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Fiscal Federalism in Bosnia and Herzegovina: Ten Years after the Dayton Treatment and Still not in a Steady Condition

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Abstract: The following paper deals with the fiscal federalism in Bosnia and Herzegovina (BiH). Besides a detailed description of the development of the fiscal federalism in BiH since the Dayton peace process, the main focus of this paper is to illustrate how the public finance system in BiH is designed and what the main differences between the Republika Srpska and the BiH Federation are. We analyse the revenue disparities between the cantons and their respective municipalities, which are boosted by the origin or rather the derivation principle in tax collection, and present an equalisation system based on the VAT, which can minimise the fiscal gaps mainly in the Federation of Bosnia and Herzegovina (FBiH). Moreover, this paper highlights the successful process and the unsolved problems of the recently introduced Value Added Tax in BiH. Especially the VAT introduction, the common Governance Board, the Indirect Tax Administration (ITA) and the newly formed common army and police force could be interpreted as signs of stabilisation for this fragmented federation. Although these are milestones of a peaceful coexistence between Moslem Bosniacs, Orthodox Serbs and Catholic Croats, the Bosnian fiscal federalism has only been partly achieved.

JEL Classification: H7; H2; H1

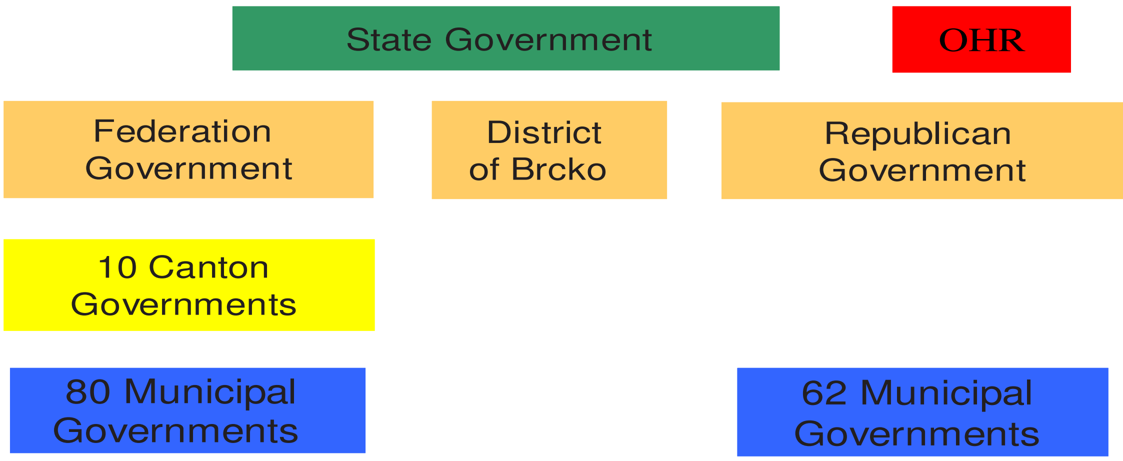
Keyword: Fiscal Federalism, Grants, VAT introduction, Bosnia and Herzegovina

1. Introduction

After almost four years of bloody conflict between the three ethic groups, the political leaders of the Bosnian Serbs, Croats and Moslems agreed on a peace agreement at Wright-Patterson Airbase in Dayton, USA, on November 21st, 1995. The General Framework Agreement for Peace (GFAP), which is also known as the Dayton Peace Agreement (DPA), was signed by all the political parties in Paris on December 14th , 1995. The DPA became the basis for peace in Bosnia and Herzegovina and ended the civil wars, in which more than 300,000 people were killed and nearly two million people became refugees.

The Dayton peace agreement created Bosnia and Herzegovina (BiH) as a single sovereign state composed of two Entities - the BiH Federation and the Republika Srpska - and the small District of Brcko.[2] While the BiH Federation itself with a federal government in Sarajevo, ten cantons and 73 municipalities is structured as a three-tier fiscal system, the Republika Srpska consists of the Republican government, which is located in Banja Luka, and 62 municipalities only as a two-tier administrative body. Moreover, due to the Dayton peace agreement the Office of the High Representative (OHR) exists in BiH, which is the supreme authority for enacting laws and a huge number of political decisions. Therefore BiH is "*de jure*" not a complete sovereign country, because it is still under the supervision of the OHR of the United Nations.[3]

The following graph describes the actual political conception of BiH:



Source: own illustration

Another feature of the BiH fiscal federalism is that the central government does not possess a huge political influence, because the Entities have enacted their own constitutions and are politically, administratively and fiscally autonomous. For example, the whole revenues of the central government amounted to only €171 million in 2004[4], while in the same fiscal year the Republika Srpska has possessed €778 million and the Federation of BiH had revenues in the amount of €1,904 million at its disposal.[5] A similar situation between the central government and the two Entities can be observed in terms of the expenditure assignment. Table 1 shows the distribution of the accountability for some areas of expenditure between the different tiers of government:

Table 1: Distribution of the accountability for some areas of expenditure in 2005

	Central Government	**BiH Federation**			**Republika Srpska**	
		Federation	Cantons	municipalities	Republika	municipalities
Currency policy	X					
Defence policy		X			X	
Immigration	X					
Police		X	X		X	
Fire protection			X		X	
Universities			X		X	
Salaries of teachers			X		X	
Maintenance and new building for secondary schools				X	X	
Maintenance and new building for primary schools				X		X
Maintenance and new building for pre-schools				X		X
School buses				X		X
Kindergarten				X		X
Health Care			X	X	X	X
Theatres and museums			X		X	
Parks and sports facilities				X		X
Waste management				X		X
Electricity supply		X			X	
Water supply				X		X
Public transportation	X	X	X		X	
Roads		X	X	(X)	X	(X)

Source: own illustration.

But not only in terms of public expenditure in BiH there is an imbalance in favour of the two Entities as well as the District of Brcko compared to the central government. Until 2005 the central government was only responsible for the legislation on customs, and all important taxes were distributed by the derivation principle between the two Entities. For example, the personal income tax was levied, collected, and received completely independently by the RS and the FBiH. At the same time, the municipalities of the two Entities had some small petty taxes[6], but the main source of revenues for the municipalities are shared taxes. The following table 2 points out the distribution of the most important taxes in Bosnia and Herzegovina:

Table 2: Tax revenue assignments between the central government, the BIH Federation, the Republika Srpska and their respective municipalities.

