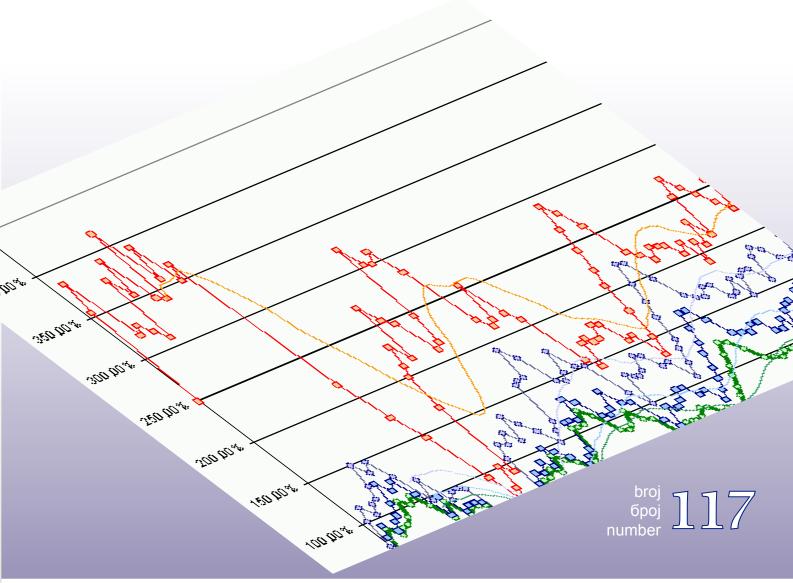
Bosna i Hercegovina Odjeljenje za makroekonomsku analizu Upravnog odbora Uprave za indirektnoneizravno oporezivanje



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

Macroeconomic Unit of the Governing Board of the Indirect Tax Authority

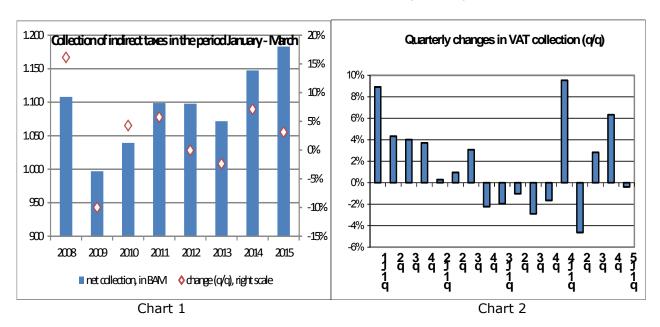
# Oma Bilten



April 2015
 Travanj 2015
 Aприл 2015
 April 2015

#### With this issue

There was a growth in both total revenues from indirect taxes and all the most important types of revenue in March 2015. Gross collection increased by 37,6 million KM, which represents an increase of 8,3% compared to March 2014. For the first time, after a year of continued growth, the refunds of indirect taxes were reduced by 1,2%. All this resulted in an increase in net revenue collection of 38,7 million KM, or 10,5%. Thanks to the strong growth in revenue collection in March, the cumulative gross collection in the first quarter moved into the zone of positive growth of 3,4%. However, the increase of refund payments of 5% in the first quarter compared to the same quarter of 2014 contributed to a slightly lower growth in net collection of 3,1%. The comparison of collection of indirect taxes in the first quarter of 2015 with the first quarter of previous year points to the conclusion that the collection of indirect taxes in nominal terms has been the most successful since the establishment of the ITA (Chart 1).



The observation by types of revenues shows that the highest growth in the first quarter of 2015 is recorded in excise taxes and road taxes, a total of 31,1 million KM, and in customs revenues 5,8 KM, while VAT revenues declined by 22,3 million KM. Since most of 23,7 million KM of unadjusted revenue relates to VAT, it is realistic to expect for the cumulative net VAT collection in the first quarter of 2015 to reach the level of the same quarter of 2014 (Chart 2 – symbol  $^{\wedge}$ ).

