

# SPOTLIGHT ON:

## Fiscal Consolidation and Public Sector Reform

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The public sector in Serbia has for quite some time now been characterized by high spending and a low quality of services. The public sector has been generating a relatively high fiscal deficit over the past three years which has after the completion of privatization been funded from loans, thus implicating the fast growth of the public debt to GDP ratio. Moreover, the structure of public spending is characterized by high current expenditures and low public investments, which runs counter to the state's development ambitions. Public sector reform and its fiscal consolidation are thus prerequisite for improving state efficiency and pre-empting a debt crisis. This paper analyzes various modalities of fiscal consolidation, such as (a) fiscal consolidation entailing exclusively a cut in current public spending and (b) fiscal consolidation entailing both a cut in current public spending and an increase in tax rates.

### Introduction

There are two key reasons for reforming Serbia's public sector. The first is low public sector efficiency, i.e. the relatively high level of costs vis-à-vis the quality and volume of services this sector provides. The priority goal of the reforms thus involves cutting public sector costs and improving or at least maintaining the current quality of public services. The second key reason for the reform, closely related to the first reason, regards ensuring the long-term sustainability of public finance. Fiscal deficit will be high and public debt will grow rapidly if the current tax system and level of public spending are maintained. Fiscal (financial) consolidation of the public sector is necessary to prevent this negative scenario.

The below analysis mostly addresses issues related to the fiscal consolidation of the public sector and points out the problems regarding its efficiency only in passing. The following issues are especially relevant with respect to fiscal consolidation:

- Is the fiscal capacity of the tax system in Serbia falling and, if it is, at which level will it stabilize?
- What fiscal deficit can be sustained over the following years without resulting in the excessive expansion of public debt?
- What level of public expenditure corresponds to fiscal capacity and a sustainable fiscal deficit level, what is its composition and how can it be achieved?
- Is it economically optimal to achieve fiscal consolidation solely by cutting public spending or would it be justified to achieve part of the adjustment by increasing taxes as well?

### Fiscal Capacity

Serbia's consolidated public revenues stood at around 43.5% GDP in 2005 and 2006. The question is whether a similar level of public revenues can be realized in the years to come. The answer to this question is negative given the recent cuts in some important tax rates and the ongoing reduction of customs duties on EU products. In addition, cutting the spending to GDP ratio will result in a permanent decline in the VAT/GDP ratio. Herewith an overview of the chief changes in tax policy and the economy of Serbia that led to a fall in fiscal capacity:

- The cut in the wage tax rate and the introduction of the tax-free wage threshold in early 2007 permanently cut public revenue by around 1% GDP;

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- Permanent losses were increased by another 0.7% GDP by the cut in other taxes (on transfer of absolute rights from 5% to 2.5%, by the transfer of specific products from the higher to the lower VAT rate category, the exemption from VAT for first-home buyers et al) in mid-2007;
- The cut in customs duties on imports from the EU led to a 0.4% GDP fall in revenues from customs in 2009 and the abolition of customs duties on EU products will result in the cumulative drop in customs revenues of at least 1.5% GDP. VAT revenues will fall by another 0.3% GDP due to the abolition of customs duties on imports from the EU;
- The drop in the domestic demand to GDP ratio will directly lead to a decline in VAT revenues by another 1% GDP. In the next few years, domestic demand is expected to exceed the GDP by 10-15% instead of by 20-25%;
- The fall in employment risks to cut revenues from wage taxes and social insurance contributions by around 0.5% GDP;
- The increase in excise on cigarettes could bring around 0.5% GDP of additional revenue.

A summary of the lasting effects of the above measures leads to the assessment that the public revenues may stand at 39% GDP in Serbia in the medium term given the valid tax rates, planned cuts in customs duties on imports from the EU and the expected drop in the domestic demand to GDP ratio.

Stricter fiscal discipline could, of course, bring in additional revenues but spectacular results should not be expected. Comparison of the tax rates and other tax elements (tax bases, tax exemptions et al) and revenues expressed in percent of GDP in Serbia with those in neighboring countries leads to the assessment that there is room, albeit moderate, for improving tax collection.