	Central Government	**BiH Federation**			**Republika Srpska**	
		Federation	Cantons	municipalities	Republika	municipalities
Excise in FBiH	-	100 %	-	-	-	-
Excise in RS	-	-	-	-	100 %	-
CIT in FBiH	-	-	100 % [A]	-	-	-
CIT in RS	-	-	-	-	100 %	-
Road tax in FBiH	-	45 %	55 %	-	-	-
Road tax in RS	-	-	-	-	100%	-
Payroll tax in RS	-	-	-	-	74 %	26 %
Payroll tax in FBiH	-	-	80 % [A]	20 %	-	-
PIT in RS	-	-	-	-	75 %	25 %
PIT in FBiH	-	-	20 % [A]	80 %	-	-
Property tax in RS	-	-	-	-	-	100 %
Property tax in FBIH	-	-	20 % [A]	80 %	-	-
Conveyance duty in RS	-	-	-	-	-	100 %
Conveyance duty in FBiH	-	-	20 % [A]	80 %	-	-
Sales tax in RS	-	-	-	-	70 %	30 %
Sales tax in FBiH	-	-	80 % [A]	20 %-	-	-
Customs in RS	-	-	-	-	100 %	-
Customs in FBiH	-	100 %	-	-	-	-

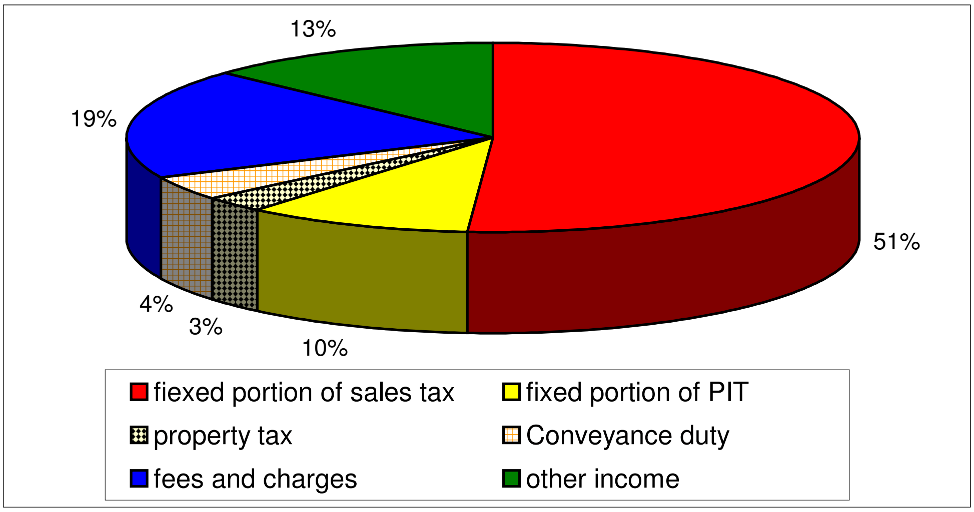
A= the tax sharing differs in every canton; see also table 3a und 3b, Source: own illustration

In an international comparison, the huge delegation of expenditure and taxation power in BiH from the central government to the Entities is quite unique. The weak political position of the central government is surely one of the major problems of BiH and has already been highlighted (see e.g. Fox / Wallich 1997, page 17, Fox / Wallich, 2001, page 404 or Spahn, 2002, page 19). However, this asymmetric conception or "over-decentralisation" in BiH could be burst by the VAT introduction, which is described in section four. The following sections two and three deal with the local revenue structure in the FBiH and the RS[7], because the abolishment of the sales tax and the implementation of a nation-wide VAT have also had a major impact on the local public finance in BIH.

2. Local Revenue Structure in the Republika Srpska

In 2003 the total public revenues[8] in the RS amounted to €766 million and the local portion of these €766 million was nearly €145 million. The revenues of the cities and municipalities in the RS are classified in the following figure :

Figure1: Revenues of municipalities and cities in the RS in 2003



Source: own calculation as well as based on data by US AID / SiDa, 2005, page 3

The local share of the sales tax is the main source of revenues for the cities and municipalities in the Republika Srpska. As already mentioned, all tax revenues in both Entities are distributed by the derivation or origin principle. Therefore the cities and municipalities in RS receive a fixed portion of 30% of their respective local sales tax yield. Additionally, two big cities in the RS – Banja Luka and Istocno Sarajevo – receive 35% of their local sales tax. Moreover, a further local portion of the respective sales tax revenues for every municipality exists in the RS. Every three years the Ministry of Finance (MoF) in the RS divides all municipalities in four "development-status" groups, which are conceived as follows:

- For developed municipalities the total local portion of the sales tax is still 30%,
- Partly-developed municipalities receive a total[9] fixed portion of 40%,
- Undeveloped municipalities are supported by a total fixed portion of 50% and
- Extremely undeveloped municipalities receive a total fixed portion of the sales tax of 60%.

At first glance, these kinds of extra tax revenues for less developed municipalities could be a solution to reduce the revenue disparities between the municipalities. But at a second glance, this form of equalisation in the RS is not reasonable, because the pure orientation towards the origin principle for the sales tax combined with a local portion aggravates the fiscal situation of weak municipalities compared to strong municipalities. Developed municipalities always have higher per capita sales tax revenues than weaker municipalities and this gap cannot be broadly reduced by a higher portion for the undeveloped municipalities of their respective lower local sales tax. Moreover, the classification criteria for the "development status" of the RS Ministry of Finance is very non-transparent and the danger of political pork barrelling is very existent.

The introduction of the VAT allows the renewal of the local equalisation in RS and the adoption of some international success stories. For example, in the United Kingdom a common pool for the tax revenues of the business rates exits. The business rates[10] are a property tax on commercial property and the tax rate is the same nation-wide. All collected tax revenues belong to the municipalities, but the tax yield is not distributed by the origin principle, but rather by the inhabitant numbers and some other factors (for a detailed description see King, 2005, page 9-17) by the central government. On the one hand, a common pool of tax revenues lowers the tax-benefit link between the political decision-makers and the voters. But on the other hand, a common tax pool can reduce the disparities better than the current equalisation in RS. An optimal local equalisation system, which equalises the tax revenue disparities as well as the expenditure needs, can be observed in Sweden (for a detailed description see Werner / Shah, 2005a). However, the MoF in the RS does not possess such a statistical background as their Nordic counterparts and therefore a horizontal equalisation like in Sweden or Denmark cannot be implemented in the Balkan region yet. However, some useful advice for a future conception of the VAT sharing and the resulting equalisation impact can be observed in the equalisation among the federal states in Germany. The German VAT revenues are distributed by tax sharing between the central government, 16 (federal) states and the local authorities (see Spahn, 1997, Werner, 2003 and Spahn / Werner, 2004). The respective fixed portion of the VAT is firstly allocated to the federal states based on the number of inhabitants. Moreover, the economically weak states obtain an additional portion of the respective states' VAT tax share, which guarantees a minimum tax yield of 92% of the nation-wide average for all states.

Whatever the MoF of the Republika Srpska will decide, the actual conception could not be used anymore because the replacement of the sales tax does not allow for the use of the origin principle.