Dinka Antić, PhD Head of Unit

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

# Analysis of initiatives to increase taxes on derivatives in B&H in the light of implications of current excise policies

(Author: Dinka Antić, PhD)

Previous initiatives to increase taxes on oil derivatives were mainly related to the introduction of earmarked excises for financing the railways. Recent initiatives of the Entity Governments include (i) the increase of an earmarked road toll for highways from 0,10 KM/l to 0,15 KM/l and (ii) the introduction of an earmarked excise duty for the establishment of required reserves for derivatives in the amount of 0,03KM/l. In modern countries of the world excise duties are used as an instrument to achieve the objectives of environmental policy, social and health policy. In the complex fiscal architecture of B&H, in which the jurisdiction of said policies belong to the Entities, the taxation policy of energy products is necessarily used to achieve the fiscal objectives. It was not until the introduction of an earmarked road toll from the price of oil products that the financing of highway construction was associated with the taxation of derivative consumption. However, selective policy, which included the payment of earmarked road tolls solely to diesel and gasoline, prompted the illegal use of heating oil to power the motor vehicles. This has reduced the expected fiscal effects and created distortions in the market of energy products. If initiatives to increase earmarked road tolls for highways are to be accepted it will further deepen the existing gap in taxation between diesel and heating oil. With this in mind, as a better option it is imposed an increase in excise duties on all derivatives in the same nominal amount and redefining the distribution in the Entities in favor of Directorates of Highways. Although in this case an increased consumption of heating oil due to generally favorable tax arrangements in relation to diesel can also be expected, fiscal losses and distortions of the market will be smaller than in the case of increased earmarked road toll for highways.

#### 1. TAXATION POLICY OF ENERGY PRODUCTS IN B&H

Unlike the taxation policy of energy products in the EU, which includes taxation of oil derivatives, gas, coke, coal and electricity, energy taxation policy in B&H refers only to the taxation of oil derivatives with excise duties and road tolls from the price of oil derivatives. Basically, the policy of taxation of oil derivatives in B&H implies differentiated taxation of derivatives with excise duties by types of derivatives and selective application of road tolls. Finally, the consumption of oil derivatives is taxed at a single rate of VAT of 17%.

The differentiation of excise duties is reflected in the fact that the rate of the excise duty on diesel and heating oil is lower than that on gasoline. There is also differentiation in types of gasoline so the motor petrol is more burdened with excise duty than unleaded petrol. This differentiation is no longer relevant because of the disappearance of motor petrol from the consumption of derivatives.

Excise duties on derivatives have not been changed for 15 years. The excise tax on motor patrol is 0,40 KM/l, on unleaded petrol 0,35 KM/l and on diesel and heating oil 0,30 KM/l. In addition to the excise tax, road toll of 0,15 KM/l is paid on gasoline and diesel. The new Law on Excise Duties, which is in effect as of 1 of July 2009, introduced an additional road toll to finance highways in the amount of 0,10 KM per liter of oil derivative.

Collection and distribution of revenues represent an important aspect for evaluation of initiatives to amend the taxation policy of derivatives. Road toll of 0,15 KM/l does not have an earmarked character, and like all other revenues from indirect taxes is paid to the Single Account of the ITA and is distributed to the Entities based on distribution coefficients determined by the Governing

Board of the ITA. As part of the Entity distribution of revenues Directorates of Highways participate in the distribution of total assigned revenues to the Entity in the percentage prescribed by the Entity regulations.

Unlike the "standard" road toll the new additional road toll is of dedicated character. Binding certain indirect taxes for the purpose required significant modifications to the system of indirect taxation in the area of distribution. In technical terms, it was necessary to provide a separate collection of the additional road toll in special accounts at commercial banks and their separation from the distribution in a similar way as it is done with refunds of indirect taxes and funds to finance the budget of B&H. Extracting new road toll from the "tank" of revenues from indirect taxes required the adoption of specific coefficients for their distribution. In fact, bearing in mind that the sole purpose of revenues from additional road tax should be used for development of the highway network, the application of the criteria of final consumption, which is the basis for allocation of indirect taxes in B&H, is not sustainable. Logic purpose of revenues from additional road toll requires that their distribution between the Entities and the District should be based on the share of the Entities and the District in the total planned highway network. At the end of 2009 the ITA Governing Board has adopted a decision on temporary distribution coefficients according to which revenues from additional road toll are allocated as follows:

- 10% of revenue is retained in the sub-account of the ITA Single Account and is used for alignment between the Entities and the District in determining the final distribution coefficients;
- 90% of revenue is shared between the distribution users in the way that 59% belongs to Federation of B&H, 39 to Republic of Srpska and 2% to Brčko District.

