Report No. 54056-YF

Serbia
Right-Sizing the Government Wage Bill

October 12, 2010

Poverty Reduction and Economic Management Unit
South East Europe Country Unit
Europe and Central Asia Region

Document of the World Bank

CURRENCY EQUIVALENTS

Currency Unit – 71.8 RSD= 1 US$

WEIGHTS AND MEASURES

The Metric System is used throughout the report.

FISCAL YEAR

January 1 to December 31

ABBREVIATIONS AND ACRONYMS

CPI	Consumer Price Index
EU	European Union
EUROSTAT	EU Statistical Website
FAD	Fiscal Affairs Dept. (International Monetary Fund)
FRL	Fiscal Responsibility Law
HIF	Health Insurance Fund
HRMS	Human Resources Management Service
IFI	International Financial Institution
IMF	International Monetary Fund
LOI	Letter of Intent
MOE	Ministry of Education
MOF	Ministry of Finance
MLSP	Ministry of Labor and Social Policy
OECD	Organization for Economic Cooperation and Development
PEDPL	World Bank Programmatic Public Expenditure Development Policy Loan
PEPS	Serbia Public Roads Enterprise
RSA	Regional School Administration
RSO	Republic Statistical Office
SBA	IMF Standby Arrangement

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FOREWORD

This report is based on the findings of a series of missions to Serbia between June 2009 and September 2010. The report was prepared by William Dillinger (Task Manager), with the assistance of Marina Wes, Ivana Aleksic, Ana Djordjevic, Juan Diego Alonso, Daniel Dulitzky and Dusko Vasiljevic. The peer reviewers were Gary Reid and Tony Verheijen. The report benefitted from the assistance of a wide range of Serbian counterparts. These included staff of the Ministries of Finance, Labor and Social Policy, Economy and Regional Development, and Public Administration and Local Government. Contributions from the IMF are also gratefully acknowledged.

The primary aim of this task is to influence legislation. Task outputs have therefore taken the form of policy discussions with counterparts in Serbia, comments on proposed legislation, inputs to a DPL loan now in preparation and discussions with the IMF in connection with its Article IV reviews and Standby Arrangement. In addition, budget resources from this task have been used to contract a leading civil service reform expert to assist the Government in designing a new pay and grading system for public service employees. The purpose of this document is to present the analytical underpinnings of these efforts, indicate the status of current reform efforts and provide the Government with proposals for longer term reforms.

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SERBIA: Right Sizing the Government Wage Bill

Executive Summary

Serbia's public sector wage bill constitutes a significant share of total government expenditure. At present, it is significantly higher (as a percent of GDP) than in most neighboring EU member countries. This is largely due to higher average levels of compensation, rather than higher levels of staffing. While wage spending has fallen recently (as a percent of GDP) this is not the occasion to be sanguine about the Government's wage and employment policies.

There are two reasons. First, continuing control over the wage bill is a key part of the Government's overall deficit reduction strategy. Given the Government's reluctance to raise taxes and the difficulty it confronts in reducing other major categories of expenditures (particularly pensions), restraining the wage bill is critical to fiscal sustainability. In connection with its Standby Arrangement with the IMF, the Government is committed to enacting fiscal responsibility legislation which would cap wage bill spending at eight percent of GDP over the medium term.* To date, the Government has been relying on blunt instruments to achieve this target; most importantly a freeze on nominal wages and a partial freeze on the creation of new positions, both introduced in 2009. As the current recession eases, pressures to increase wages are mounting. The wage freeze is becoming politically unsustainable. More nuanced methods of restraining the wage bill are required.

Second, over the longer term, the present policy of continuous wage and position freezes would undermine the quality of public administration. Persistent wage freezes would make it difficult to attract and retain competent staff. Persistent position freezes would lock in existing patterns of over- and under staffing. On the other hand, a reversion to the former system of ad hoc adjustments in staffing and wages could set the stage for unsustainable wage bill growth in the future. Structural reforms are therefore required.

This report recommends a more sustainable approach to wage bill control, based on reforms in the system of establishment control and wage setting.

Establishment control: Ostensibly, Serbia has a well developed system for controlling the creation and allocation of staffing positions. However, evidence suggests that (particularly in less fiscally constrained times) the system is vulnerable to ad hoc demands for the creation of new positions and resistance to the cancellation of redundant ones. The current effort to rationalize the allocation of teaching positions, in connection with the rationalization of primary and secondary school networks, offers an alternative and more promising model.