3. Local Revenue Structure in the Federation of BIH

The ten cantons of the Federation of Bosnia and Herzegovina have the revenues of the sales tax, the corporate income tax, the payroll tax and the wage taxes at their disposal. The cantons share these tax revenues with their municipalities, but the degree of the tax sharing differs extremely between the ten cantons. The following tables 3a and 3b describe the respective tax sharing of the cantons and their municipalities in the fiscal year of 2003:

Table 3a : Tax sharing between the municipalities and the cantons in 2003

	CIT		Payroll tax		PIT		Property tax		Conveyance duty	
	cantonal	local	cantonal	local	cantonal	local	cantonal	local	cantonal	local
Una Sana	50 %	50 %	75 %	25 %	0 %	100 %	0 %	100 %	0 %	100 %
Posavina	100 %	0 %	80 %	20 %	70 %	30 %	50 %	50 %	50 %	50 %
Tuzla Prodrinje	100 %	0 %	80 %	20 %	0 %	100 %	0 %	100 %	0 %	100 %
Zenica Doboj	100 %	0 %	80 %	20 %	0 %	100 %	0 %	100 %	0 %	100 %
Bosna Prodrinje	50 %	50 %	80 %	20 %	50 %	50 %	50 %	50 %	50 %	50 %
Central Bosnia	100 %	0 %	80 %	20 %	0 %	100 %	20 %	80 %	5 %	95 %
Herzegovina Neretva	100 %	0 %	50 %	50 %	50 %	50 %	50 %	50 %	20 %	80 %
West Herzegovina	100 %	0 %	50 %	50 %	80 %	20 %	0 %	100 %	50 %	50 %
Sarajevo	100 %	0 %	100 %	0 %	100 %	0 %	60 %	40 %	0 %	100 %
Herceg Bosna	80 %	20 %	60 %	40 %	75 %	25 %	75 %	25 %	30 %	70 %

Source: own illustration

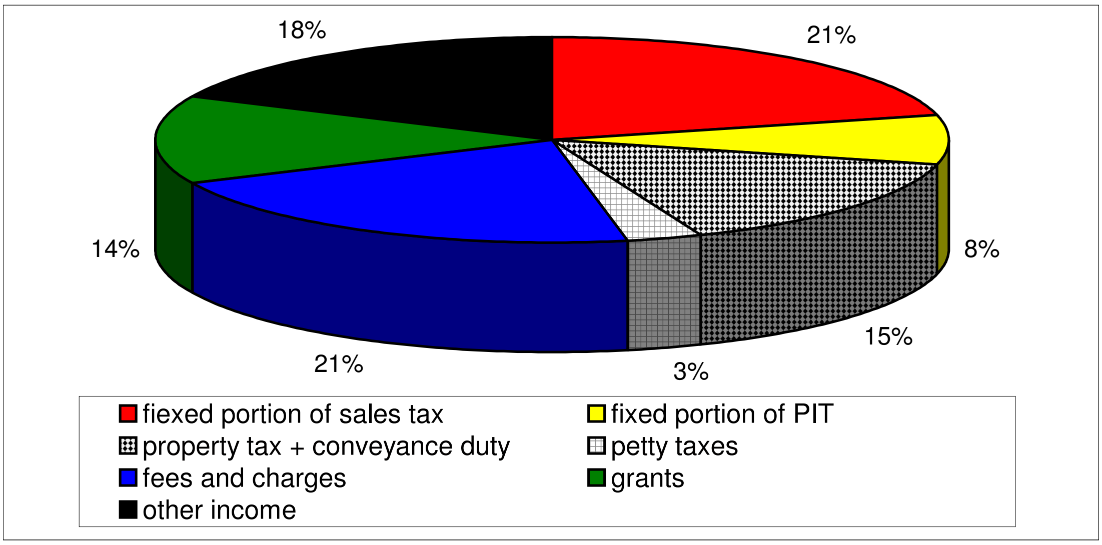
Table 3b : Tax sharing between the municipalities and the cantons in 2003

	lottery tax		sales tax – low tariff		sales tax – high tariff		tax on holiday houses		beverage catering tax	
	cantonal	local	cantonal	local	cantonal	local	cantonal	local	cantonal	local
Una Sana	0 %	100%	80 %	20%	80 %	20%	-	-	50 %	50 %
Posavina	50 %	50 %	80 %	20 %	80 %	20 %	-	-	0 %	100 %
Tuzla Prodrinje	100 %	0 %	100 %	0 %	70 %	30 %	-	-	100 %	0 %
Zenica Doboj	0 %	100%	100 %	0 %	80 %	20 %	-	-	100 %	0 %
Bosna Prodrinje	50 %	50 %	80 %	20 %	80 %	20 %	-	-	50 %	50 %
Central Bosnia	20 %	80 %	100 %	0 %	80 %	20 %	-	-	20 %	80 %
Herzegovina Neretva	50 %	50 %	100 %	0 %	75 %	25 %	-	-	50 %	50 %
West Herzegovina	0 %	100%	75 %	25 %	75 %	25 %	0	100	20 %	80 %
Sarajevo	100 %	0 %	100 %	0 %	100 %	0 %	-	-	100 %	0 %
Herceg Bosna	75 %	25 %	75 %	25 %	75%	25 %	-	-	0 %	100 %

Source: own illustration

In 2003, the municipalities of the FBiH possessed €137 million, which can be classified as follows:

Figure 2: Revenues of the municipalities and cities in the FBiH in 2003



Source: own calculation as well as based on data by US AID / SiDa, 2005, page 8

Compared to their counterparts in the RS, the municipalities of the FBiH own absolutely and relatively less and the small influence of the shared taxes – mainly from the tax sharing of the sales tax – is striking. The smaller influence of the sales tax results from the fact that the canton of Sarajevo, which is the richest of all ten cantons in FBiH, does not provide for sales tax sharing but rather for a vertical transfer of grants to its respective municipalities.[11]

The fiscal gaps between the cantons as well as the municipalities, which are boosted by the origin or derivation principle in terms of tax collection, are huge. Moreover, in the FBiH no equalisation system exists. The VAT introduction, which is the topic in the next section in detail, could be a solution to minimise these revenue disparities.

Some parts of the German VAT revenues are used to equalise the fiscal capacities of the federal states (see e.g. Spahn / Föttinger, 1997, Guihéry, 2001, Lenk 2001, Spahn / Franz, 2002, Werner / Xue, 2003 and Werner / Shah, 2005b). The German VAT equalisation formula has two advantages for the Fiscal Federalism in Bosnia in general and in particular for the FBiH. Firstly, using only the respective inhabitant numbers and the fiscal capacity measure allows this kind of VAT equalisation a fairly transparent and simple administration. An extremely complex and non-transparent system like for example the Australian Grant Commission would produce a political defence reaction and could also overburden the small administration staff numbers, which nowadays do not have the actual inhabitant numbers of Bosnia at all. As a matter of fact, the Australian Grant Commission also has some advantages (see Rye and Searle, 1997), but as for the Scandinavian system of expenditure needs equalisation, the collection of such data in BiH is currently not possible or is too costly.