**Table L1-1. Serbia: Public Revenues – Realization and Projections (in % GDP)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013-2018
Public revenues	42.9	43.8	42.4	41.1	38.8	38.0	38.5	38.8	38.8
Income tax	5.6	6.0	4.9	4.9	4.9	4.7	4.8	4.9	4.9
Profit tax	0.6	0.9	1.3	1.4	1.0	1	1.2	1.4	1.5
VAT	12.8	11.4	11.2	10.8	9.9	9.8	9.7	9.6	9.5
Accises	4.2	4.4	4.2	3.9	4.3	4.4	4.6	4.8	5
Customs	2.3	2.3	2.4	2.3	1.5	1.3	1.1	0.9	0.7
Other taxes	1.4	1.5	1.4	1.3	1.3	1.2	1.2	1.2	1.2
Contributions	10.8	11.7	11.4	11.2	11.2	11	11.1	11.2	11.2
Non-tax and other	4.9	5.5	5.3	5.2	4.6	4.6	4.8	4.8	4.8

Source: Ministry of Finance for the 2005-2008 period, author's estimates and projections for the 2009-2018 period.

## Estimates of a Sustainable Fiscal Deficit and Public Spending if Taxes Remain Unchanged

Given the current tax revenues, the question arises as to what fiscal deficit level would be sustainable in the next decade or so without its funding leading to state over-indebtedness. The answer depends on a large number of factors, such as the GDP growth rate, the real interest rate levels, fluctuations in the real exchange rate of the dinar, et al, and on the level of state indebtedness which will be sustainable in the long term.

The estimate of a sustainable fiscal deficit level departed from the optimistic assumption that the GDP would grow at a 3% rate in 2010 and at an average 5% afterwards. On the assumption that the inflow of foreign savings will be lower than it has been in the preceding years, the projected GDP growth rate is somewhat lower than the rate achieved in the 2001-2008 period.

The assumption is that the real interest rate on public debt will stand at 3.5% in 2010, at 4% in 2011, at 4.5% in 2012 and 5% thereafter – thus equalling the GDP growth rate. The rise in real interest rates on state debt is the result of a large number of factors, notably: a lower share of foreign currency savings in public debt – interest rates on savings reduced the overall interest rate average; the period in which Serbia repaid debts to international organizations at extremely low interest rates has ended; the increase in the share of the new debt – characterized by relatively high interest rates – in the total public debt.

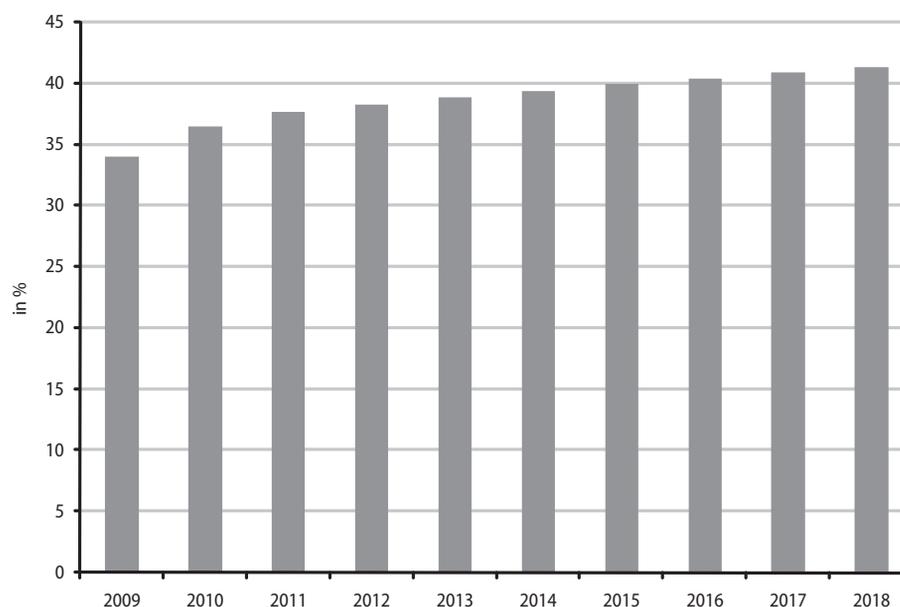
For simplicity purposes, the assumption is that the dinar's real exchange rate will remain unchanged – its depreciation would increase and its appreciation would decrease the debt level and the debt servicing burden.

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The assessment is that the sustainable level of public debt<sup>1</sup> in Serbia ranges in the 40%- 45% GDP interval. The sustainable<sup>2</sup> level of public debt was calculated on the basis of the estimate that costs of interest rates on public debt should not exceed 2% GDP by much.

