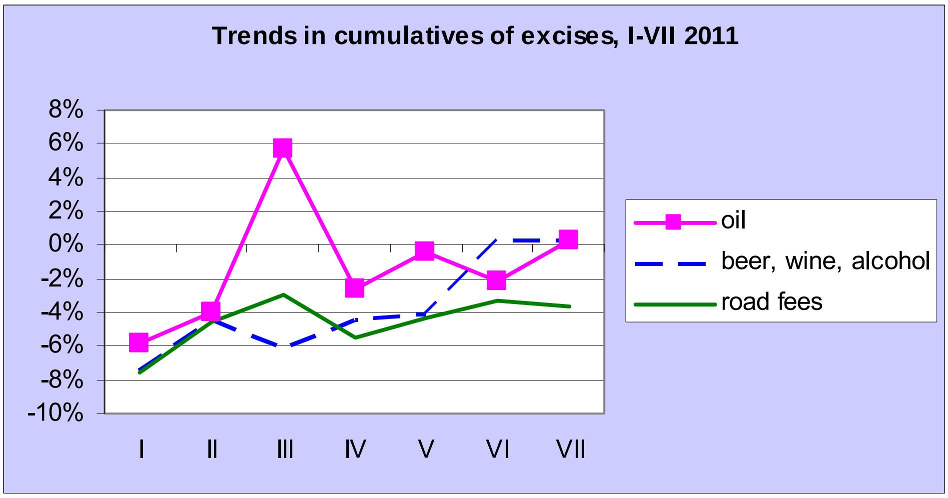


Chart 6

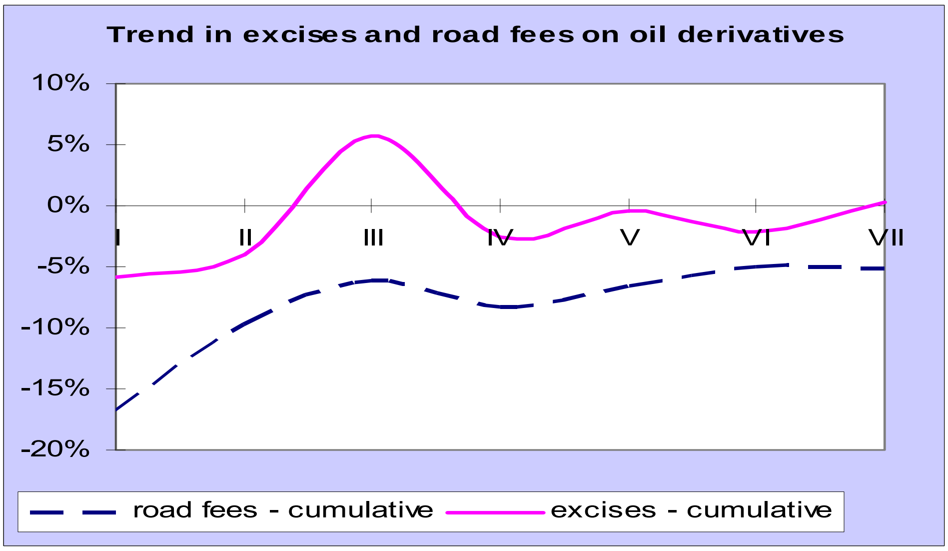


Chart 7

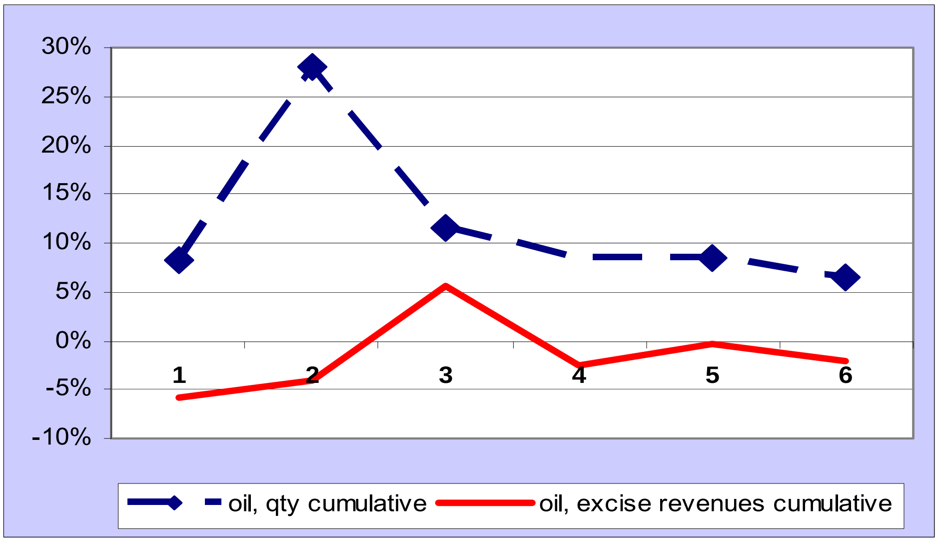


Chart 8

A strong growth of the import / production of heating oil is evident (30,5% in the first six months), which is excise-free, although one should bear in mind the low weight of heating oil, given the low share of this derivate in the total consumption. However, thanks to the strong growth of consumption of heating oil, share of this derivate in total consumption in the first six months of the 2011 increased from 6,9% to 8,5%. Increase of the heating-oil share leads to a decrease of the road tax revenues. However, higher consumption of heating oil, burdened by smaller charges, can be a source of tax fraud. Significant revenues from road tax (total 0,25 KM/l) and corresponding VAT are lost by substitution of diesel with heating oil.

Secondly, consumption of gasoline in the first six months is lower by 5,5% compared to the same period in 2010, while consumption of diesel increased by 6,6%. This led to a change of the structure of derivates, where the share of gasoline decreased from 25,4 to 22,5%. It also influenced the amount of revenue collected, since gasoline is burdened by higher excise rate under provisions of the Law on excises. Therefore, shifts in consumption in favor of diesel leads to a reduction in expected revenues from excise on derivates.

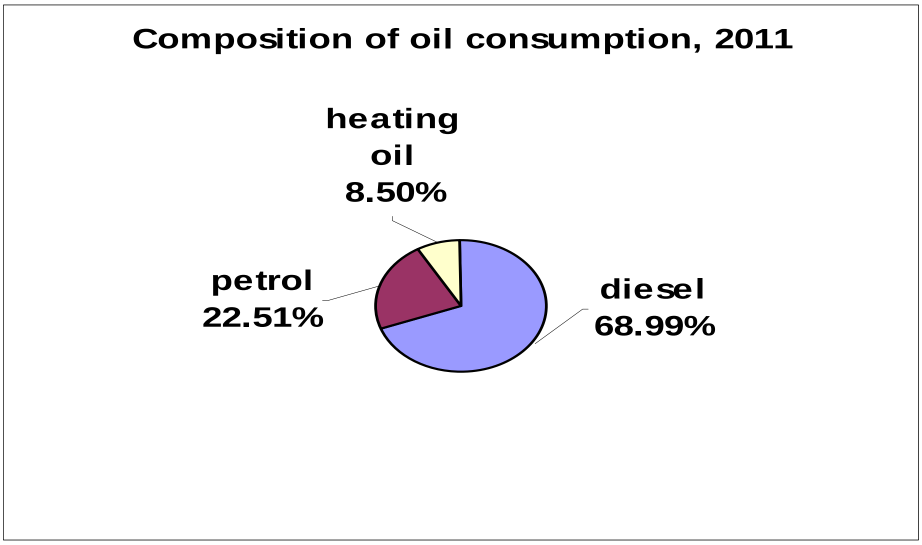


Chart 9

Cigarettes' market analysis in BiH

(Prepared by: Aleksandar Eskić, Macroeconomist in the Unit)