In order to assess the initiative to amend the taxation policy it is necessary to consider the implications of the current derivative taxation policy in B&H in the period 2009-2014 on the consumption of derivatives and collected revenues.

#### 2. TRENDS IN CONSUMPTION OF DERIVATIVES

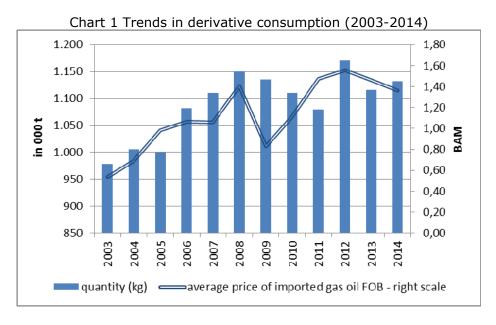
Creating analytical basis for analyzing trends in the consumption of oil derivatives is largely complex for the following reasons:

- Consumption data do not represent actual consumption of the population but the sum of quantities of imported derivatives on which the excise duty is paid and quantities of derivatives on which the excise duty is paid by the Refinery;
- Consumption of derivatives is expressed in kilograms (import) and in liters (Refinery). For
  the analysis of trends in consumption quantities of derivatives from Refinery (data for the
  period 2009-2014) were converted in kilograms to the average specific weight of certain
  types of derivatives. By opposite conversion (from kilograms in liters), which enables the
  calculation of revenues from excise duties and their comparison with actual revenue
  collected, the minimum deviation is determined that does not significantly affect the
  conclusions of the analysis.

Until the outbreak of the global economic crisis consumption of derivatives in B&H was continuously increasing (Chart 1). There has been a significant increase in 2006, which, in addition to economic growth, can be linked with the establishment of the ITA, in terms of strengthening the single economic space and market. One important reason for the growth in derivative consumption is strong growth in indirect tax revenues following the introduction of VAT in 2006 and 2007 which triggered a spiral of consumption in the country.

The global economic crisis brings a moderate decrease in derivative consumption in B&H by 2011, and in 2012 there was strong growth which is historically the maximum that could not be achieved

in the next two years. The price inelasticity of derivative consumption is noted until the outbreak of the global crisis (Chart 1 – right scale) and in the last two years consumption ranged as usual in relation to the price drop.



The natural reaction of subjects who bear the tax burden is to avoid the tax burden, reduce it or to shift it to someone else. Large differences in the tax burden on goods which are mutual substitutes always represent an incentive to consumers to reduce the tax burden. In the case of taxation of oil derivatives consumers may opt for derivatives that are less taxed, for example, instead of cars on gas they opt to purchase the cars on diesel. This substitution of consumption is legal, but has consequences for revenues.

Analysis of trends in consumption of derivatives by types points to divergent trends (Chart 2).

In the last ten years the share of gasoline is constantly decreasing, both in total quantities of power fuel (diesel + gasoline) and in total quantities of derivatives (Chart 3). The share of consumption of unleaded petrol is reduced from 25% in 2008 to only 17% in 2014. Or in other words, the consumption of unleaded petrol in 2014 was only 64% of the consumption from 2008 (Chart 4). The share of diesel in the same period increased from 65% to 72%, while the share of heating oil was increased from 9,6% to 11% but in 2011 and 2012 it amounted 13%.