Wage determination: Serbia's current system of wage setting is complex and ad hoc. The wages of public service employees—which account for the majority of government employees—are based on over 610 separate coefficients (excluding those governing employees in defense, interior and treasury and tax administration). In normal times (when wage freezes are in abeyance) changes in coefficients are conceded on an ad hoc basis to influential unions. As a result, wages in some categories of employment have risen to unaffordable levels and pay inequities (unequal pay for equal work) are widespread. The ongoing freeze in nominal wages will reduce the average level of wages, but not address existing pay inequities or the more fundamental vulnerabilities in the wage setting process.

To address these problems, The Government has embarked upon a pay and grading reform for public service employees. This would establish a simple 12-grade system for all public service employees based on a single base salary. If successful, it will eliminate pay inequities among public service employees and constrain the Government's ability to respond to ad hoc demands for wage increases from particular segments of personnel. The cost of the reform, in terms of its impact on the total wage bill, will depend upon the specific coefficients and base salary that the Government ultimately adopts. For purposes of illustration, this report calculates the impact of a set of wage parameters (coefficients and base salary) based, approximately, on the median wage of the existing positions to be classified into each grade. Under this scenario, the impact of the reform on the aggregate wage bill would be relatively small; about 0.35 percent of GDP. The Government's ultimate choice of coefficients and base salary, as well as the timing of the reform's implementation, should reflect the availability of budget resources.

In addition to these structural reforms, the report analyses the impact of short term measures to restrain the wage bill. This analysis suggests that the choice of wage indexation formulas (once the proposed hybrid indexation formula runs out in 2012) is likely to have the greatest impact on the wage bill in the short term. The impact of staff cuts--on the relatively small scale discussed in this report--would be fairly small. The proposed pay and grading reform, by the same token, would increase the wage bill by only a modest amount. The Government could of course choose to adopt a more aggressive approach to downsizing and lower coefficients under the pay and grading reform. Over the long term, the adoption of more systematic methods of establishment control and wage setting are likely to be the most effective deterrents to run-away wage bills.

*As discussed in Box 2 of the main text, this figure would include the wage bill spending of central budgetary institutions, local government budgetary institutions and mandatory social insurance organizations. Within each entity, it would include wages financed from own source revenues but would exclude the employers' share of social insurance contributions.

SERBIA: Right Sizing the Government Wage Bill

Context

1. *Economic Context* The Serbian economy experienced an economic boom over the period 2003-08, when growth was driven by high demand linked to significant capital inflows. Growth averaged 5.7% percent per year, and peaked at 6.9% in 2007. In 2009, following the onset of the global financial crisis, the Serbian economy went into recession. Real GDP fell by three percent in 2009, driven by a sharp contraction of real domestic demand (-7.5% in 2009). The nascent recovery that was apparent in the second half of 2009 has stalled, and year-on-year GDP growth rate in Q1 2010 is estimated at +0.9%. GDP is projected to grow again in 2010, although at a modest rate, and pre-crisis growth rates are projected to be reached only by 2013. (Table 1.) The growth recovery will depend significantly on foreign demand as well as increasing investment levels. Consumption, both private and government, had been contributing significantly to growth rates prior to the crisis, but its contribution to growth in 2010 will be negative, while consumption will again contribute to growth in the outer years, but more modestly than pre-crisis.

2. *Fiscal Context* Serbia's fiscal deficit predates the recession. As shown in Table 1, the deficit has grown steadily since 2006, due to both rising expenditures and falling revenues (as a percent of GDP). Both revenues and expenditures fell in 2009, although revenues fell more sharply. Spending was contained by a range of expenditure measures, including a nominal wage and pension freeze. While these policies remain in effect in 2010, the deficit is nevertheless expected to increase to 4.8 percent of GDP, due to continued declines in revenues.