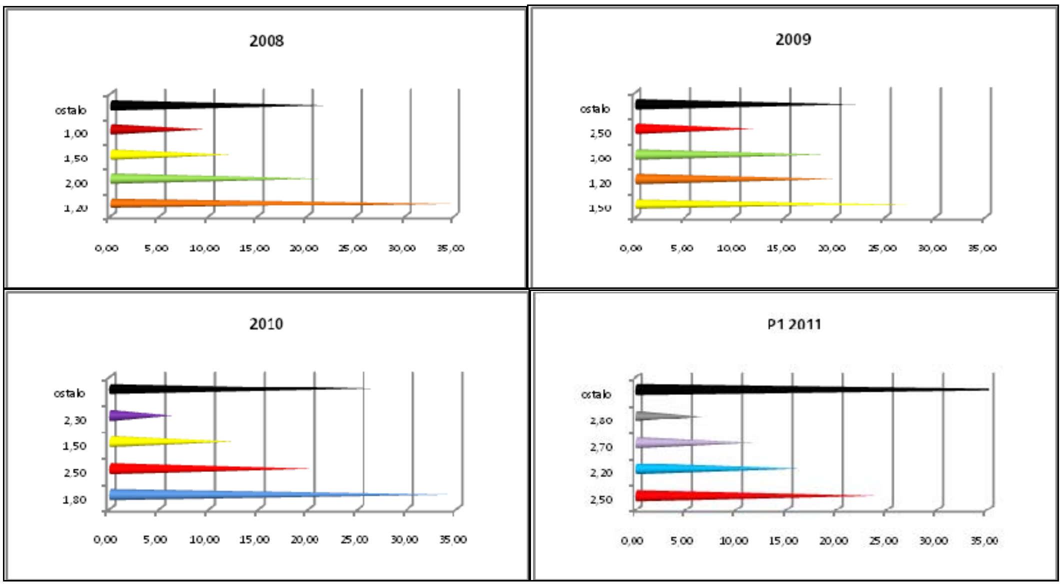
Introduction

We are witnesses that the market of cigarettes gets more and more important over time especially in terms of revenues of public authorities in BiH. This has been influenced by new regulatory framework that entered into force from July 1st, 2009. It is that this new regulatory framework has caused certain changes in terms of business environment and behavior of key actors on the market of cigarettes. One of the main key features is the introduction of specific excise duty that is determined every year based on the decisions of the Governing Board of the ITA and is increased by at least 7.5 KM per 1000 cigarettes i.e. 15 pfennigs per pack of 20 cigarettes[2].

As we wrote earlier, the objective of the new Law on excise duties and associated by-laws was to respond to three major challenges that the authorities of Bosnia and Herzegovina had faced at that moment. The first occurred as a consequence of the chosen path to European integration process and the need for harmonization of public policies in this area, particularly in terms of structure and amount of excise duties on cigarettes. Another challenge was to provide a solid and reliable revenue base for public authorities at the time of building and strengthening institutions at all administrative levels; institutions of BiH, institutions at the entity levels including Republic of Srpska and Federation of Bosnia and Herzegovina, and other local self-governments as well. We emphasize that direct beneficiaries of revenues from excise duties on cigarettes are all public authorities in Bosnia and Herzegovina which is defined by the Law on allocation of revenues from the single account and entity legislation. The third challenge is to improve public health, and the most effective instrument, at least when it comes to diseases caused by tobacco smoke, the increase of prices, which consequently leads to a reduction in cigarette consumption.

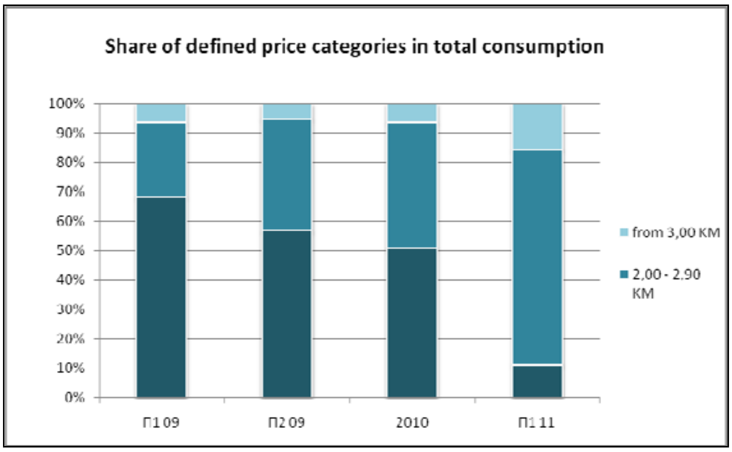
Characteristics of market of cigarettes in BiH

Strong changes on the market of cigarettes caused by applying the provisions of the new Law on excise duties are still ongoing. It has been more than two years after the entry into force of this Act and the following are some of the main effects.



[2] See article 22 of the Law on excise duties (BiH Official Gazette no BiH 49/09)

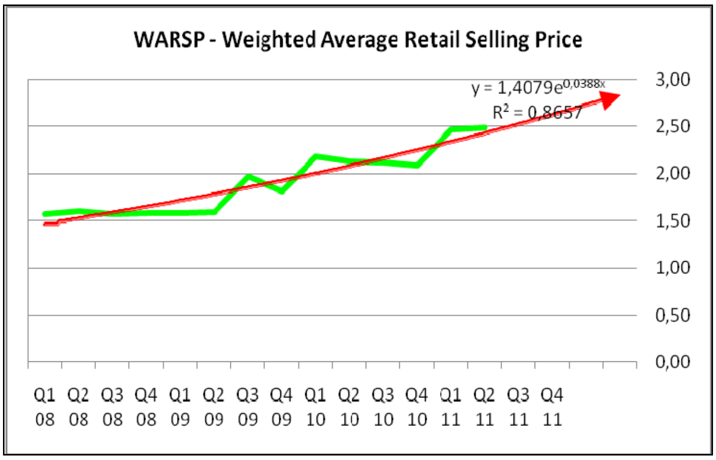
On top four comparative charts we can see the current share of four most common price categories of cigarettes for the period 2008 - P1 2011 (first half of the year). At the beginning it is important to note that the share of four most common price categories accounted for about 4/5 of the total market before the entry into force of the new Law, it would then be reduced to less than 3/5 after the entry into force of the Act (which is reflected by the increased participation of other price categories in the overall market). Likewise, we see that over time higher price categories replaced the lower ones. So we have the price range of four most common price categories is increasingly shrinking. This is a direct consequence of the evolution of price policies of certain market players and their outcomes.