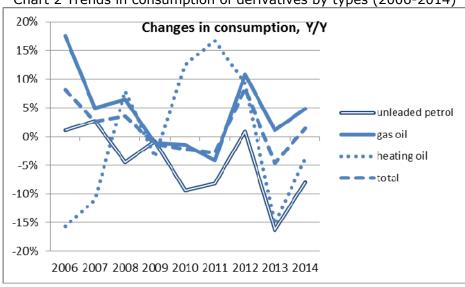
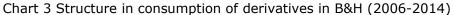
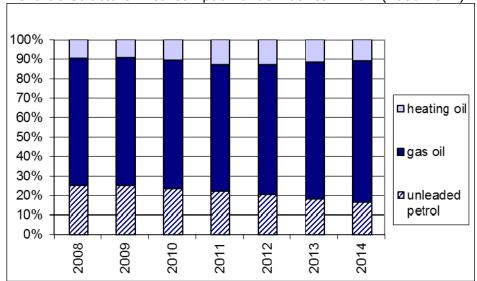


Chart 2 Trends in consumption of derivatives by types (2006-2014)





Unlike gasoline, the consumption of diesel has steady growth in the last three years (Chart 3). Consumption of diesel oscillated around the consumption from 2008 in a narrow range from -7% to +10%, which represents the maximum that was achieved in 2014. Changes in the structure of consumption of power fuel can be explained by the lower taxes on derivative but also by the growing preference of B&H citizens to vehicles on diesel. With the economic crisis, the trend of reducing the use of gasoline in favor of diesel is enhanced. One reason is certainly the economy of diesel consumption in relation to vehicles on gasoline. Generally, diesel consumption should be less price elastic compared to gasoline, as companies are large consumers of diesel, unlike gasoline which is used mainly by citizens.

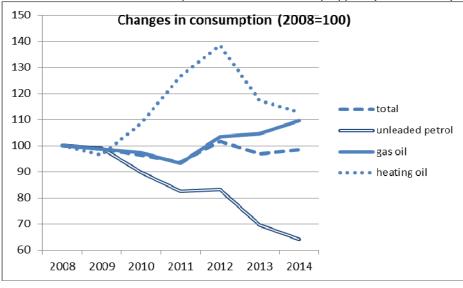


Chart 4 Trends in consumption of derivatives by types (2006-2014)

The strong growth in consumption of heating oil is the most striking. The sharp increase was noted in consumption of heating oil by 2009 and the maximum has been reached in 2012 when the consumption of heating oil exceeded the consumption in the pre-crisis year 2008 by 38% (Chart 4). Increased consumption of heating oil can be directly linked to favorable tax treatment of heating oil in relation to diesel after the gap in taxation of these derivatives was increased by introducing the earmarked road tolls in 2009. It can be concluded that the additional road toll gave a strong incentive for abuses in the use of heating oil to power the vehicles instead of heating. After the intensified control measures the growth in consumption of heating oil has significantly slowed, and after the turbulence the consumption of heating oil in 2014 has exceeded the consumption in 2008 by 13% (Chart 2).

Taking into account the deviations in the market of heating oil caused by differences in the amount of taxes, it can be concluded that the negative trends of diesel for the period 2010-2012 are a result of substitution with heating oil which is however much weakly reflected in diesel due to the high statistical base for comparison.

#### 3. TRENDS IN REVENUES FROM EXCISE AND ROAD TAXES

Analysis of trends in revenues from excise and road taxes is based on:

- Gross excise duties on derivatives. Refunds of excise duties on diesel used to heat buildings and greenhouses were not taken into consideration.
- Gross collection of road tolls. Occasional refunds of road tolls to entities that
  are exempt from payment but who have already paid were not taken into account.
  These are mines, power plants and entity railways in accordance with the Decision of
  the ITA Governing Board.

Collection of excise duties on oil derivatives followed the trends in consumption, except in 2012 when a growth in consumption was recorded and a fall in excise collection (Chart 5). Since 2009 the structure of revenues from excises on derivatives consists of revenues collected on imported derivatives and excise duties paid by the Refinery.

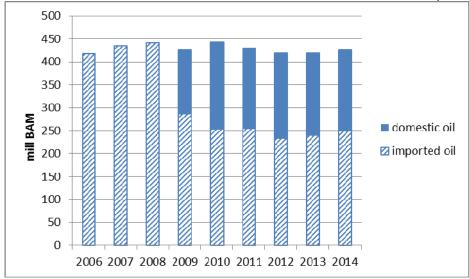
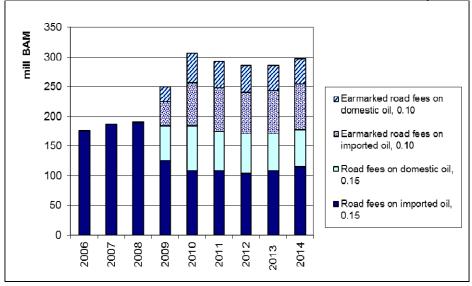