Based on these assumptions, the estimate is that the consolidated deficit, standing at 4.5% GDP this year, will in a few years stabilize at the 2.5% GDP level, while the primary deficit (total deficit minus interest rate costs) will drop from 3.6% GDP in 2009 to 2.3% in 2010 and stabilize at 0.5% GDP as of 2012. This means that spending on interest rates will be negligibly lower than the fiscal deficit in the coming years, due to the increase in public debt and interest rates.

**Graph L1-2. Public Debt to GDP Ratio in Serbia (estimate)**



These public revenue and fiscal deficit levels lead to the conclusion that the sustainable consolidated level of public expenditures will stand at around 41.5% GDP in the years to come. This share of public expenditures is 2.5% lower than in the 2006-2009 period.

The first way to achieve fiscal consolidation entails cutting public spending down to the level set by the current tax system and sustainable fiscal deficit. The second way to achieve fiscal consolidation entails predominantly cutting public expenditure and simultaneously boosting fiscal capacity by increasing specific tax rates. The second option would provide for a more moderate decrease in the public spending to GDP ratio, while the fiscal deficit and public debt would remain at a sustainable level.

### Achieving Fiscal Consolidation by Cutting Current Public Spending

If fiscal consolidation is achieved exclusively by reducing public expenditure – consolidated public expenditures would decrease by 2.5% GDP over the 2006-2009 period. Fluctuations in the ratio of specific public expenditure components to the GDP – current expenditure minus interest rates (hereinafter: current expenditure), interest rate and public investment expenditures – are particularly relevant from the economic point of view.

In the 2006-2008 period, current expenditure minus interest rate expenditures stood at around 39% GDP, interest rate expenditures stood at around 1% GDP, while public investments stood at around 4% GDP. Estimates are that interest rate expenditures will amount to 1% GDP and that the public investment to GDP ratio will fall to 3.5% in

1 The assumption is that public debt changes solely due to the existence of fiscal deficit. It is, however, possible that Serbia's public debt increases above that level, e.g. in the event the state assumes financial obligations related to denationalization. This analysis does not take into account either this possibility or potential revenues from the privatization of public companies.

2 The fluctuations in the public debt to GDP ratio were modeled by using the following formula:  $\frac{B_t}{Y_t} - \frac{B_{t-1}}{Y_{t-1}} = (r - g) \frac{B_{t-1}}{Y_{t-1}} + \frac{(G_t - T_t)}{Y_t}$ , where  $B_t$  is the public debt level,  $Y_t$  is the Gross Domestic Product,  $r$  is the real interest rate,  $g$  is the GDP growth rate,  $G_t$  is public expenditure without interest rates and  $T_t$  is public revenue. V. Blanchard (2003).

2009. The structure of public spending over the following years can be estimated by treating interest rate and public investment expenditures as a given and calculating current expenditure by subtracting the two from the overall expenditure.

The above assumptions on the fluctuations in the GDP, fiscal deficit, public debt and interest rates lead to the conclusion that the share of interest rate expenditures will grow steadily over the next few years, rise to 1.5% GDP in 2011 and soon afterwards stabilize at around 2% GDP. Moreover, the realization of major infrastructure projects<sup>3</sup> calls for increasing public investments to a 5-6% GDP level<sup>4</sup>. Assuming that the Government genuinely intends to implement the projects at the announced pace, the share of public investments will have to rise to around 5.5% GDP. Given the estimated interest rate and public investment expenditures, 34% GDP will remain to fund current public spending.

The realization of the described sustainable fiscal framework therefore entails a circa 5% GDP cut in current public expenditure in the coming years over the 2006-2008 period (and similarly over 2009). The drop in the current public spending to GDP ratio can be expressed as the sum of the 2.5% GDP fall in the share of overall public spending, the 1% GDP increase in interest rate expenditures and the 1.5% GDP increase in public investments expenditures. Assessments of the possibilities of cutting current public spending by 5% must not lose sight of the strong rigidity this very component of public spending has exhibited in the preceding years. Public investments accounted the most for the variations in overall public spending.

The high rigidity of current public spending can be understood better if one takes its structure into account. Current public expenditure comprises heterogeneous items, notably:

- Outlays for wages of around 460,000 public sector staff (breakdown of public sector employees is given in Table L1-2);
- Outlays for pensions of around 1.6 million pensioners;
- Purchase of goods and services for the state sector (public utility, telecommunication and similar services for schools, hospitals, state institutions et al, office supplies, medications for state hospitals, fuel for the army, police et al, consumables, et al);
- Subsidies for agriculture, the railroad company, tourism et al and various programs for stimulating the economy;
- Social aid for the poor, unemployed, women on maternity leave, et al.