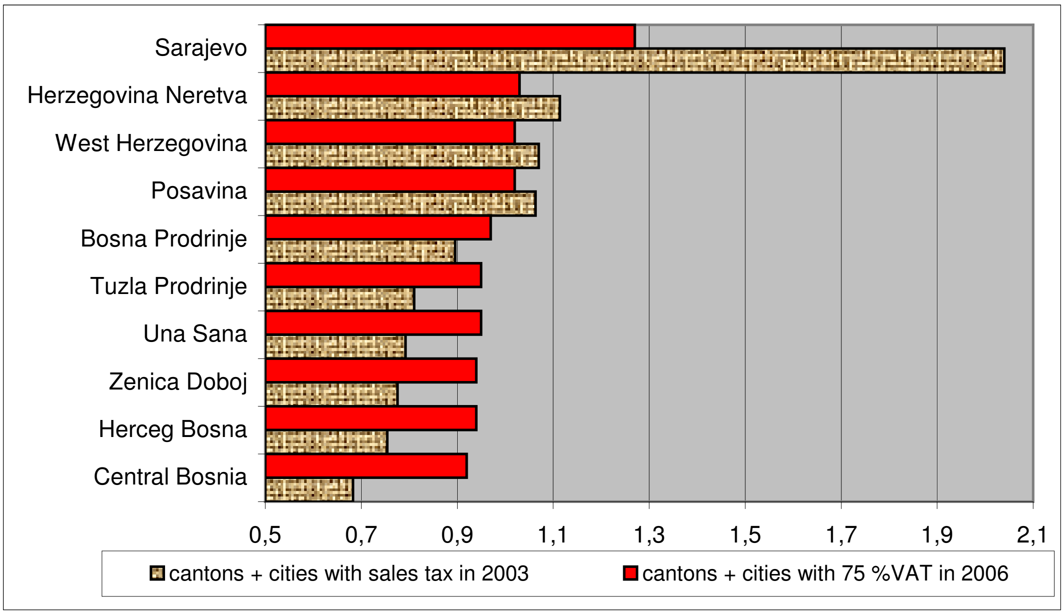
Secondly, the VAT is a completely new tax in Bosnia and therefore – besides the constitutional discussion about the ownership of these extra revenues between all tiers of government – the new VAT is a good possibility to release the local authority and the weak subnational cantons from their fiscal dormancy. Moreover, the German fiscal system has a good reputation with Bosnia's political decision-makers, which manifested itself in the currency board of the German DM and the Bosnian KM.

Using the German VAT equalisation as a spin-off of a fiscal reform, our suggestion can be summarised as follows: The origin principle for the VAT is not reasonable and the used single account conception fortunately avoids this situation. The whole VAT revenues have to be collected in a common pool and from this pool the central government, the two Entities and the district of Brcko receive their fixed portion. Inside the FBiH all VAT revenues belong to the cantons and are distributed by the following steps:

1. As regards the cantonal allocation of VAT revenue, at least 75% of VAT has to be distributed among the cantons according to the number of inhabitants.
2. The remaining 25% is distributed among the financially weak cantons to guarantee a minimum of 92% of the cantonal average per capita. The measurement of the cantonal average includes all other tax revenues of the cantons and their respective municipalities. The 100% consideration of the local tax revenues is one of the major differences as opposed to the German equalisation, which considers only 64% of the local tax revenues.[12]
3. If – after strengthening the financially weak cantons – a residue of the remaining 25% exists, this residue is transferred again to all cantons based on the inhabitant numbers. However, in this third step the inhabitant number of the densely populated canton of Sarajevo is readjusted with the factor of 1.3. A readjustment of sparsely populated cantons is excluded and the population of all other nine cantons is weighted with the factor 1.0[13]

The following figure 3 demonstrates that the equalisation effect of the first two steps is already extremely significant compared to the fiscal year of 2003:

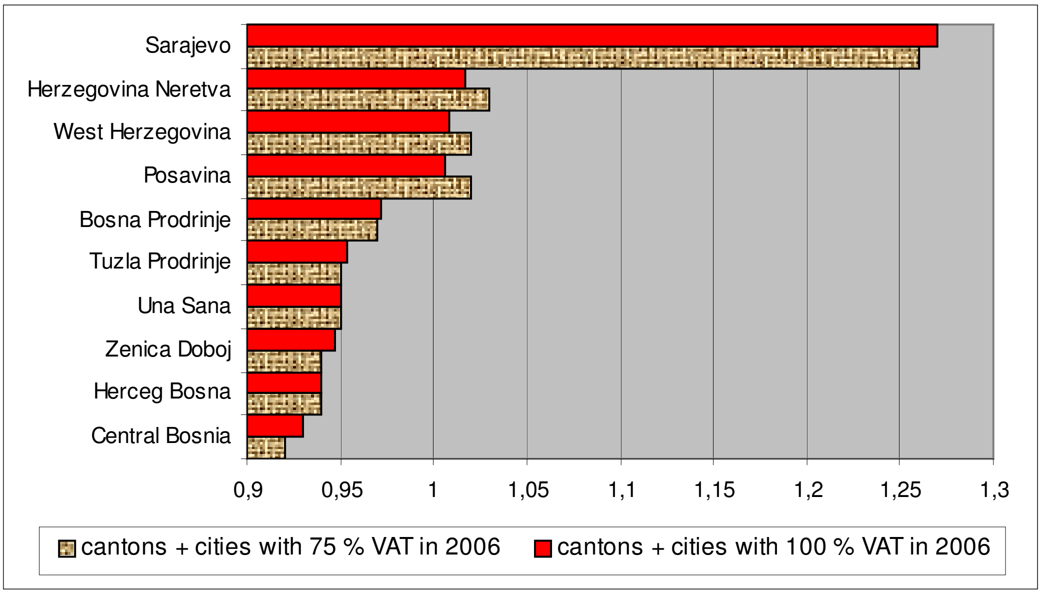
Figure 3: Per capita tax revenues of the cantons and their respective municipalities in 2003 (all tax revenues including sales tax) compared to 2006 (all tax revenues including 75% VAT)[14]:



Source: own calculation, the cantonal average amounts to 1,0 in both years and is measured separately in both years.