On the top chart we show the tendency of share of certain price groups for the period 2009 - P1 2011. In doing so, we specifically show the data for the first half of 2009 when the old Law on excise duties was in force. We see that the share of the first price group (up to 1.90 KM) has been declined from the level of around 2/3 of the total market to just over 10% in the first half of 2011. Simultaneously, the share of the other two price categories is increasing so at the end of the analyzed period we have approximately the same share of price category from 2.00 to 2.90 KM as the price category to 1.90 KM in the beginning of the analyzed period.

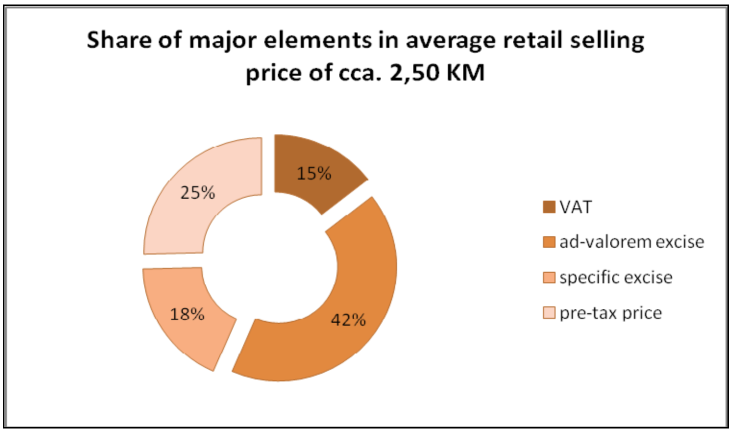
Weighted average retail selling price

Sublimation of all that has been said is reflected in changes of the weighted average retail selling price of cigarettes. On the next chart we presented the trend of this indicator on a quarterly basis.



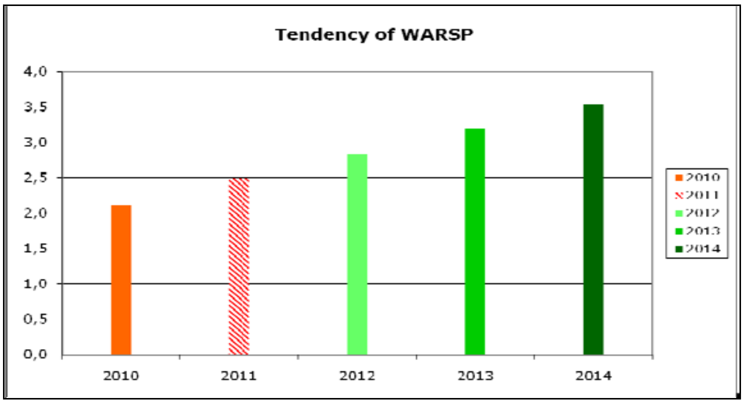
Here we see that the weighted average retail selling price of cigarettes was approximately about the level of 1.50 KM until the point of entry into force of the new Excise Law. Then, this ratio begins to rise, with mild fluctuations in certain quarters, when it reached level of about 2.50 KM at the end of observed period.

At this point we give the structure of retail selling price of cigarettes of 2.50 KM, i.e. the share of major elements of the price. Share of Value Added Tax is approximately 15% (equivalent to a recalculated rate of VAT of 17% in Bosnia and Herzegovina). The ad-valorem excise duty share is 42%, while the share of specific excise duties is about 18% (while in absolute terms it amounts to 0.45 KM). Which brings us to the pre-tax price at 25% (please note, the retail selling price of cigarettes of 2.50 KM).



In this pre-tax price are included the production costs and all related costs that occur during the production and possible import (mainly customs duties). Of course, there is a certain margin as a reward for all participants in the chain - from manufacturer to end retailer.

The following shows the possible direction of movement and intensity of weighted average retail selling price of cigarettes sticking to the existing policy of taxation of cigarettes, while keeping the pre-tax price at approximately the same level.

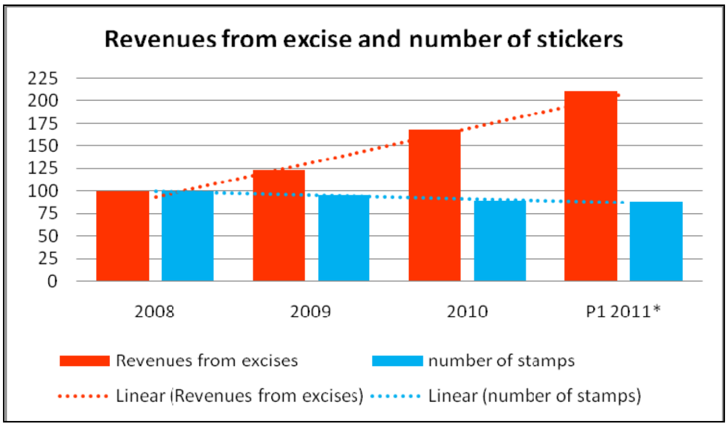


On this chart we see that the weighted average retail selling price of cigarettes could move from the estimated level of about 2.50 KM in 2011 to slightly above 3.50 KM in 2014 already. This actually represents an increase of the weighted average retail selling price of over 40% within 3 years.

Although we have certain estimates according to different scenarios, it remains to be seen to what extent this will affect the overall consumption, the consumption structure and price policies of participants on the market of cigarettes.

Revenues from excise duties on cigarettes

On the chart below we can see how the revenues and volume of stamps/stickers have been moving during the period 2008 - P1 2011. As we expected, in line with our forecasts, the number of withdrawn stamps has been decreasing as the average retail selling price has been increasing. So we can say that the volume decreased by about 12% in the first half of 2011 comparing with the same period in the base year (2008). During this same period, revenues have been increased substantially, and only for the first half of 2011 amounted to nearly as it had been collected in the base year (2008).



*) collected revenues as well as the volume of withdrawn stamps
in the first half of the year we compared with the same data for the first half of year 2008

Conclusion

This tells us that the practice in case of Bosnia and Herzegovina does not deviate much from the experiences in other countries that have gone this path. We can assume that the volume of cigarettes will continue to decline simultaneously with increase of the weighted average retail selling price of cigarettes. We assume the result of these phenomena will manifest as a continuation of the positive trend of movement in revenues collected from excise duties on cigarettes. The actual net effect will primarily depend on the elasticity of cigarette consumption, which until now has been very rigid, and the price policy of market actors. The fact is that the average pre-tax price has been declining constantly so that it is obvious that the tobacco industry overtakes the burden of price increases that affect the final retail selling price. The logical assumption is that all of this is due to a decrease of the disposable budget for meeting the needs of smokers. So, with the overall economic recovery it can be expected that needed conditions will be created for increasing the revenues collected on this base. Until then, it is necessary to pay special attention and focus and control the proper implementation of existing policy of taxation of tobacco and tobacco products as well as prevention of solicit trade of cigarettes, which leads to various anomalies on the market, such as unfair competition, reduced revenues to budgets of public authorities for financing the public needs and other negative effects that this practice can initiate.

Fiscal space and public debt sustainability

(prepared by: Aleksandra Regoje)

Introduction

The consequences of the financial crises are posing challenges for a number of advanced economies in terms of public debt sustainability. If an economy finds itself on an explosive debt path, the key issue is finding solutions to restore fiscal sustainability, which includes meeting the long-term budget constraint.