Chart 5 Trends and structure in collection of excise duties on derivatives (2006-2014)





As expected, the introduction of additional earmarked road tolls for highways led to significant fiscal impacts. Since the changes in excise policy occurred in the mid of 2009, effects of introducing road tolls were spread in the second half of 2009 and first half of 2010 (Chart 6). Regardless of this fact, total revenues from road tolls in 2009 were higher by 32% compared to 2008, i.e. 22,7% in 2010 compared to 2009.

Comparing trends in derivative consumption and trends in revenue collection from excise and road taxes it can be noted that revenues did not follow derivative consumption to the same extent (Chart 7). The biggest differences were in 2012 when there was a declining trend in revenues and a growing trend in consumption.

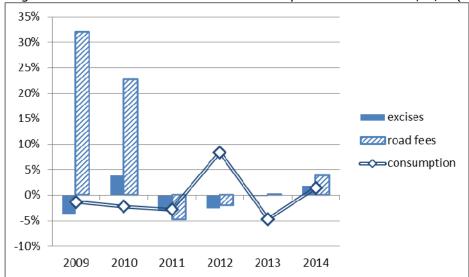


Chart 7 Changes in collection of revenues and consumption of derivatives, G/G (2009-2014)

Reason for divergent trends in excise duties may be a reduction of the share of higher taxed unleaded petrol in favor of the lower taxed diesel. In this case, the fiscal loss is 0,06 KM/l, including the corresponding VAT.

Reasons for deviations of revenues from road tolls in relation to trends in derivatives consumption can be (i) the growth of the illegal substitution of diesel with heating oil and (ii) the application of exemptions from payment road tolls for the mines, power plants and railways. Exemptions for the mines, power plants and railways refer to the amount of diesel used by listed subjects in the process of production or provision of services, as well as for the work of vehicles that are not driven on categorized roads. The quantity of diesel that can be exempted from road toll under the Law is approved by the Governing Board of the ITA on the proposal of the Entity Governments, i.e. of the responsible entity ministries.

In the first case it is about illegal tax evasion and in the second case, the tax expenditure. In both cases, the fiscal loss is equal to the sum of both road tolls and the corresponding VAT (i.e.  $0.29KM/I)^{1}$ .

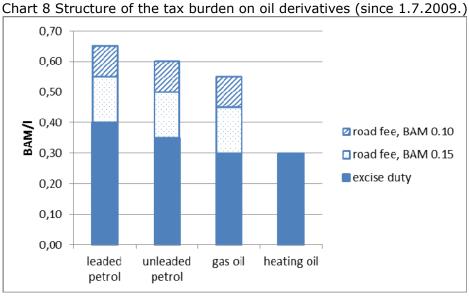
#### 4. IMPLICATIONS OF INITIATIVES TO INCREASE THE TAX BURDEN

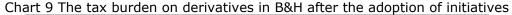
According to the current structure of the tax burden on oil derivatives it implies that the heating oil is a derivative that is the least burdened by taxes (Chart 8). The tax burden on diesel is by 83% higher than on the heating oil, while it is doubled on unleaded petrol.

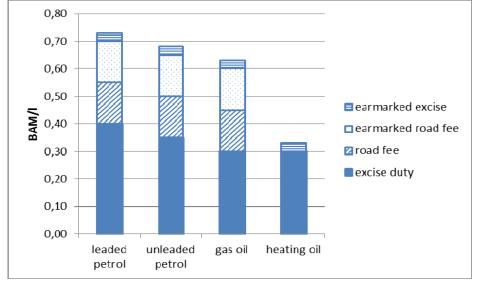
The latest initiatives of Entity Governments in connection to the taxation policy of oil derivatives include the following:

- (i) Increase of the earmarked road toll for highways from 0,10 KM/l to 0,15 KM/l and
- (ii) Introduction of an earmarked excise duty to establish reserves for energy products in the amount of 0,03 KM/l.