Table 1 Macroeconomic Indicators

Indicators	2005	2006	2007	2008	2009 est.	2010 proj.	2011 proj	2012 proj	2013 proj	2014 proj
Real GDP growth (%)	5.6	5.2	6.9	5.5	-3.0	1.5	3.0	5.0	5.5	5.5
Public sector balance (as % of GDP)										
Expenditures	42.2	45.8	45.4	44.5	43.6	43.4	41.6	40.3	39.3	38.5
Revenue	43.0	44.2	43.5	41.9	39.5	38.6	37.8	37.3	37.1	37.0
Balance	0.8	-1.6	-1.9	-2.6	-4.1	-4.8	-3.9	-3.0	-2.2	-1.5

3. *Trends in the wage bill* In 2009, total public spending on wages accounted for 25 percent of public sector expenditure. A total of 435,000 staff were employed in the public sector.[1] As shown in Table 2, the vast majority—about 85 percent—were employed by the central government and associated funds. In sectoral terms, the largest single group consists of teachers and other employees of the Ministry of Education, who accounted for nearly thirty percent of the total. Staff employed by the Health Insurance Fund (including medical staff

[1] The public sector, in this report, consists of central government budget organizations, local government administrations, and mandatory social insurance organizations (such as the HIF), and but excludes publicly owned enterprises, including those of central and local governments. As elaborated later in this report, figures on wages and staffing levels reflect the data used by the Ministry of Finance to determine the annual salary appropriation for each budget user. Actual staffing levels may differ.

working in HIF-owned facilities) and other smaller social funds constitute another 25 percent. Employees of the Ministry of Interior (police), the Ministry of Defense, and the Department of Prison Administration constitute twenty percent. Employees of the judiciary and the remaining central government ministries and agencies comprise another ten percent, with local government employees making up the remainder.

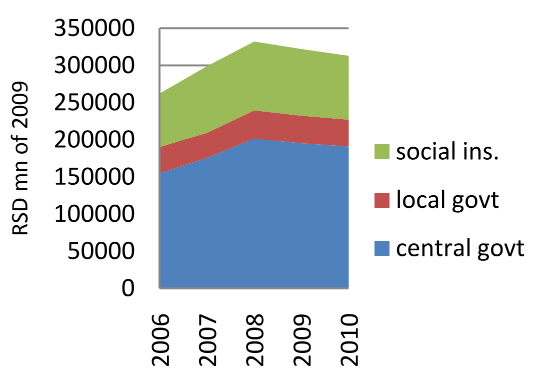
Table 2 Trends in Public Sector Staffing Numbers

	2006	2007	2008	2009	2010	% of total 2009	% change 2006-2010
Central government + funds							
Education*	123791	123791	122700	122700	125127	28%	1%
Police, defense	80490	79950	82796	87380	88830	20%	10%
Judiciary	13952	14231	12845	12980	14043	3%	1%
Culture, social ministries*	8739	8739	8798	8798	8798	2%	1%
Other central	28253	30356	31352	29493	29901	7%	6%
HIF, other social ins.	118038	109055	112048	113100	111313	26%	-6%
Subtotal	373263	366122	370539	374451	378012	86%	1%
Local government	55217	57580	58670	60878	61167	14%	11%
Total	428480	423702	429209	435329	439179	100%	2%
As % total employment	16%	16%	15%	17%	18%		
Total employment	2630691	2655736	2805307	2590188	2412106		

*Central government figures for education and culture include staff administered by Voivodina as of 2008. Source: MOF budget execution data for 2006-2009; 2010 budget.
Sources: Public sector data from MOF. Total employment data from labor force survey. (LFS data is for October, except 2010)

4. In absolute terms, the size of the Serbian public sector wage bill has fluctuated considerably over the last four years. As shown in Figure 1, the aggregate wage bill peaked in real terms in 2008 and has since declined. (Figures for 2010 reflect the 2010 budget.) While the wage bill rose by 14 percent in real terms between 2006 and 2007 and another eleven percent in 2008, it declined in real terms by about three percent in 2009 and is budgeted to fall by another 2.8 percent this year.