Figure 4 highlights the final equalisation effect of the 100% VAT distribution and points out the fiscal difference from step # 2 to # 3 in our estimation:

Figure 4: Per capita tax revenues of the cantons and their respective municipalities in 2006 with a portion of 75 % VAT and a 100 % distribution of the VAT



Source: own calculation

4. The VAT introduction

During the entire post-war period, the sales taxes were the dominant source of revenues in BiH. In 2003 the sales tax revenues accounted for somewhat more than 40% of the total tax revenues in BiH. Until the start of 2005, the two Entities and the District of Brcko had three separate and non-harmonised laws regulating the sales taxes. The differences between the three laws were significant and included different rates, numbers of reduced rates as well as tax bases to which these rates were applied. These differences naturally induced arbitrage and produced market distortions. Furthermore, very little cooperation existed between the individual tax administrations, which resulted in massive tax evasion and substantial revenue losses. Importers and retailers from the RS often declared fictitious sales in the Federation and *vice versa* while selling goods tax-free on the black market. Such evasion schemes were especially attractive for importers and retailers of heavily taxed excisable goods such as oil[15]. The ability to make high profit margins from selling oil on the black market has led to the phenomenon of abundant petrol stations in BiH. For example, even today there are more than 20 petrol stations operating on the 60km road from Banja Luka to Gradiska. The lack of coordination was also present with other indirect taxes, e.g. excises, where domestic producers of excisable products that wanted to sell in both Entities were faced with double taxation and a complicated reimbursement process. Due to this reason, the only domestic oil refinery in Brod in the Republika Srpska was, for a long time, kept out of the oil market in the Federation.

The lists of the exempted goods under the three Sales Tax Laws were extensive and differed between the three laws. The main exemptions consisted of the basic food products (bread, milk, oil, etc.), exported goods, reconstruction materials and equipment for agricultural production. The long lists of exemptions and the dispersion of tax rates aggravated the problems of tax compliance and erosion of the tax base.

The coordination between the Entities on taxation issues has been improved gradually through a number of agreements. The goal was to improve cooperation and the exchange of information between the Entity tax administrations and Brcko as well to harmonise the tax laws. The following table 4 shows the sales tax rates prescribed by the Entity laws before the full harmonisation was reached. In 2003, as one of the attempts to tackle the tax evasion, the point of collection of the sales taxes on imported excisable goods was relocated from retailers to the border. This change was followed with a surge in revenues from this source confirming the suspicion that a significant share of excisable goods had been channelled through the black market by the use of fictitious companies. One of the agreements aimed at strengthening the single BiH market is the so called "*Mrakovica Agreement*" where the Prime Ministers of the FBIH and the RS concluded that the excises on the inter-Entity sales would be paid only at the point of production in order to avoid double taxation.

Table 4: Sales tax rates applied in the BiH Federation and the Republika Srpska

Year		**FBiH**	**RS**[16]
1998	goods	5 %, 10 %, 15 %, 20%	10 %, 20 %
	services	10 % 15 % 30 %	10 %
2004	goods	10 % 20 %	10 %, 20 %
	services	10 %	10 %%

Source: own illustration

Recognising the need to tackle the cross-Entity tax evasion through a painful process of political negotiations and under a watchful eye of the international community, a political consensus was reached to shift the responsibility for indirect taxation to the state level. In late 2003, the state parliament adopted the Law on Indirect Taxation System (ITS Law) and established a joint institution responsible for indirect taxation in the whole territory of BiH - Indirect Taxation Authority (ITA). After its establishment, the ITA worked in close cooperation with the European Customs and Fiscal Assistance Office (CAFAO) on the introduction of the long-expected VAT set for 2006.

In the interim period, starting from January 2005, the ITA assumed responsibility for the collection of import duties, road fees, excises and sales tax on excisable goods. A state-wide single account was established for payments of the taxes collected by the ITA. The sales tax on non-excisable goods, as well as the sales tax on services remained under the control of the Entity tax administrations until 2006. Table 5 presents indirect tax revenues for the single account.

Table 5: The single account revenues in 2005 and 2006 (estimated)

	2005	**2006**	Increase in %
VAT	€ 0.0 million	€ 936.43 million	---
Customs duties	€ 309.64 million	€ 281.47 million	-9.1%
Excises	€ 399.32 million	€ 428.16 million	+7.2 %
Imported	€ 304.83 million	€ 326.87 million	+7.2 %
Domestic	€ 155.86 million	€ 101.29 million	+7.2 %
Sales tax	€ 275.59 million	€ 35.84 million	-87%
On imported goods	€ 208.04 million	€ 26.28 million	-87.4 %
On domestic goods	€ 61.36 million	€ 9.56 million	-84.4 %
Other	€ 6.13 million	€ 9.56 million	+55.3%
Road tax	€ 84.21 million	€ 92.19 million	+9.5%
Other tax	€ 3.17 million	€ 0 million	-100 %
Total	€ 1 076.78 million	€ 1 774.08 million	+64.8 %

Source: Macroeconomic Unit of the GB of ITA and own estimation

The ITS Law determines that the revenues from the Single Account are to be regularly distributed in the following order:

1) the amount is transferred to the state budget based on the current year's state budget,

2) the share of the remaining amount to be transferred to the Federation, to RS and to Brcko is determined by their share of the final consumption,

3) the amount needed to finance international debt obligations is deducted from the shares of the Federation and RS and is paid directly to the state budget.

The Governing Board (GB)[17] of the ITA reached an agreement that the shares of the final consumption of the FBiH, the RS and the District of Brcko were to be calculated monthly from the corresponding shares of the sales tax base. The GB also prescribed the methodology for the calculation of the shares. However, the monthly shares had not been calculated in 2005, but instead, a fixed share from June 2004 was applied throughout 2005. Recalculation of the shares in mid-2005 was associated with a significant shift in the shares, which led to a cycle of disputes on the accuracy of data submitted by the ITA and the Entities as well as on the methodology of calculating the shares. Consequently, the GB has been unable to reach an agreement on this issue until today.

BiH was the last country in the Balkans region to introduce VAT. The Law on VAT was adopted by the Parliament of BiH in January 2005. Drafted under the guidance of CAFAO, the law was designed to be consistent with the Sixth European VAT Directive. Unlike the case of the EU member countries and neighbouring countries of BiH, the VAT rate in BiH was set to a single rate of 17%.[18] Despite significant political pressure from the opposition parties in the state parliament to introduce a reduced rate for those goods that were treated favourably under the sales tax system, a case was made to start the introduction of VAT with a single rate: reduced rates increase administrative expenses and, at the same time, create incentives for false reporting and misclassification. They significantly complicate the reporting and control systems and increase the number of refund situations. Furthermore, the introduction of reduced rates represents an inefficient policy to relieve the tax burden on the low-income households as such policies extend to the entire society.

The exemptions embedded in the BiH VAT Law reflect the requirement of the Sixth VAT Directive to exempt certain goods and services. The IMF estimated that these exemptions reduce the tax base of BiH by €283 million. The exempted sectors, such as education, health, financial and social services, by definition do not charge VAT on their sales. On the other hand, tax credits are not allowed for these sectors. That is, these sectors are not able to deduct VAT paid for their inputs. Only the exported goods have been granted "full exemption" (with tax credit). Such exemptions are also referred to as "zero-rating". In the last few months before the introduction of VAT in BiH, the constantly present requests from various interest groups to extend the list of exempted goods and services have become more pronounced. Some of these requests have undergone parliament procedure and are yet to be voted on. It remains to be seen whether and when the first amendments to the Law on VAT regarding the exempted sectors are to be introduced.