It is necessary to answer the question of how fiscal policy should respond properly to the growth of public debt, in order to ensure its sustainability in the future.

If public debt continuously rises, responsible policy implies increasing the primary surplus in order to stabilize the debt ratio in gross domestic product (GDP). Of course, there may be various shocks (for example growing expenditure due to financial crises) that cause deviations from this rule, but public debt ratio will eventually stabilize, if the subsequent increase in the primary balance is sufficient to offset the higher interest payment. Below is explained that this rule can not be literally applied at every level of debt, because it would require a primary balance that exceeded GDP at a certain level of debt. The concept of debt limit is also explained, above which, in absence of fiscal adjustment, debt becomes explosive and default is inevitable.

Primary balance and debt limit

The broader definition of debt sustainability is based on the fact that condition for fulfilling the criteria of intertemporal budget constraint is that primary balance responds positively to a lagged debt. This definition doesn't consider possibility of unlimited public debt growth. When debt is in a moderate range, its dynamics is sustainable, and its increase requires sufficient level of primary balance in order to stabilize the debt-to-GDP ratio. At low levels of debt, there is a little response of the primary balance to rising debt. As debt increases, the balance responds more strongly, and eventually the adjustment effort peters out as it becomes more difficult to cut expenditures or raise revenues further.

If primary balance does not keep pace with the higher effective interest payments on rising debt (equal to the interest rate–output growth rate differential multiplied by the debt ratio), there will be a debt limit[3], above which debt becomes explosive in absence of a change in fiscal policy. The debt limit is not a fixed and immutable barrier, but it does define a critical point above which the historical fiscal policy becomes insufficient to maintain debt sustainability. Some have questioned the relevance of debt limits in advanced-economies, given the government's right to tax and (not) spend. However, this does not mean that changes in fiscal policy can always ensure debt repayment, because promises of policy change are not sufficient to markets, when a country has no track record of adjustment. Therefore, solvency should be analyzed from the perspective of historical fiscal adjustment, in other words - how the policy in the past responded to changes in public debt.

[3] Graphichal explanation of dept limit is available in Ostry et al, „Fiscal Space", 2010, p. 8

It should be borne in mind that creditors would not be willing to lend on equal terms to the point that default is imminent. Recognizing that country's debt approaches its limit, creditors demand an increasing risk premium, since it becomes more likely that a negative fiscal shock may lead to the debt default. Higher risk premium requires a larger primary surplus due to the growing expenditures for debt service, which in turn increases the risk of default.[4]
Empirical studies (Mendoza and Ostry, 2008), show that primary balances indeed respond positively to rising debt in a number of advanced economies, but that this is not the case for countries with relatively high debt to GDP ratios. The studies which go further (Ostry et al., 2010 and Ghosh et al., 2011) explain the loss of correlation of primary balance and debt at high levels of debt, showing that the fiscal reaction function is not linear (i.e. at high debt levels the primary balance's response weakens and eventually becomes negative).[5] This means that, when the debt becomes very large, it is difficult to generate a sufficient level of fiscal balance that will ensure its sustainability.

The sustainability of public debt in advanced economies is rarely discussed earlier. Of course there were fiscal challenges („demographic pressures" etc.), but these were long term problems, not the issues which must be solved immediately. All that changed after last economic crisis. Concerns over debt sustainability in countries like Greece, Spain and Ireland are making the headlines. The crisis has also taken its toll in a number of other advanced economies out of Eurozone, such as UK, Japan or the US. Revenue fall and stimulus measures caused enormous debt-to-GDP ratios in many advanced countries. However, many believe that the global financial crisis is only a suitable victim for escalating debt in many advanced economies and that cause must be sought elsewhere. The key question is how fiscal policy was conducted before the global crisis, not during it.

Table 1 shows debt ratios in advanced economies on the eve of crisis (2007), at the end of it (2009), as well as the IMF projections for 2015.

Fiscal framework and fiscal stability

It's widely accepted that providing medium-term fiscal framework can contribute to fiscal sustainability. The framework allows tax, expenditure and public debt policies to be assessed against a government's strategic priorities and fiscal objectives of a country. Intergenerational fiscal frameworks are also recognized by G-20 countries. In Australia, the *Charter of Budget Honesty Act 1998* requires regularly release of an Intergenerational Report (IGR) which covers the period over the following 40 years. Regardless the fact that these are framework economic projections over such long time period, the report can provide a general indication of where fiscal stress is most likely to emerge.

On average, public debt increased from 60 percent of GDP in 2007, to almost 75 percent of GDP by the end of 2009. According to IMF projections, this ratio will grow over the next few years and will amount to an average of over 85% of GDP in 2015.

[4] Ostry et al., „Fiscal Space", IMF Staff Position Note, Sept. 2010
[5] Ghosh et al.„Fiscal space in advanced countries", 2011

Table 1

Country	Debt / GDP 2007	Debt / GDP 2009	Debt / GDP 2015	Country	Debt / GDP 2007	Debt / GDP 2009	Debt / GDP 2015
Australia	9,4	15,5	20,9	Italy	103,4	115,8	124,7
Austria	59,5	67,3	77,3	Japan	187,7	217,7	250,0
Belgium	82,8	97,3	99,9	Korea	29,6	32,6	26,2
Canada	65,0	82,5	71,2	Netherlands	45,5	59,7	77,4
Denmark	34,1	47,3	49,8	N. Zealand	17,4	26,1	36,1
Finland	35,2	44,0	76,1	Norway	58,6	53,6	53,6
France	63,8	77,4	94,8	Portugal	63,6	77,1	98,4
Germany	65,0	72,5	81,5	Spain	36,1	55,2	94,4
Greece	95,6	114,7	158,6	Sweden	40,5	40,9	37,6
Iceland	29,3	105,1	86,6	UK	44,1	68,2	90,6
Ireland	24,9	64,5	94,0	USA	62,1	83,2	109,7
Israel	78,1	77,8	69,9	Mean	57,9	73,7	86,1

Source: Ostry et al. „Fiscal Space", IMF Staff Position Note, Sept. 2010, p. 13

Fiscal space

The issues confronting many countries today concerns the room for fiscal maneuver and necessary adjustment measures in order to achieve debt sustainability. Fiscal space can be defined as the room in government budget that allows resources for a desired purpose without endangering the financial sustainability or stability of the economy. Some authors define it as the difference between the current level of public debt and its limit. Government can provide fiscal space through tax increase measures, by providing grants from external sources or by cutting lower priority expenditures, provided that there is no threat to macroeconomic stability and fiscal sustainability.

The issue of fiscal space is of more current interest for developing countries than in advanced countries, given the increasing pressure on their current expenditures, although fiscal problems are impediments to the global recovery in many industrial countries today. The key question for low income countries is how to create fiscal space regarding their chronic financial imbalances and inadequate tax base. Significant inflows of foreign resources in these countries can threaten macroeconomic stability (for example through increase of real exchange rate), or cause excessive dependence on aid. Also, countries that receive foreign funds for certain sectors may face additional needs for the budget funds as a result of the development of related sectors.