Figure 1 Trends in Real Wage Bill



Source: Ministry of Finance

5. These trends in the wage bill are largely a reflection of changes in wages, rather than in staffing numbers. As shown in Table 3, real wages increased by about 26 percent, in real terms, between 2006 and 2008. They then fell by about five percent in 2009 and are budgeted to decrease by another six percent in 2010. Staffing numbers, in contrast, have remained roughly constant. The total number of public sector staff has increased only by only 2.5 percent from 2006 to 2010. As a proportion of total employment, however, the public share has increased particularly in the last three years, as levels of employment in the private sector has declined in absolute terms. Public

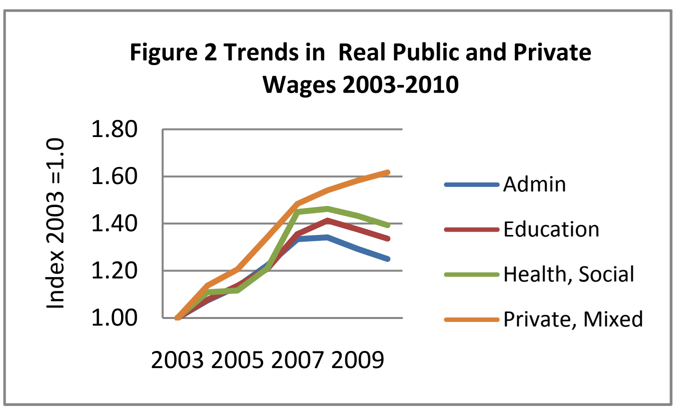
employment constituted 15 percent of total employment in 2008 but 18 percent of total employment in 2010.

6. These broad trends disguise some variation at a finer level of detail. In some sectors (e.g., the police and military) staffing numbers have increased significantly (ten percent between 2006 and 2010) while average wages have slowly and steadily fallen, in real terms. In others (e.g., education) staffing numbers have remained roughly constant while salaries increased dramatically (by 73 percent between 2006 and 2008), before declining by eleven percent between 2008 and 2010. (The net increase in teachers' salaries over the five year period was about 55 percent.) Staffing and salary levels in the HIF and other social insurance funds have followed a similar trend. At the local level, staffing numbers increased by eleven percent over the five year period, while real wages followed the inverted 'V' pattern, rising between 2006 and 2008 and then falling in the following two years.

Table 3 Trends in Average Public Sector Wages
(Gross wages in RSD thousands of 2009)

	2006	2007	2008	2009	2010	% change 2006-2008	% change 2008-2010
Education*	471	560	815	774	728	73%	-11%
Police, defense	757	788	749	718	700	-1%	-6%
Judiciary	705	951	915	850	785	30%	-14%
Culture, social ministries*	571	643	772	735	712	35%	-8%
Other central budgetary	737	799	665	678	680	-10%	2%
HIF, other social ins.	609	821	828	792	772	36%	-7%
Subtotal central govt + funds	643	584	648	609	588	30%	-9%
Local government	612	705	774	739	712	1%	-8%
Total							

*Figures include staff administered by Voivodina as of 2008. Source: MOF budget execution data for 2006-2009; 2010 budget. Figures include Government's share of social insurance contributions but exclude 'other allowances' and wages paid from own source revenues.



Source: Republic Statistical Office RAD Survey 2010

7. The recent decline in real wages in the public sector contrasts with trends in the private sector. Figure 2 illustrates trends in real wages in the public and private sectors as reported in the Republic Statistical Office's Rad survey.[2] (The trend lines show the cumulative increase in real wages starting from a base of 1.0 for each group in 2003.) As shown, the rate of growth in private sector wages exceeded

[2] The Rad (labor) survey is a regular monthly survey on wages and employment, conducted by the RSO. It excludes agricultural employment (except large registered agricultural companies), self employment (e.g. working at home), and has only limited coverage of "sole proprietors".

that of public sector wages over the period 2003-2006. Large increases in public wages (particularly in the health sector) closed part of the accumulated gap in 2007. Since then, the trends in public and private wages have diverged. While public sector wages have declined since 2008, wages in the private sector have continued to rise. In 2008, real private sector wages increased by 5.7 percent, while wages in public administration grew only by 0.7 percent. (Wages in education grew by 5.7 percent and in health by 1.3 percent.) In 2009, private sector wages rose by four percent, while wages in public administration declined by 4.9 percent. (Wages in education and health declined by 3.7 percent and 3.0 percent, respectively.) Results for the first quarter of 2010 show that this trend has continued. While private sector wages rose by 3.5 percent wages in public administration declined by 4.2 percent. In education and health, they declined by 3.9 percent.

Is the public sector overstaffed and overpaid?