As already mentioned, the VAT revenues are distributed jointly with other indirect taxes from the Single Account. The ITS Law foresees that the apportionment of funds between the Entities and Brcko is done in accordance with the associated shares of the final consumption as revealed by VAT returns. However, the methodology for the calculation of the shares was not determined before the introduction of VAT in January

2006. This has caused disruptions in revenue distribution and aggravated the problem of budget uncertainty for all budget units in the country.[19] There have been proposals to introduce an interim solution (a set of coefficients for apportionment based on historical shares or similar) for the initial year of the VAT introduction until the revenues and associated monthly shares of the final consumption have stabilised. Table 6 displays the distribution of revenues from the single account in 2005.

Table 6: Distribution of revenues from the Single Account in 2005 between all tiers of government

	in € million	in %
Refunds	0.46	0.0
Central government	128.59	11.9
FBIH gross	622.7	57.8
FBIH net	551.02	51.2
Debt service	71.68	6.7
RS gross	288.88	26.8
RS net	243.37	22.6
Debt service	45.5	4.2
District of Brcko	35.94	3.3
Total	1 076.53	100

Source: own estimation

5.Conclusion

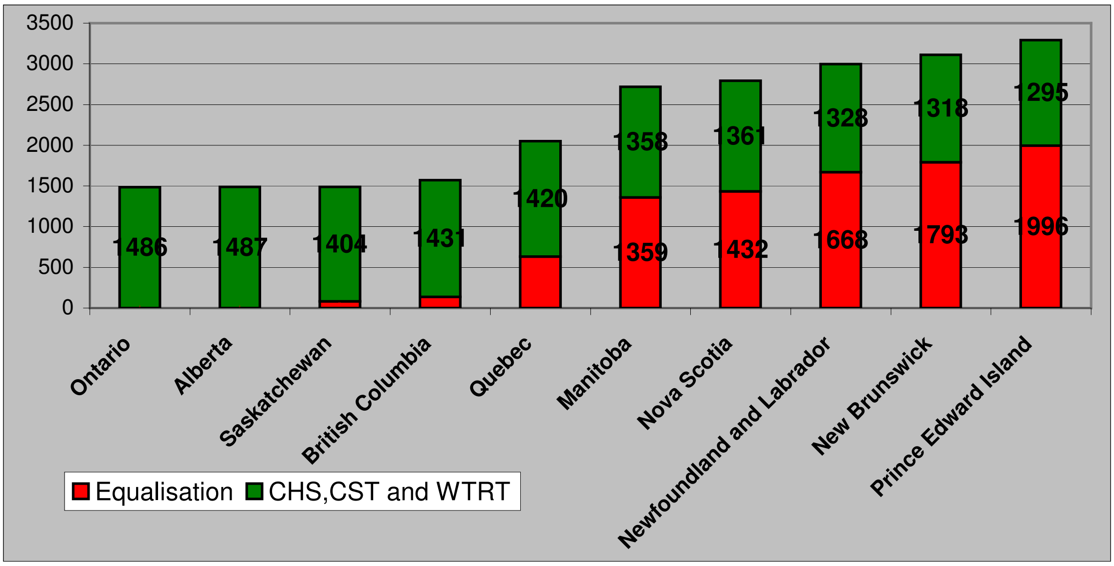
One of the major features of the Bosnian fiscal federalism – a weak central government, which is financed by the two entities without any taxation right – is quite unique worldwide. The VAT introduction and its institutional "ancestor" – namely the Single Account – will strengthen the fiscal independence of the central government. However, all political decision makers have not agreed yet on how to distribute the VAT revenues between all tiers of government, which is very unusual due to the fact that the new tax has already been collected since the beginning of 2006.

Therefore, we used the German VAT equalisation as a spin-off of a fiscal reform, but we have deleted some characteristics of the German equalisation system which could have a negative impact in BiH. For example, our suggestion is not based on vertical grants by the central government. In Germany two kinds of these vertical grants exist: deficit coverage funds and special requirement funds. The application of the deficit coverage funds with a general equalisation up to a national average of 99.5 % would reduce the incentives of all economically weak cantons to raise extra tax yields, and the special requirement funds in Germany are mainly the result of the German reunification. Moreover, we want to avoid the bail-out problem (see Seitz, 2000 Spahn / Werner, 2004 and Rodden, 2005), and with a maximum of 95% equalisation nationwide we want to develop enough positive incentives to increase the tax collection.

Furthermore, it has to be borne in mind that the subnational tax sovereignty is very low in Germany, because all important taxes are shared between the central government, the states (Länder) and the local authorities (see Guihéry / Werner, 2005). If in the future the cantons receive their own tax sovereignty, a further adaptation of the equalisation system will be required. The Canadian equalisation system is interesting for BiH, because this country also offers a heterogeneity of different forms of cultural heritage with the major French speaking province of Quebec, the bilingual mixed province of New Brunswick and the eight English-speaking Anglo-Saxon Provinces. One the one hand, Canada has one of the highest forms of subnational tax sovereignty (see Hayashi / Boadway, 2001 and Esteller-Moré / Solé-Ollé , 2002) in the world, but on the other hand the economically weak provinces, which are mostly located on the Atlantic Ocean coastline, are heavily influenced by the vertical equalisation grants of the central government in Ottawa.

The Canadian transfer system consists of four[20] pillars: the Canadian Health Transfer (CHT), the Canadian Social Transfer (CST), the Territorial Formula Financing (TFF) and the Canadian equalisation. The following figure 5 demonstrates the fiscal impact of all four pillars in the fiscal year of 2005-2006

Figure 5: Transfer from the Canadian central government to the provinces in the fiscal year of 2005-2006 (measured in CAN $ per capita)



Source: own illustration

We are going to discuss the Canadian equalisation, because it is based on the fiscal capacity of every province. The measurement of the fiscal capacity includes 33 provincial tax bases[21]. With clear transparency and low cost of administration, the

Canadian system has similar advantages to the German equalisation system compared to their counterparts in other federal or unitary countries. In contrast to the German equalisation system, the Canadian equalisation allows the reflection of different subnational tax rates. If the Bosnian cantons once receive a surcharge on the CIT or the PIT, the Canadian equalisation system could surely be borne in mind. Nevertheless, the Canadian transfer system cannot avoid political pork barrelling (see Milligan / Smart, 2005), which especially in such a tense political situation like in BiH is not very reasonable.

The acceptability to the population and the different interest groups is also essential for the success of the reform of the fiscal system of BiH. This is not easy as many players are involved and as some players of this long-term positive sum game will lose some revenues in our suggested redistribution mechanism of the VAT revenues in a short-term perspective like for example the canton of Sarajevo. But for the long-term goal of the majority of the population and the politicians in BiH – membership of the European Union – these reforms are necessary. If the people of BiH discuss these political decisions instead of such nationalistic questions such as what name to give to the airport in Sarajevo and how every ethic group acted during the last international soccer game between BiH and Serbia-Montenegro, the still existing wounds of the civil war can heal more easily.