**Table L1-3: Breakdown of Public Sector Employees**

	Employees, in thousands	Structure in %
Education	126.5	28.8
Health	107.7	24.5
Municipalities and towns	60.8	13.8
Police and SIA	46.9	10.7
Defense	36.0	8.2
Republican authorities	29.0	6.6
Justice system	13.0	3.0
Culture and sports	9.0	2.0
Other state authorities	11.1	2.5
<b>Total</b>	<b>440</b>	<b>100</b>

Source: Ministry of Finance.

Slashing current public expenditure obviously cannot bypass any of the listed major items in the current public spending framework. For instance, a nominal freeze of wages and pensions in 2010, an inflation of e.g. 7% and a 3% GDP growth rate would generate savings of around 2% GDP. From the fiscal point of view, this measure constitutes a considerable and necessary cutback, but it must be borne in mind that freezing wages and pensions in 2009-2010

<sup>3</sup> Herewith a list of merely some of the ongoing or announced major infrastructure projects: completion of the highway and modernisation of the railway on Corridor X, construction of regional roads (Batočina–Kragujevac highway, the Kragujevac beltway, highway towards Romania, et al), the beginning of the construction of the highway towards southern Adriatic, the construction of several bridges in Belgrade and its vicinity, the reconstruction of Corridor VII, the modernisation of the clinical centers, et al.

<sup>4</sup> If minor investments are slashed, major infrastructure projects could be implemented even with 5% GDP total investments. If the realization of minor projects is not cut and the infrastructure projects are implemented as planned, total public investments would stand at around 6% GDP.

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would reduce their real value by over 15%, resulting in growing pressures (strikes et al) to increase the wages as soon as the economy starts recovering and salaries in the private sector grow. Forty percent of the necessary cut in current public spending would be achieved by a two-year freeze of salaries and pensions. This is why the state must take measures to further slash current public spending.

Hypothetical downsizing<sup>5</sup> of public sector staff by around 50,000 would result in around 1% GDP permanent net savings. Such downsizing would have to encompass all state levels (republican, Vojvodina and municipal authorities) and all sectors (state administration, schools and health institutions). Such relatively abrupt downsizing could, however, result in lower quality and lower access to state sector services.

Substantial public sector downsizing could also generate additional savings by cutting the running state costs. This effect would be particularly strong if downsizing were accompanied by reducing the network of state institutions (schools, hospitals, administration buildings, the abolition of some agencies et al). Therefore, freezing salaries and pensions in 2010 and downsizing the public sector by 50,000 would result in direct savings of over 3% GDP, or 60% of the necessary cut in current public expenditure.

The above adjustment would be insufficient and it would be necessary to additionally cut other current expenditure items, such as various forms of state intervention in the economy. State interventions in Serbia's economy now mostly take the form of subsidies and other incentives (state credits, joint venture with FIAT et al). Various forms of state intervention, now amounting to slightly over 2% GDP, probably have to be halved. While cuts in some items (e.g. cutting subsidies to the railway company after closing unprofitable track, the suspension of subsidies to coal mines following their privatization or slashing incentive credits), would not have negative social and economic effects, a reduction of agricultural subsidies would be extremely problematic.

The ultimate cut in current public spending to these proportions could not bypass the social protection program either. Cutbacks in this area would probably be achieved by a nominal freeze of allowances and by setting stricter social assistance eligibility criteria (i.e. by lowering the accessibility of social protection).

**Table L1-4. Consolidated Revenues, Expenditures and Deficit (% GDP)**

	2005	2006	2007	2008	2009	2010	2011	2012	2013-2018
Public revenues	42.9	43.8	42.4	41.1	38.8	38.0	38.5	38.8	38.8
Public expenditures	41.9	45.4	44.3	43.5	43.3	41.5	41.5	41.3	41.3
- current expenditures w/o interests	38.1	39.8	38.8	39.1	39.0	35.8	34.5	34.1	34.0
- expenditures on interests	1.0	1.5	0.8	0.6	1.0	1.2	1.5	1.7	2.0
- public investments	2.7	4.1	4.7	3.8	3.4	4.5	5.5	5.5	5.3
Deficit/surplus	1.0	-1.6	-1.9	-2.5	-4.5	-3.5	-3.0	-2.5	-2.5
Primary deficit	2.1	-0.1	-1.1	-1.8	-3.6	-2.3	-1.5	-0.8	-0.5

Source: Ministry of Finance for the 2005-2008 period, author's estimates and projections for the 2009-2018 period.