8. Whether the Serbian public sector is overstaffed and overpaid is subject to some debate. It can be argued that the public sector is always prone to overstaffing and overcompensation. Governments, unlike private firms, do not have to operate efficiently in order to stay in business. They support themselves through taxes. Under these conditions, it is said, politicians and bureaucrats have an inherent incentive to add staff, to garner favor with voters (in the case of the former) and expand their fiefdoms (in the case of the latter). Once on the payroll, it is said, public employees are difficult to dislodge due to civil service protection and collective bargaining agreements. Public sector wages, by the same token, are not subject to competitive pressures. Powerful public sector unions can pressure governments to raise wages regardless of conditions in the private labor market.

9. These claims have to be taken with a grain of salt. Serbia, like all European countries, has a formidable system of establishment control. If it were effectively enforced, adding new positions to the payroll would be quite difficult. By the same token, the legal impediments to dismissing staff are not particularly high. Most public employees are contract workers and therefore not subject to civil service protection.[3] With respect to wages, the Government is under no legal obligation adjust wages upward, as the current freeze in nominal salaries demonstrates.

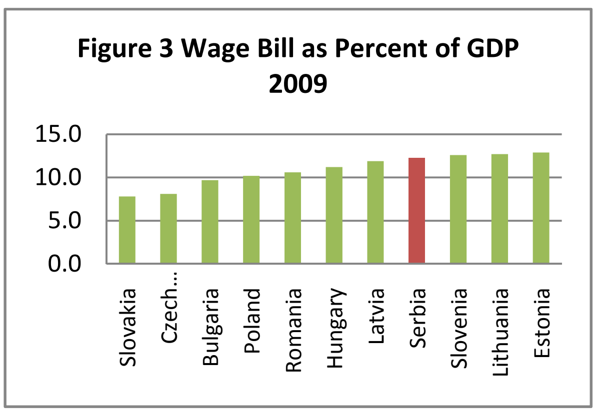
10. Is the public sector overstaffed and overpaid? In principle, one might hope to find a technical answer to this question. One approach would be to calculate the number of staff required to perform the specific functions performed by the public sector and the level of wages that would be required attract and retain the staff required to perform them. This is more easily done in some sectors than in others. As discussed below, the number of teachers (or more precisely, teaching-hours) required to instruct Serbia's primary school children can be largely derived from enrollment figures and classroom size standards. Determining the staffing needs of the Ministry of Defense would be less straightforward. By the same token, wage levels in the public sector might be based on comparable wages in the private sector, on the grounds that both sectors are competing for the same talent pool. But public employment is not strictly comparable

[3] As discussed below, however, there are other impediments to dismissal, including provisions of the labor law and the threat of lawsuits by disgruntled employees that effectively limit the Government's ability to downsize.

to private employment. (Job security, for example, tends to be greater in the public sector.) And many public sector occupations have no precise private sector equivalent. The job descriptions of clerical staff in the private and public sector may be similar. Those of security personnel are not.

11. *International Comparisons* In the absence of a credible methodology for addressing this question in sectoral terms, one fallback is to rely on international comparisons. Such analyses typically compare the size of the wage bill, as a percent of GDP, in different countries, along with indicators of the number of public employees (typically in proportion to population) and the average level of public sector compensation (as a percent of per capita GDP). All such comparisons are subject to two important caveats. First, the performance of other countries does not imply good practice. It merely describes the existing situation in other countries. (As such, it can easily represent a sampling of bad practices.) Second, indicators for different countries are not strictly comparable. Although the entities that collect these data (such as EUROSTAT) go to great lengths to impose common definitions on the raw data from different countries, differences in the accounting and reporting practices can result in spurious variations (or similarities) among them. Subject to these caveats, the Serbian case is nevertheless worth examining in an international context. Conspicuous differences would, at least, indicate areas where further analysis would be required.

12. Serbia's aggregate wage bill, as a percent of GDP is higher than in most neighboring members of the EU. (Comparable, accurate data for neighboring non-EU members is not available.) As shown in Figure 3, Serbia's wage bill in 2009 was equal to about 12.3 percent of GDP.[4] This puts its wage bill spending on a par with the Baltic countries, but significantly above the levels of Romania, Bulgaria and Poland, as well as Slovakia and the Czech Republic.