 $<sup>^{1}</sup>$  In the period 2011-2013 tax expenditures based on exemption from payment of the road toll and corresponding VAT ranged between 11 and 16 mil KM per year.







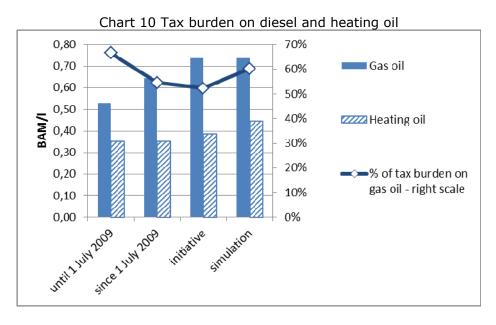
The adoption of these initiatives would increase the tax burden on unleaded petrol for diesel for 14,55%, and heating oil for 10%. The new structure of the tax burden on derivatives was given in Chart 9.

Relativities of total excise burden on diesel and heating oil as a substitute, increased for the corresponding VAT, are important for the analysis of implications of initiatives<sup>2</sup>. From the previous analysis it can be concluded that the introduction of an earmarked road toll led to the expansion of the gap between the tax burdens on these two energy products, giving the incentive for misuses of heating oil to power the vehicles instead of using diesel.

Until the adoption of the new Law on Excise Duties discrepancy amounted to 0,18 KM/I, and taxes on heating oil were 66,7% of taxes on diesel (Chart 10). Introducing the earmarked road toll in

<sup>&</sup>lt;sup>2</sup> It is the amount of VAT on part of the base (price before taxation) consisting of excise and road taxes. Banja Luka: Bana Lazarevića, 78 000 Banja Luka, Tel/fax: +387 51 335 350, E-mail: oma@uino.gov.ba Sarajevo: Doke Mazalića 5, 71 000 Sarajevo, Tel: +387 33 279 553, Fax: +387 33 279 625, Web: www.oma.uino.gov.ba

2009 the discrepancy increased to 0,29 KM/l, while taxes on heating oil amounted to only 54,5% of taxes on diesel. By increasing the earmarked road toll the discrepancy would increase to 0,35 KM, while taxes on heating oil would have amounted to only 52,4% of taxes on diesel.



A linear increase in excise duties on all derivatives is imposed as a better solution instead of increasing the earmarked road toll. In case that excise duties on all derivative increased by 0,05 KM/l, instead of increasing the earmarked road toll, the nominal gap in the taxation between diesel and heating oil would remain the same as before, but relativities between taxation of diesel and heating oil would have improved in favor of diesel. The percentage of the tax burden on heating oil in relation to taxes included in the price of a liter of diesel would increase to 60,3%, thus approaching the situation that existed before the adoption of the new Law on Excise Duties (Chart 10, "simulation").

#### 5. CONCLUSION

From the analysis it can be concluded that any increase in taxes, which only applies to diesel and not on heating oil as a substitute, deepens the gap between the tax burden of diesel and heating oil at the expense of diesel. This policy gives consumers an incentive for illegal use of heating oil to power the vehicles. In addition to irregularities and distortions in the market the increase in road taxes brings fiscal losses in relation to the expected inflow.

The implications of this solution are much more favorable than in the case of increasing the earmarked road toll. Incentives for illegal substitution of diesel with heating oil are smaller and therefore chances for achieving the expected revenues are higher. As any solution involves certain *trade-off*, if we want a more stable market of derivatives and more stable inflow of revenues it is necessary to sacrifice the automatism in the allocation of additional revenues. Bearing in mind non-earmarked character of excise duties and earmarked character of road tolls for highways in this case it would be necessary to ensure the redistribution of additional revenues from excises collected into the Single Account of the ITA to the Entity Directorates of Highways within the Entity distribution of the corresponding part of indirect taxes.