In order to perform calculations of debt limit and fiscal space, the estimates of interest rates on public debt are needed. There are two approaches to obtain these estimates. The first one is so-called „market approach" which uses current or projected market interest rates on public debt, and is based on the assumption that the market rate reflects the probability of default. There are two variants of this approach, namely historical average and projections. The use of this approach (historical or projected) may overestimate the true debt limit because it ignores the fact that the interest rate will raise sharply as debt approaches its limit. Therefore, there is another, so-called model approach, which takes into account the rising risk of default as debt approaches its limit.

According to the research conducted by Ghosh et al. (2011) which is based on data for the period 1985-2007, the projections of debt limits ($\bar{d}$) and long-run debt ratio to which each country's public debt conditionally converges (d*) are provided. While there is a significant variation of projected data across countries, according to calculation which takes into account historical and projected interest rates, $d*$ ranges between 0 to 110 percent of GDP, and $\bar{d}$ ranges between 150 to 260 percent of GDP. There is no significant difference in d* and $\bar{d}$ projected on the basis of model approach (table 2).

Table 2. Etimates of d* and $\bar{d}$ by countries

	Market approach				Model approach	
	d*		$\bar{d}$			
Country	Hist.	Proj.	Hist.	Proj.	d*	$\bar{d}$
Australia	0,0	0,0	203,9	193,2	0,0	202,7
Austria	63,9	54,3	179,7	187,3	55,1	170,7
Belgium	60,3	76,3	182,0	168,4	53,7	172,0
Canada	110,8	82,6	152,3	181,1	75,2	173,1
Denmark	0,0	0,0	175,7	208,7	0,0	195,9
Finland	0,0	0,0	200,4	184,5	0,0	167,0
France	94,8	89,8	170,9	176,1	92,7	159,7
Germany	94,5	71,0	154,1	175,8	63,6	170,0
Greece	80,5	...	196,5	...	...	...
Iceland	0,0	...	213,5	...	0,0	157,3
Ireland	0,0	90,7	245,7	149,7	42,9	157,6
Israel	79,7	82,1	184,8	182,4	65,0	183,9
Korea	0,0	0,0	217,2	229,2	0,0	220,3
Netherlands	50,2	50,7	190,5	190,1	58,0	168,7
N. Zealand	0,0	0,0	201,0	186,4	0,0	197,6
Norway	0,0	0,0	263,2	249,2	0,0	233,5
Portugal	77,1	...	191,6	...	...	...
Spain	0,0	94,8	218,3	153,9	70,2	168,4
Sweden	0,0	0,0	203,5	204,9	0,0	167,8
UK	79,6	94,9	182,0	166,5	75,5	166,0
USA	78,7	101,2	183,3	160,5	77,6	173,1
Median	50,2	62,6	191,60	183,4	53,7	170,7
Mean	41,4	49,3	195,70	186,0	38,4	179,2

Source: Ghosh et al., "Fiscal Fatigue, Fiscal Space and Debt Sustainability in Advanced Economies", NBER, Feb. 2011, str. 30

The estimate of fiscal space[6] (Ghosh et al. 2011) is calculated as a difference between the debt ratio projected for 2015 and the debt limit $\bar{d}$.[7]

[6] Indicator of fiscal space is an estimate rather than official data, because the debt limits can not be accurately determined with certainty.

[7] Since even a slight change in the estimate of the primary balance can lead to significant changes in estimates of the debt limit, the model allows simulation of the projected coefficients of the primary balance reaction function.

Table 3 reports estimates of probability that a country has a given amount of fiscal space (0, 50, or 100 percent of GDP). Cells are marked grey where the probability is less than 50 percent.

Table 3. Estimated Probability of Fiscal Space (in percent)

Country	Projected Market Interest Rate			Model-implied Interest Rate		
	FS>0	FS>50	FS>100	FS>0	FS>50	FS>100
Australia	99,8	99,5	99,5	99,8	99,8	99,8
Austria	97,9	97,8	75,1	81,4	81,4	38,1
Belgium	95,9	89,7	2,9	95,5	92,0	5,2
Canada	92,2	92,1	70,3	80,9	80,9	57,1
Denmark	100,0	100,0	100,0	100,0	100,0	100,0
Finland	96,2	96,0	69,3	72,8	72,8	37,1
France	88,7	86,6	12,0	65,5	63,1	4,3
Germany	93,0	92,3	35,3	82,6	82,3	25,8
Greece	6,3	0,1	0,1	0,3	0,0	0,0
Iceland	49,1	44,0	5,8	57,9	57,3	20,4
Ireland	66,0	55,9	1,7	60,9	58,8	4,3
Israel	97,1	97,1	80,7	95,1	95,1	81,4
Italy	17,3	1,7	0,2	0,1	0,1	0,1
Japan	0,1	0,1	0,1	0,0	0,0	0,0
Korea	100,0	100,0	100,0	100,0	100,0	100,0
Netherlands	99,3	99,2	83,1	81,0	80,8	35,1
N. Zealand	93,3	93,0	92,1	94,5	94,5	94,5
Norway	100,0	100,0	100,0	99,9	99,9	99,9
Portugal	34,4	27,1	0,4	27,6	23,8	0,5
Spain	69,9	61,0	1,6	82,6	79,8	6,3
Sweden	99,9	99,9	99,9	71,3	71,3	70,6
UK	78,1	75,9	8,9	69,3	68,9	12,1
USA	71,8	52,2	1,2	82,9	71,2	2,8
Median	93,0	92,1	35,3	81,0	79,8	25,8
Mean	75,9	72,2	45,2	69,7	68,4	38,9

Source: Ghosh i dr, "Fiscal Fatigue, Fiscal Space and Debt Sustainability in Advanced Economies", NBER, Feb. 2011, p. 33

The probability of positive fiscal space is high for many countries including Australia, Denmark, Korea, New Zealand and Norway, and is small or doesn't exist for many European countries and Japan. Countries facing a low probability of positive fiscal space need to undertake fiscal adjustment. Even countries that are estimated to have ample space may need to undertake medium-term adjustment, taking into take account their future potential commitments.

Instead of conclusion

Estimation of fiscal space depends on the projected level of debt in the future and its limits, which in turn depends on the historical fiscal performance. Therefore, countries with relatively high debt ratios can enjoy the additional fiscal space if they were proven to be fiscally responsible in past. Studies show that debt limits vary considerably among countries. It can be concluded that the fiscal space varies for two reasons: different levels of indebtedness and different debt limits. Projection that a country has little or no fiscal space doesn't mean that the government will default, because its limit is not carved in stone. Estimate of fiscal space is based on the assumption that fiscal policy will continue the trend of the past, but it can change. The low level of fiscal space should alarm the changes in policy, in order to ensure fiscal sustainability.

Literature

- Ostry et al., „Fiscal Space", IMF Staff Position Note, Sept. 2010
- Ghosh et al., "Fiscal Fatigue, Fiscal Space and Debt Sustainability in Advanced Economies", NBER, Feb. 2011
- Heller P, „Fiscal Space: What It Is and How to Get It", Finance and Development, IMF, June 2005
- Ghosh et al., „Fiscal space in advanced countries", March 2011
- Baldacci et al., „Measuring Fiscal Vulnerability and Fiscal Stress: A Proposed Set of Indicators", IMF Working Paper, April 2011
- Schick A, „Budgeting for Fiscal Space", June 2008
- Doherty L. and Yeaman L, „Fiscal space in G-20", Australian Treasury, Economic Roundup Issue 3, 2008
- *J. D. Ostry, „Watch This (Fiscal) Space: Assessing Room for Fiscal Maneuver in Advanced Countries", Sept 2010*

Consolidated reports

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

The consolidated report includes.