6. Appendix

Figure A1: Map of Bosnia and Herzegovina

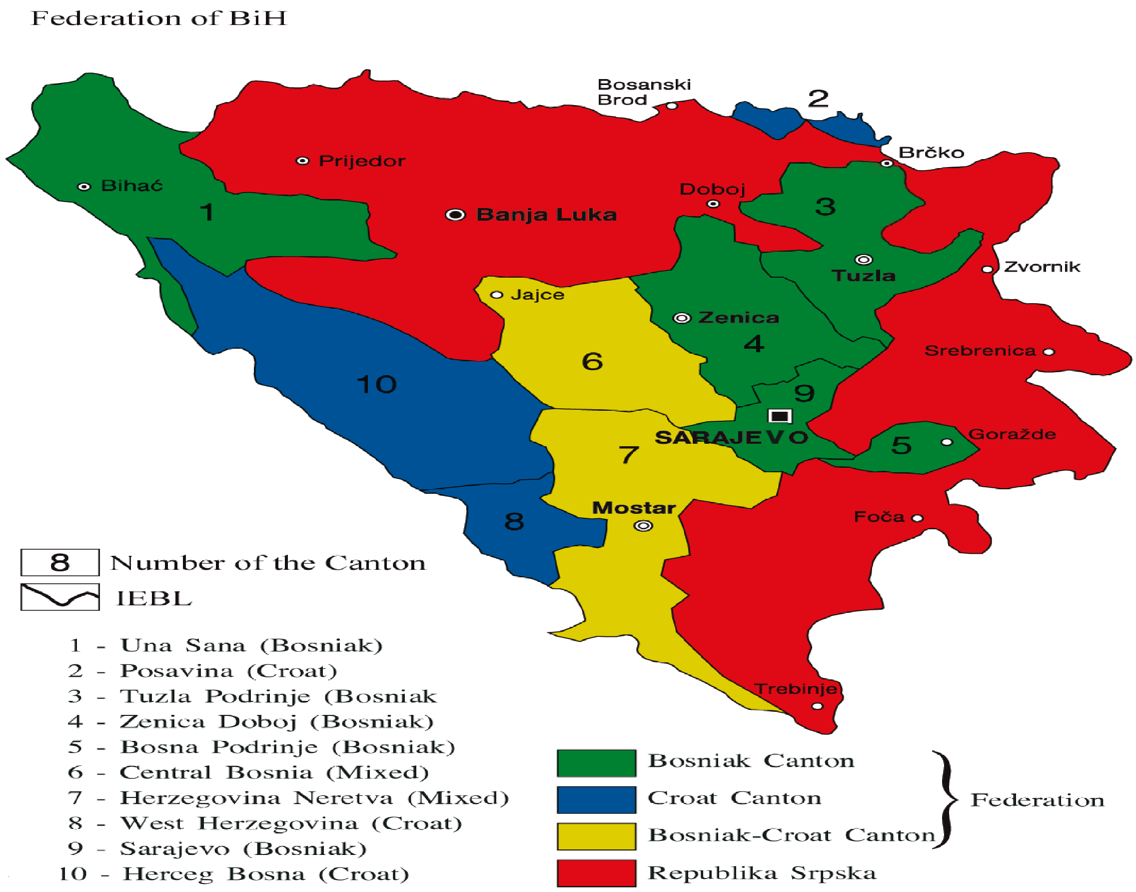
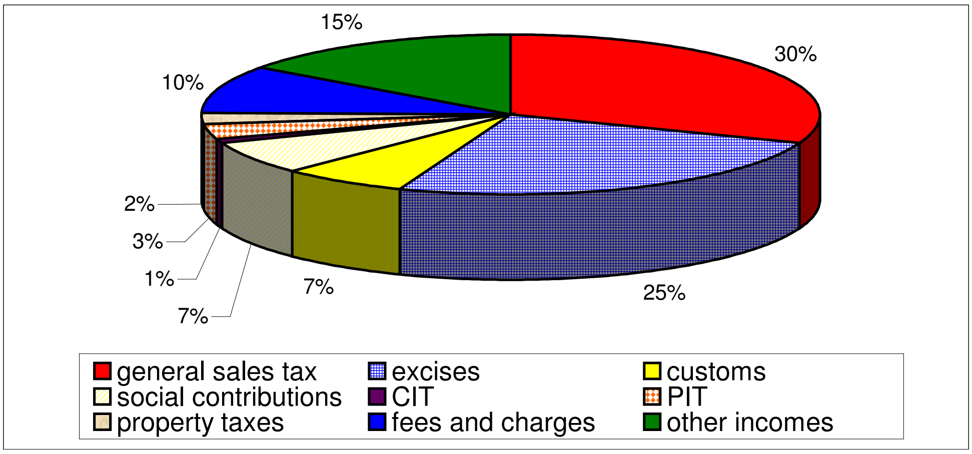


Table A1: Tax and non tax revenues for BiH in the fiscal year 1999 (in €million)

	BiH Federation			Republika Srpska			Total BiH
	Federation government	Canton & municipalities	Total BiH Federation	Republika government	municipalities	Total Republika Srpska	
Total taxes	346.66	637.22	983.88	266.95	32.82	299.77	1283.65
Sales tax	0.0	387.71	387,71	54.35	19.22	73.57	461.28
Excise	160.03	0.0	160.03	43.51	1.69	45.2	205.23
Customs	177.42	0.0	177.42	72.19	0.0	72.19	249.61
PIT / CIT	9.2	135.44	144.64	25.41	6.6	32.01	176.65
Property tax	0.0	17.18	17.18	0.0	2.35	2.35	19.53
Gift & death tax	0.0	0.26	0.26	0.0	0.15	0.15	0.41
Gambling tax	0.0	0.15	0.15	0.0	0.25	0.25	0.4
Fees and citizen tax	0.0	55.47	55.47	0.0	25.16	25.16	80.63
Other taxes	0.0	41.01	41.01	46.32	2.5	48.82	89.83
Total social contributions	472.43	0.0	472.43	156.15	0.0	156.15	628.58
Pension fund	254.11	0.0	254.11	78.38	0.0	78.38	332.49
Employment fund	29.14	0.0	29.14	13.24	0.0	13.24	42.38
Health fund	189.18	0.0	189.18	64.53	0.0	64.53	253.71