## Economic and Social Effects of a Substantial Cut in Current Public Spending

Given the above conclusion that adjustment of public spending to the current fiscal capacity and the given fiscal deficit level calls for a circa 5% cut in the share of current public spending in the GDP, the question is whether the above decrease in public spending is economically optimal<sup>6</sup>. "Every cut in public spending is optimal" would be the superficial answer to this question. This is in general the wrong answer because it does not take into account the benefits the citizens and the economy have from the public sector. The public sector provides important services every developed democratic society must have. The services provided by the public sector in Serbia are varied, starting from classical state functions such as maintaining law and order, internal and foreign security, to newer services such as public education, public health care, protection of the elderly within the pension system, protection of the poor, subsidizing agriculture, construction of infrastructure, stimulating scientific research and numerous other activities.

<sup>5</sup> From the point of view of economic activity, the dismissal of 50,000 public sector employees would lead to lower domestic demand and thus to a slowdown in economic recovery. Moreover, laying off 50,000 people, who realistically have little chance of finding a new job, would further increase social discontent. Any larger-scale resort to early retirement as a way of downsizing the public sector would cut public spending only to the extent to which their pensions would be lower than their salaries.

<sup>6</sup> Like in the private sector, it is optimal to reduce spending in the public sector until the marginal costs and marginal benefits of providing a public service are equated. Social, civilizational, security and other factors, leading to continued public spending on items even when such spending is not economically optimal, are, however, taken into account in practice.

Cuts in public spending can clearly result in lower quality of service provided by the public sector or the reduction of such services to a suboptimal level. Given that this topic is almost entirely ignored in public and expert debates on public sector reform, we shall now list some cases in which the cuts in public expenditure could do society more harm than good:

- Downsizing Tax Administration staff or a considerable cut in the real value of their salaries could result in lesser staff commitment and the growth of grey economy;
- Cutting the number of staff and real level of salaries in the public health care system may lead to the flight of the best staff to the private sector and thus to lower quality of services and the transfer of part of the costs on to the beneficiaries of health services;
- Lower quality services in public education that may ensue due to the insufficient number of teachers, insufficient investments in their training and modern equipment would permanently reduce the state's competitive ability;
- Cutting agricultural subsidies may result in lower agricultural production and exports;
- Downsizing the police may lead to lesser security, as may cutting the real wages of policemen or the failure to provide them with the necessary equipment;
- Cutting the number of civil servants or the real value of their wages may lead to a fall in the quality of the regulations they enact, extension of the deadlines within which they issue decisions, longer queues, greater corruption, et al.

This does not necessarily imply that savings in the above areas are impossible or unnecessary, only that they must be implemented carefully so that the economic damage arising from the lower level and quality of public services does not exceed the benefits of the savings made within the public sector reforms. It is therefore necessary to apply utmost care when weighing the advantages and disadvantages of cutting a public spending item during the implementation of the reforms. Achieving economic optimum calls for a differentiated approach to specific public sector segments. It is extremely likely that some services, sectors, institutions, agencies et al. need to be considerably trimmed down or even abolished while others need to be strengthened by increasing the number of their staff and investing additional resources in them.

### **Additional Possibilities of Achieving Fiscal Consolidation**

Although there is no doubt that cutting current public spending needs to be at the heart of public sector reforms, the state can also take some other measures complementary with public spending reduction. There are three possibilities: (a) to increase tax rates, (b) to further increase the fiscal deficit, and (c) to reduce public investments.

The first option entails increasing the fiscal capacity of the tax system by e.g. 1% GDP whereby public revenues would stand at around 40% GDP, public expenditure at around 42.5% GDP and the fiscal deficit would remain at the level of around 2.5% GDP. As the fiscal deficit would amount to 2.5% GDP, public debt would stabilize at 40–45% GDP. Under this option, public investments would remain at around 5.5% GDP. This option would still call for strong fiscal adjustment: a freeze of wages and pensions in 2010 and their slower growth in the subsequent years, downsizing of public sector staff by 20–30 thousand, rationalization of the network of public institutions, cuts in state interventions in the economy (but to a smaller extent than in the first scenario discussed above).