- revenues from indirect taxes collected by the Indirect Tax Authority on the Single Account,
- transfers from the ITA Single Account for external debt servicing,
- transfers from the ITA Single Account for financing Brčko District, cantons, municipalities and Road Directorates,
- 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.

Table 2. (Consolidated report: Central government)

The consolidated report includes.

- revenues and expenditures of the budget of Institutions of B&H,
- revenues and expenditures of the budget of the FB&H and cantons,
- revenues and expenditures of the budget of the RS,
- revenues and expenditures of the budget of the BD.

Tables 3.1-3.5. (Consolidated report: Cantons)

1. The consolidated report includes.
    - revenues and expenditures of the cantonal budgets,
    - revenues and expenditures of the budgets of related municipalities
2. Net financing = loans received – repayment of debt

Consolidated report: BiH, entities and SA, I-VI 2011

	I	II	III	IV	V	VI	I-VI
Revenues	**409,1**	**387,7**	**484,9**	**460,3**	**478,9**	**537,9**	**2.758,8**
Taxes	383,4	362,1	440,3	413,0	451,0	503,1	2.552,8
Indirect taxes	366,1	338,5	387,3	373,0	419,3	465,0	2.349,1
VAT	237,7	222,1	230,2	247,6	249,5	275,9	1.462,9
VAT on imports	138,3	180,4	210,4	204,1	202,2	227,2	1.162,6
VAT from VAT returns	149,5	115,6	98,3	108,2	117,9	118,2	707,8
VAT from automatic assessment done by ITA	0,0	0,1	0,1	0,1	0,1	0,3	0,6
One-off VAT payments	0,3	0,2	0,3	0,1	0,1	0,0	0,9
Other	2,7	2,6	3,0	2,6	2,4	2,5	15,7
VAT refunds	-53,1	-76,8	-81,9	-67,4	-73,2	-72,4	-424,8
Custom duties	15,5	20,9	26,5	23,9	24,1	24,9	135,8
Sales tax	0,0	0,0	0,0	0,0	0,0	0,0	0,1
Excises	93,2	76,4	107,8	79,2	118,0	138,2	612,9
on imports	60,6	54,1	70,7	52,3	80,2	92,9	410,7
on domestic production	32,6	22,3	37,1	27,0	37,8	45,4	202,2
Railroad tax	21,2	19,0	22,3	22,6	26,5	24,9	136,5
Other	1,5	1,3	1,4	1,6	2,2	2,0	10,0
Other refunds	-3,1	-1,2	-0,9	-1,9	-1,0	-1,0	-9,1
Direct taxes	17,3	23,6	53,0	40,0	31,6	38,1	203,7
Profit tax revenues	8,7	10,7	35,1	23,6	13,5	20,0	111,6
Income tax revenues	8,1	12,1	16,9	15,5	17,2	17,2	86,9
Other direct taxes	0,6	0,8	1,0	0,9	0,9	0,9	5,1
Contributions	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Non-tax revenues	23,8	24,3	41,0	46,5	27,5	33,2	196,3
Grants	1,9	1,3	3,6	0,9	0,4	1,6	9,6
Other revenues	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Expenditures	**393,2**	**372,1**	**492,6**	**522,1**	**461,7**	**509,0**	**2.750,7**
Wages and compensations	118,2	118,8	150,3	130,5	131,4	131,2	780,4
Purchases of goods and services	9,9	14,1	19,2	23,2	26,3	31,2	123,9
Subsidies and transfers	89,2	83,7	142,8	182,8	105,9	113,5	717,9
Interests (domestic and foreign)	3,3	5,9	9,2	4,7	10,3	19,8	53,2
Interests on foreign debt	3,3	4,6	8,2	3,9	10,3	18,1	48,2
Interests on domestic debt	0,0	1,4	1,0	0,8	0,0	1,7	5,0
Other current expenditure	2,9	3,4	11,8	15,4	16,4	18,5	68,4
Capital expenditures	0,2	0,4	1,0	1,3	2,6	12,6	18,1
Other expenditures	4,2	2,7	6,8	8,0	7,5	10,1	39,3
SA transfers	166,9	144,5	165,0	160,1	173,9	187,8	998,1
o/w: FBiH/cantons, municipalities, Road Fund	127,5	110,3	127,9	123,1	133,3	142,8	764,8
o/w: RS/cities, municipalities, Road Fund	28,5	24,2	25,6	25,9	27,9	30,7	162,8
o/w: Brčko	10,9	10,0	11,5	11,1	12,6	14,3	70,4
Net lending and capital gains	-1,5	-1,5	-13,5	-4,1	-12,5	-15,6	-48,5
Overall balance	**15,9**	**15,6**	**-7,7**	**-61,7**	**17,2**	**28,9**	**8,0**
Financing	**-15,9**	**-15,6**	**7,7**	**61,7**	**-17,2**	**-28,9**	**-8,0**

Table 1.

Consolidated report: Central government, I-VI 2011

	Q1	Q2	Total
Revenues	**1.251,9**	**1.454,8**	**2.706,7**
Taxes	1.110,8	1.288,5	2.399,4
Indirect taxes	939,2	1.088,6	2.027,8
Direct taxes	171,6	200,0	371,6
Profit tax revenues	78,9	88,1	167,0
Income tax revenues	84,5	103,7	188,2
Other direct taxes	8,2	8,2	16,3
Contributions	0,0	0,0	0,0
Non-tax revenues	133,8	162,6	296,4
Grants	7,3	3,7	10,9
Other revenues	0,0	0,0	0,0
Expenditures	**1.211,0**	**1.465,3**	**2.676,3**
Wages and compensations	672,7	683,7	1.356,4
Purchases of goods and services	87,1	131,9	218,9
Subsidies and transfers	379,7	503,3	883,0
Interests (domestic and foreign)	19,9	36,6	56,5
Interests on foreign debt	16,5	33,1	49,6
Interests on domestic debt	3,4	3,5	6,9
Other current expenditure	46,6	84,6	131,2
Capital expenditures	8,3	32,6	40,9
Other expenditures	13,8	25,6	39,3
Net lending and capital gains	-17,0	-32,9	-49,9
Balance	**40,9**	**-10,5**	**30,4**
Financing	**-40,9**	**10,5**	**-30,4**

Table 2.