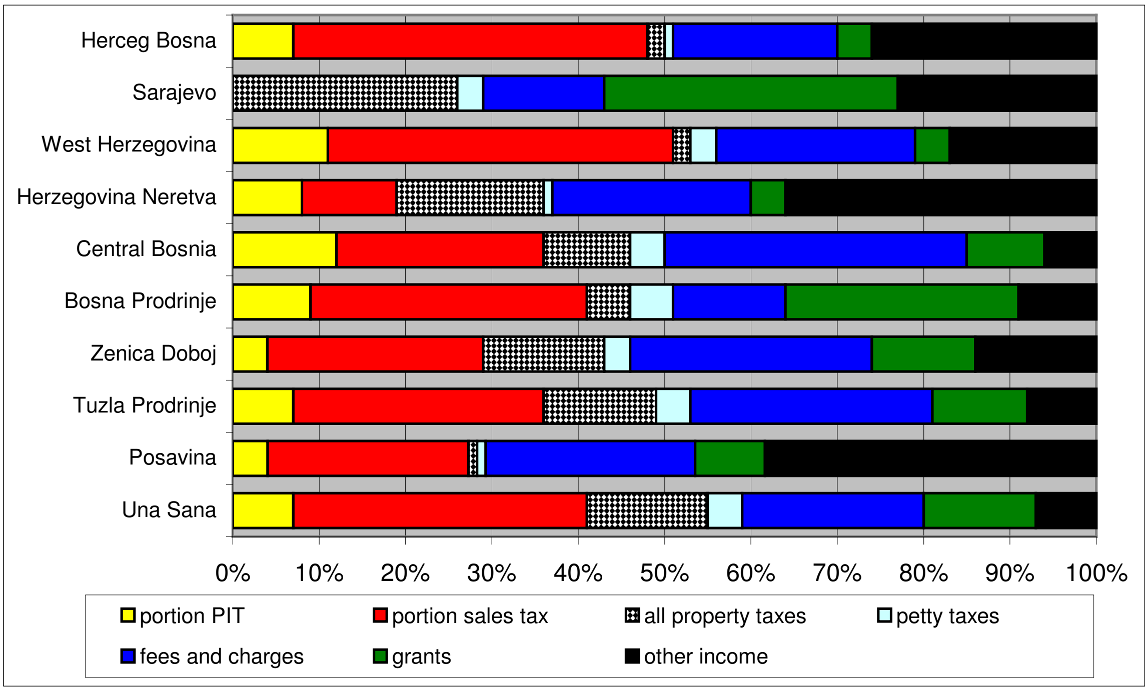
Source: own calculation based on Fox / Wallich, 2003, page 474 and Fox, 2003, page 7

Figure A2: Total revenues in the Brcko District in 2004



Source: own calculation

Figure A3: Total revenue structure of the municipalities by canton



Source: own illustration mainly based on data by US AID / SiDa, 2005, page 7

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[2] A detailed map including the ethic composition can be found in the appendix.

[3] The OHR and all its regional offices are sponsored by a group of 55 countries and international organisations. However, the OHR has no authority over the foreign military force, which has been located in BiH since the end of the civil war to stabilise the country.

[4] The budget of the central government is financed by the two entities. The Federation of Bosnia and Herzegovina provides two thirds and the Republika Srpska supplies one third of the budget. A similar situation can be observed in Germany during the time of 1871 to 1915. Besides some minor tariff and customs receipts plus some joint excise and special consumption taxes, the German *Reich* was practically without revenue sources of its own. To finance its budget, the so-called *Matrikularbeiträge*, a kind of membership fees or contributions, had to be granted by the *Länder*, the *Reich* becoming their *Kostgänger* (boarder), as it came to be called in those times. The central government of BiH today is in the same fiscal position, because it is undoubtedly a boarder of the two entities.

[5] A short survey of the fiscal year of 1999 is located in the appendix.

[6] A diverse number of property taxes, conveyance duty, tax on mobile phones, tax on boats, tax on weapons and tax on vehicles. Most of these taxes are summarised by the phrase “Citizen tax”.

[7] A short survey of the fiscal situation of the Brcko District is located in the appendix.

[8] Excluding customs and including the contribution to the four social security systems (health, pension, young welfare and unemployment insurance). The contribution amounted to €197million in 2003.

[9] The municipalities receive the regular portion of 30 % and an extra portion for being less developed of 10 %.

[10] For the business rates, Scotland and Wales use the official name of non-domestic rates.

[11] A general overview of the structure of the revenues in the municipalities in all ten cantons can be found in the appendix.

[12] Due to the “Solidarity Pact II” the consideration of the municipal tax revenues have increased from 50 % to 64 %. In Germany's equalisation formula, this step allows for a stronger consideration of the financial strength of the municipalities and hence takes more into account the fact that in financially strong states, there are usually also financially strong municipalities. From a financial viewpoint, it would be right to take into account 100% of the municipal taxes; However, a reduction of 36% as an exemption has been stipulated in the Law on Measures (MaßstG), and is one of the politically motivated completely arbitrary decisions.

[13] Besides the readjustment of the three city-states, in Germany an additional allowances of 6% exists when calculating the financial requirements for densely populated regions at the local revenue level. A similar conception or a favour for sparsely populated regions is not reasonable for Bosnia, because the danger of political pork barrelling in the definition of "sparsely" is quite high. Furthermore, one feature of our suggestion is a clear and transparent conception.

[14] For the VAT revenues, we use the estimation of the MAU. The MAU forecasts KM 1.908 billion for the Federation of Bosnia and Herzegovina. Our total tax revenues for 2006 are based on 2003 and for every canton we excluded their respective sales tax revenue with a general ratio of 0.68 of the total revenues

[15] The oil price has a huge impact on the Bosnian trade balance, which, due to an oil-price increase, leads to a transfer of income from importing to exporting countries through a shift in the terms of trade. A detailed observation, which shows the development of the major excisable products from January 2003 to September 2005, can be found in Đukiã / Werner, 2005.

[16] Some revenues of the sales tax in the RS refer to the railroad tax as earmarked revenues. Therefore all tax rates have a 2% component which is directly linked to the railroad tax.

[17] The GB comprises State and two Entity Ministers of Finance as well as three experts appointed by the State and Entity Governments. The GB has a foreign initial Chairman appointed by the High Representative. The Director of the ITA, a representative from Brcko and a representative of the Central Bank are observers of the Board.

[18] IMF has evaluated the VAT rate of 16% as revenue neutral, i.e. the rate producing the same amount of revenues as under the sales tax system. Such a tax rate should also be price neutral. Following this, the application of a 17% rate increases the average price by somewhat less then 1%. However, the Macroeconomic Unit of the GB of ITA estimated the VAT base at 135% of the IMF’s estimate.

[19] It is worth noting that the State and both Entity Parliaments failed to adopt budgets for 2006 in the legally prescribed time (by 31 December 2005).

[20] The Health Reform Transfer has been introduced recently, and therefore are sometimes mentioned five pillar of the Canadian transfer system.

[21] The calculation of the tax base uses nation wide average tax rates. Furthermore, the Canadian standard measures uses the average fiscal capacity of the five "middle income" provinces.