The second option entails a further increase in the fiscal deficit. Given the circumstances in Serbia, the deficit can be only moderately increased over the main scenario. Specifically, the assumption is that fiscal deficit will increase to 4% in 2010 and to 3.5% in 2011 and then remain at the 3% GDP level. Under this option, the debt would amount to nearly 50% GDP in several years' time. A deficit increasing in the described manner would provide additional funds to the amount of 1% GDP for financing current public spending the first year, but the volume of additional funds would soon stabilize at 0.7% GDP. The increase in deficit could only partly be used to fund current public spending, because part of the deficit increase would have to be used to cover interest rate expenditures, which would increase due to public debt growth.

The third option entails changing the structure of expenditure in the framework of the given consolidated revenues, expenditures and deficit by transferring part of the funds allocated for public investments to current spending. Transferring funds amounting to 1% GDP would result in the public spending to GDP ratio of around 35% but would

simultaneously imply slower implementation or postponement of some infrastructure projects. Assessments are that it is highly unlikely that such reallocation of funds is planned in advance, but such reallocation should not be ruled out if it is impossible to cut current public expenditure.

To sum up, the assessment is that only the first option would yield economically and socially desirable results. This option is compatible with the fundamental public sector reforms equally valuing the improvement of the volume and quality of public services and the reduction of public spending. It is also more equitable from the viewpoint of inter-generational distribution because the increase in taxes would transfer the greater part of the burden of current public spending on to the current generations. The other two options would have weaker balancing impact and produce less favorable results in the long term. An increase in fiscal deficit would provide substantial additional means for funding public spending only temporarily, for two or three years. Afterwards, most or even the whole deficit would be used to pay public debt interest. Also, making room for a more moderate reduction of current public spending by cutting public investments is economically unjustified given that public investments improve infrastructure, which is crucial for creating favorable private investment conditions.

## Conclusion

Boosting public sector efficiency and fiscal consolidation are prerequisite for Serbia's sustainable economic and social progress in the long term. A more efficient public sector entails increasing the volume and quality of its services at the same or lower level of cost. Efficiency can in general be improved by multi-annual reforms of the pension system, the state administration and public services (education, health et al), improving budget procedures et al. Fiscal consolidation ought to ensure long-term sustainable funding of the reformed public sector, i.e. to ensure the stabilization of the public debt to GDP ratio at a sustainable level by maintaining the fiscal deficit at an appropriate level.

Cutting fiscal potential from around 42.5% GDP to around 39% GDP with a fiscal deficit of 2.5% GDP implies the reduction of consolidated public spending by around 2.5% GDP. Also, additional room within the reduced public spending framework must be made for public investments – around 1.5% GDP and for interest rates – around 1% GDP. If tax rates remain unchanged, the share of current public spending in the GDP must therefore be cut by 5%. Given that a very big cut in public spending is at issue, the question is whether such a reduction is economically justified and socially feasible. This cut in current public spending could lower the level and quality of public services, which would negatively impact on the citizens and the economy, and even generate widespread social resistance to reforms – for only broadly accepted reforms can be successful.

It is therefore necessary to also take into consideration additional measures, such as raising tax rates, further increasing the fiscal deficit or abandoning a substantial increase in public investments. A considerable cut in current public spending (by 3-4% GDP) and an increase in tax revenues (by 1-2% GDP) are assessed to be the best option. An increase in tax rates would mean greater fiscal policy consistency as well. Maintaining a low tax rate policy on the one hand, and a high ratio of pensions to wages, quality accessible health and education services accessible to all, good infrastructure, high subsidies, incentive credits et al on the other, is unsustainable in the long term. The implementation of the other two additional measures would have negative impact on the economy in the long term. The further increase in fiscal deficit would accelerate the growth of public debt and increase its servicing costs, which is unsustainable in the long term. Also, abandoning a substantial increase in public investments would negatively impact on economic growth rate in the long term.

## **Bibliography**

- Blanchard, O. (2003), *Macroeconomics*, Prentice Hall.
- Romer, D. (2006), *Advanced Macroeconomics*, McGraw-Hill.
- Rosen, S.H. and T. Gayer (2008), *Public Finance*, McGraw Hill.
- Ministry of Finance of the Republic of Serbia website.
- Spilimbergo, A., S. Symansky, O. Blanchard and C. Cottarelli (2008), “Fiscal Policy for the Crisis”, IMF Staff Position Note, SPN 08/01.
- World Bank (2009) “Doing more with less: addressing the fiscal crisis by increasing public sector productivity”
- Ali J. Al-Ezd and R. Barrell (2005) “Estimating tax and benefit multipliers in Europe”, *Economic Modeling* 22. pp. 759–776.