Bosnian-Podrinje Canton, I-V 2011

		I	II	III	IV	V	Q1	Q2	I-V 2011
1	**Revenues** (11+12+13+14)	**3.697.249**	**2.791.961**	**3.071.111**	**2.847.705**	**3.319.509**	**9.560.321**	**6.167.215**	**15.727.536**
11	**Tax revenues**	**2.458.008**	**2.272.590**	**2.579.410**	**2.473.520**	**2.751.851**	**7.310.007**	**5.225.371**	**12.535.378**
	Income and profit tax	185.229	231.726	260.066	266.829	254.359	677.021	521.188	1.198.210
	Property tax	36.696	57.396	17.098	18.943	32.594	111.190	51.537	162.727
	Indirect taxes	2.236.037	1.983.262	2.302.100	2.187.529	2.464.619	6.521.399	4.652.148	11.173.547
	Other taxes	45	205	147	219	279	397	498	895
12	**Non-tax revenues**	**333.662**	**249.238**	**296.102**	**256.423**	**257.152**	**879.002**	**513.575**	**1.392.577**
13	**Grants**	**897.894**	**266.564**	**187.133**	**113.492**	**307.750**	**1.351.591**	**421.242**	**1.772.833**
14	**Other revenues**	**7.686**	**3.569**	**8.466**	**4.271**	**2.756**	**19.721**	**7.027**	**26.748**
2	**Expenditures** (21+22)	**2.785.359**	**3.139.473**	**3.183.829**	**3.212.852**	**3.007.930**	**9.108.660**	**6.220.782**	**15.329.442**
21	**Current expenditures**	**2.785.359**	**3.139.473**	**3.182.929**	**3.212.852**	**3.008.178**	**9.107.760**	**6.221.030**	**15.328.791**
	Gross wages and compensations	1.806.673	1.845.386	1.884.689	1.874.802	1.847.800	5.536.748	3.722.602	9.259.351
	Purchases of goods and services	250.893	490.418	380.919	340.401	289.200	1.122.231	629.600	1.751.831
	Grants	679.792	803.295	916.989	997.361	870.937	2.400.075	1.868.298	4.268.373
	Interests	48.001	373	332	288	242	48.706	530	49.236
	Transfers to lower budget units	0	0	0	0	0	0	0	0
22	**Net lending***	0	0	900	0	-249	900	-249	651
3	**Net acquisition of nonfinancial assets**	**16.181**	**38.022**	**73.619**	**131.687**	**58.399**	**127.822**	**190.085**	**317.907**
4	**Government surplus/deficit** (1-2-3)	**895.709**	**-385.534**	**-186.337**	**-496.833**	**253.181**	**323.839**	**-243.652**	**80.187**
5	**Net financing** **	**-144.272**	**-14.754**	**-14.623**	**-14.291**	**-14.291**	**-173.649**	**-28.582**	**-202.231**

Table 3.1.

Posavina Canton, I-V 2011

		I	II	III	IV	V	Q1	Q2	I-V 2011
1	**Revenues** (11+12+13+14)	**2.418.228**	**2.345.460**	**3.060.083**	**2.793.428**	**2.634.478**	**7.823.771**	**5.427.907**	**13.251.677**
11	**Tax revenues**	**1.968.419**	**1.781.395**	**2.407.635**	**2.101.183**	**2.165.674**	**6.157.450**	**4.266.856**	**10.424.306**
	Income and profit tax	277.172	283.313	668.178	411.946	284.236	1.228.663	696.181	1.924.845
	Property tax	42.007	27.496	38.594	52.805	29.657	108.097	82.462	190.559
	Indirect taxes	1.645.781	1.469.687	1.698.888	1.635.617	1.851.088	4.814.355	3.486.705	8.301.060
	Other taxes	3.459	900	1.976	815	693	6.335	1.508	7.842
12	**Non-tax revenues**	**423.076**	**492.210**	**452.867**	**670.958**	**447.517**	**1.368.153**	**1.118.475**	**2.486.628**
13	**Grants**	**26.733**	**71.855**	**199.581**	**21.288**	**21.288**	**298.168**	**42.575**	**340.743**
14	**Other revenues**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	**Expenditures** (21+22)	**2.409.825**	**2.784.678**	**3.132.213**	**2.474.128**	**2.669.680**	**8.326.717**	**5.143.808**	**13.470.524**
21	**Current expenditures**	**2.409.825**	**2.784.678**	**3.132.213**	**2.474.128**	**2.669.680**	**8.326.717**	**5.143.808**	**13.470.524**
	Gross wages and compensations	1.674.885	1.702.412	1.735.081	1.684.256	1.713.396	5.112.378	3.397.652	8.510.030
	Purchases of goods and services	648.172	492.587	551.235	415.968	433.042	1.691.994	849.009	2.541.003
	Grants	73.515	588.981	845.178	373.163	504.498	1.507.673	877.660	2.385.334
	Interests	13.255	699	718	741	18.745	14.672	19.486	34.158
	Transfers to lower budget units	0	0	0	0	0	0	0	0
22	**Net lending***	0	0	0	0	0	0	0	0
3	**Net acquisition of nonfinancial assets**	**28.916**	**116.681**	**42.080**	**87.745**	**231.490**	**187.677**	**319.235**	**506.912**
4	**Government surplus/deficit** (1-2-3)	**-20.514**	**-555.900**	**-114.210**	**231.555**	**-266.691**	**-690.623**	**-35.136**	**-725.759**
5	**Net financing **	**-30.494**	**0**	**0**	**0**	**0**	**-30.494**	**0**	**-30.494**

Table 3.2.

Central Bosnia Canton, I-V 2011

		I	II	III	IV	V	Q1	Q2	I-V 2011
1	**Revenues** (11+12+13+14)	**15.495.042**	**13.683.684**	**16.312.551**	**15.396.256**	**18.627.517**	**45.491.276**	**34.023.773**	**79.515.049**
11	**Tax revenues**	**13.084.890**	**11.569.724**	**13.685.389**	**12.805.571**	**16.156.149**	**38.340.002**	**28.961.720**	**67.301.722**
	Income and profit tax	1.747.848	1.305.155	1.854.480	1.619.010	3.512.188	4.907.483	5.131.198	10.038.681
	Property tax	318.525	415.126	438.206	379.821	471.008	1.171.858	850.829	2.022.687
	Indirect taxes	11.003.501	9.830.696	11.370.461	10.792.701	12.149.748	32.204.658	22.942.449	55.147.107
	Other taxes	15.016	18.747	22.241	14.039	23.205	56.003	37.243	93.246
12	**Non-tax revenues**	**2.076.006**	**1.976.674**	**2.358.588**	**2.170.051**	**2.203.043**	**6.411.268**	**4.373.094**	**10.784.362**
13	**Grants**	**334.146**	**137.286**	**268.574**	**420.634**	**268.325**	**740.006**	**688.959**	**1.428.965**
14	**Other revenues**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	**Expenditures** (21+22)	**12.163.282**	**13.464.450**	**13.515.646**	**14.487.272**	**14.705.955**	**39.143.378**	**29.193.227**	**68.336.605**
21	**Current expenditures**	**12.163.282**	**13.464.450**	**13.515.646**	**14.487.272**	**14.705.955**	**39.143.378**	**29.193.227**	**68.336.605**
	Gross wages and compensations	8.799.259	9.225.131	9.499.622	9.272.416	9.243.647	27.524.012	18.516.063	46.040.075
	Purchases of goods and services	1.720.596	1.984.504	1.930.090	1.865.428	1.392.166	5.635.190	3.257.595	8.892.785
	Grants	1.571.326	2.098.362	1.950.279	3.235.329	3.909.572	5.619.967	7.144.900	12.764.868
	Interests	66.436	50.377	38.473	56.953	96.712	155.286	153.665	308.951
	Transfers to lower budget units	5.665	106.076	97.181	57.146	63.858	208.922	121.004	329.927
22	**Net lending***	0	0	0	0	0	0	0	0
3	**Net acquisition of nonfinancial assets**	**124.740**	**60.124**	**-26.462**	**262.232**	**579.511**	**158.402**	**841.743**	**1.000.144**
4	**Government surplus/deficit** (1-2-3)	**3.207.020**	**159.109**	**2.823.367**	**646.752**	**3.342.051**	**6.189.497**	**3.988.803**	**10.178.299**
5	**Net financing** **	**-115.007**	**-116.443**	**-113.615**	**-115.646**	**-114.473**	**-345.065**	**-230.119**	**-575.184**

Table 3.3.