### **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

<sup>\*</sup>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: SA, B&H Institutions and entities, I-II 2015

(in million KM)	I	II	Total
Revenue	465,8	461,3	927,1
Taxes	422,5	422,5	845,0
Direct taxes	21,7	26,5	48,2
Taxes on income, profits and capital gains	20,8	25,4	46,2
Taxes on property	0,9	1,1	2,0
Indirect taxes (net)	373,6	395,9	769,5
VAT	217,9	254,1	472,0
Excises	118,6	97,7	216,3
Road fee	21,6	23,1	44,7
Customs	14,3	19,8	34,1
Other indirect taxes	1,2	1,3	2,5
Other taxes	27,2	0,1	27,3
Social security contributions	5,9	5,4	11,4
Grants	0,9	0,3	1,3
Foreign grants	0,8	0,3	1,1
Transfers	0,2	0,0	0,2
Other (non-tax) revenue	36,4	33,0	69,4
Expenditure	398,0	447,5	845,4
Expense	394,1	443,9	837,9
Compensation of employees	129,5	130,6	260,0
Use of goods and services	11,2	21,8	33,0
Social benefits	55,5	52,2	107,7
Interest	7,1	9,7	16,8
Interest payments to non-residents	3,8	6,7	10,4
Interest payments to residents	3,3	3,0	6,3
Subsidies	2,1	3,0	5,2
Grants, transfers (incl. transfers from SA**)	187,8	222,7	410,4
Other expense	0,9	4,0	4,8
Net acquisition of nonfinancial assets	3,9	3,6	7,5
Acquisition of nonfinancial assets	4,5	3,8	8,3
Disposal of nonfinancial assets	0,6	0,2	0,8
Gross/Net operating balance (revenue minus expense)	71,7	17,4	89,1
Net lending /borrowing (revenue minus expenditures)	67,8	13,8	81,6

<sup>\*\*</sup> transfers from SA include unconsolidated transfers to BD, cantons, municipalities and road funds

Table 1

# Preliminary report: General government, 2014

(in million KM)	Q1	Q2	Q3	Q4	Total
Revenue	2.647,7	2.961,8	2.941,6	3.142,3	11.693,4
Taxes	1.352,4	1.421,9	1.538,2	1.580,3	5.892,8
Direct taxes	241,7	238,2	209,4	240,5	929,8
Taxes on income, profits and capital gains	212,8	206,0	181,6	205,7	806,1
Taxes on payroll and workforce	2,5	3,9	4,8	3,4	14,7
Taxes on property	26,3	28,3	23,1	31,3	109,0
Indirect taxes	1.109,1	1.181,0	1.327,1	1.337,3	4.954,4
Other taxes	1,6	2,8	1,7	2,6	8,6
Social security contributions	961,1	1.051,2	1.070,5	1.184,1	4.266,9
Grants	14,8	15,5	19,8	21,9	72,0
Foreign grants	14,3	15,1	15,3	20,5	65,2
Transfers	0,4	0,4	4,5	1,5	6,8
Other (non-tax) revenue	319,5	473,2	313,1	356,0	1.461,7
Expenditure	2.587,9	2.780,2	2.986,0	3.532,8	11.886,8
Expense	2.531,2	2.685,8	2.761,9	3.237,8	11.216,8
Compensation of employees	797,9	819,9	810,0	861,6	3.289,3
Use of goods and services	462,2	500,7	511,9	653,5	2.128,3
Social benefits	1.102,6	1.119,4	1.150,2	1.303,0	4.675,1
Interest	44,0	59,5	44,7	63,0	211,1
Interest payments to non-residents	21,6	28,5	23,3	31,4	104,8
Interest payments to residents	22,5	31,0	21,4	31,6	106,3
Subsidies	37,0	66,6	104,0	143,9	351,5
Grants, transfers	23,5	29,2	23,7	49,6	126,0
Other expense	64,0	90,6	117,6	163,3	435,5
Net acquisition of nonfinancial assets	56,7	94,4	224,1	295,0	670,1
Acquisition of nonfinancial assets	66,2	98,8	241,5	310,0	716,4
Disposal of nonfinancial assets	9,6	4,4	17,3	15,0	46,3
Gross/Net operating balance (revenue minus expense)	116,5	276,0	179,7	-95,6	476,6
Net lending /borrowing (revenue minus expenditures)	59,9	181,6	-44,4	-390,5	-193,5
Net financing = (Minus) Net lending /borrowing	-59,9	-181,6	44,4	390,5	193,5

Table 2