Zenica-Doboj Canton, I-V 2011

		I	II	III	IV	V	Q1	Q2	I-V 2011
1	**Revenues** (11+12+13+14)	**24.847.604**	**22.801.928**	**25.887.529**	**24.695.975**	**28.903.255**	**73.537.061**	**53.599.229**	**127.136.291**
11	**Tax revenues**	**20.009.986**	**18.605.517**	**21.745.997**	**20.545.454**	**23.770.071**	**60.361.500**	**44.315.524**	**104.677.024**
	Income and profit tax	2.436.628	2.697.545	3.788.572	3.582.439	4.490.411	8.922.744	8.072.850	16.995.594
	Property tax	466.703	487.759	391.083	402.428	534.250	1.345.545	936.678	2.282.223
	Indirect taxes	17.103.788	15.418.125	17.564.086	16.557.453	18.738.484	50.085.999	35.295.938	85.381.937
	Other taxes	2.866	2.089	2.256	3.133	6.926	7.211	10.059	17.270
12	**Non-tax revenues**	**4.418.407**	**3.599.969**	**3.677.229**	**3.858.915**	**4.690.818**	**11.695.605**	**8.549.733**	**20.245.337**
13	**Grants**	**403.173**	**596.443**	**464.302**	**289.275**	**442.366**	**1.463.919**	**731.641**	**2.195.560**
14	**Other revenues**	**16.038**	**0**	**0**	**2.331**	**0**	**16.038**	**2.331**	**18.369**
2	**Expenditures** (21+22)	**20.812.372**	**24.958.408**	**26.169.895**	**25.780.747**	**24.963.224**	**71.940.676**	**50.743.971**	**122.684.647**
21	**Current expenditures**	**20.812.372**	**24.958.408**	**26.169.895**	**25.780.747**	**24.963.224**	**71.940.676**	**50.743.971**	**122.684.647**
	Gross wages and compensations	13.686.538	14.242.263	15.053.495	14.892.157	15.053.948	42.982.296	29.946.105	72.928.401
	Purchases of goods and services	3.148.473	4.986.701	5.021.479	4.286.085	3.976.155	13.156.653	8.262.240	21.418.892
	Grants	3.834.092	5.561.855	5.767.959	6.508.476	5.755.020	15.163.906	12.263.496	27.427.402
	Interests	131.000	16.000	77.059	15.325	78.702	224.059	94.027	318.085
	Transfers to lower budget units	12.270	151.590	249.903	78.703	99.400	413.763	178.103	591.867
22	**Net lending***	0	0	0	0	0	0	0	0
3	**Net acquisition of nonfinancial assets**	**212.125**	**563.877**	**937.346**	**1.412.500**	**1.862.315**	**1.713.348**	**3.274.815**	**4.988.163**
4	**Government surplus/deficit** (1-2-3)	**3.823.106**	**-2.720.357**	**-1.219.713**	**-2.497.271**	**2.077.715**	**-116.963**	**-419.556**	**-536.520**
5	**Net financing** **	**-130.364**	**-11.167**	**1.000.000**	**-1.000**	**497.167**	**858.469**	**496.167**	**1.354.636**

Table 3.4.

West Herzegovina Canton, I-VI 2011

		I	II	III	IV	V	VI	Q1	Q2	I-VI 2011
1	**Revenues** (11+12+13+14)	**6.383.860**	**6.324.170**	**9.487.345**	**7.476.649**	**7.470.798**	**8.487.875**	**22.195.376**	**23.435.322**	**45.630.698**
11	**Tax revenues**	**5.302.509**	**4.908.246**	**7.704.580**	**6.119.850**	**5.835.272**	**7.304.805**	**17.915.335**	**19.259.926**	**37.175.261**
	Income and profit tax	1.000.130	1.033.332	3.316.684	1.911.862	1.369.581	1.967.629	5.350.146	5.249.072	10.599.218
	Property tax	182.459	241.592	297.482	130.384	123.635	134.796	721.533	388.815	1.110.348
	Indirect taxes	4.044.846	3.619.005	4.062.373	4.053.752	4.325.606	5.184.554	11.726.225	13.563.912	25.290.137
	Other taxes	75.074	14.318	28.040	23.852	16.449	17.826	117.431	58.127	175.559
12	**Non-tax revenues**	**1.025.771**	**1.398.059**	**1.737.165**	**1.222.108**	**1.256.893**	**967.111**	**4.160.995**	**3.446.111**	**7.607.106**
13	**Grants**	**55.581**	**17.865**	**45.600**	**134.691**	**378.634**	**215.960**	**119.046**	**729.285**	**848.330**
14	**Other revenues**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	**Expenditures** (21+22)	**5.946.209**	**7.759.915**	**7.262.244**	**6.950.964**	**7.238.335**	**6.911.131**	**20.968.369**	**21.100.430**	**42.068.798**
21	**Current expenditures**	**5.946.209**	**7.759.915**	**7.262.244**	**6.950.964**	**7.238.335**	**6.911.131**	**20.968.369**	**21.100.430**	**42.068.798**
	Gross wages and compensations	4.228.682	4.499.391	4.768.105	4.782.014	4.772.539	4.553.891	13.496.178	14.108.444	27.604.622
	Purchases of goods and services	944.132	1.287.042	937.446	782.406	1.136.274	655.475	3.168.620	2.574.155	5.742.775
	Grants	435.656	1.605.707	1.186.298	1.210.091	1.007.091	1.364.426	3.227.661	3.581.608	6.809.269
	Interests	73.458	101.888	87.896	109.373	88.484	75.968	263.242	273.824	537.066
	Transfers to lower budget units	264.281	265.888	282.498	67.080	233.947	261.372	812.667	562.399	1.375.066
22	**Net lending***	0	0	0	0	0	0	0	0	0
3	**Net acquisition of nonfinancial assets**	**-10.270**	**133.816**	**-711**	**97.896**	**103.890**	**54.589**	**122.835**	**256.375**	**379.210**
4	**Government surplus/deficit** (1-2-3)	**447.921**	**-1.569.562**	**2.225.813**	**427.789**	**128.573**	**1.522.155**	**1.104.172**	**2.078.518**	**3.182.689**
5	**Net financing ** **	**-511.902**	**-587.157**	**-525.810**	**-290.139**	**-208.655**	**-257.348**	**-1.624.868**	**-756.142**	**-2.381.010**

Table 3.5.