Sources: Comparators from Eurostat; Serbia data from MOF

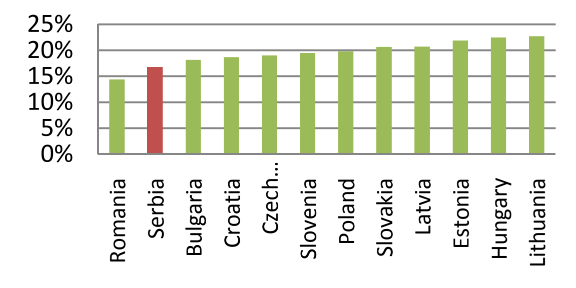
13. The difference is not due to staffing numbers but rather to wage levels. By the standards of neighboring EU members, Serbia does not appear to be overstaffed. Figure 4 compares the ratio of government employment to total employment in Serbia and neighboring EU countries.[5] As shown, government employees account for about 17 percent of total employed persons in Serbia in 2009. This is significantly higher than the level in Romania, but below the levels of the other Eastern

[4] As discussed in Box 1, the figure for Serbia includes the wage bill spending of central government and local government budgetary institutions and mandatory social insurance organizations. It includes all the components of budget category 41 (gross wages, employer contributions to social insurance funds, and other allowances) as well as wages financed from the own source revenues of government entities.

[5] For comparator countries, public sector employment is defined as the sum of NACE categories (1) public administration, defense and compulsory social security; (2) education; and (3) human health and social work. Total employment is defined as the sum of all NACE categories. For Serbia, public employment is defined as the sum of employees paid from the budget revenues of central government and local government budget organizations and mandatory social insurance institutions, as reported by the MOF. The figures for total employment are from the October labor force surveys for 2008 and 2009. Figures for 'total employment' for both Serbia and the comparator countries include both 'formal sector' and 'informal sector' employment.

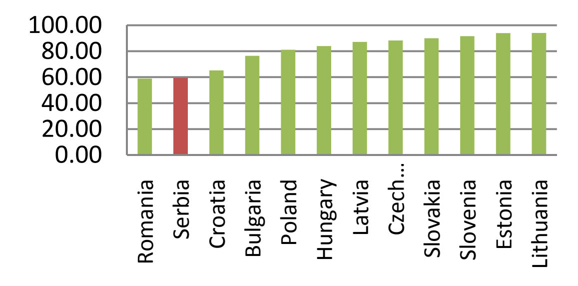
European EU accession countries. As shown, the proportion of public employment in those countries ranges from 18 percent (Bulgaria) to 23 percent (Lithuania.) Similarly, the ratio of public employees to population in Serbia is generally below that of neighboring EU countries. As shown in Figure 5, Serbia again ranks below all it EU neighbors except Romania on this score.[6]

Figure 4 Public Employment as Percent Total Employment, 2009



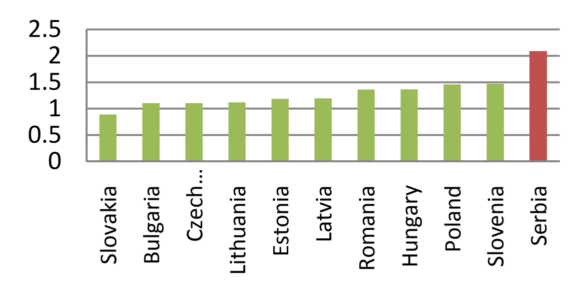
Sources: Comparators from Eurostat; Serbia data from MOF

Figure 5 Public Employment Per 1000 Population, 2009



Sources: Comparators from Eurostat; Serbia data from MOF

Figure 6 Ratio of Avg Government Wage to Per Capita GDP



Sources: Comparators from Eurostat; Serbia data from MOF

14. This does not, of course, prove that the Serbian public sector is 'right-sized'. Comparator countries may be—and probably are—overstaffed. It also does not provide any insight into possible over- or understaffing in particular ministries (e.g., the Ministry of Education) or public sector institutions (e.g., HIF facilities) or in certain occupations (e.g., managers, technical staff, support staff). It merely suggests that at an aggregate level, public employment in Serbia is not conspicuously higher than in neighboring EU countries.[7]

15. Wage levels, on the other hand, do appear to be too high. Figure 6 uses a standard indicator—the ratio of the average public sector wage to per capita GDP—to compare public sector wages in Serbia with those of neighboring EU countries. Here, Serbia is an outlier. The average wage of a public employee for Serbia was roughly twice Serbia's GDP per capita in 2009. This is roughly seventy percent higher than the average ratio in the neighboring EU countries.

16. The problem here is not that wages in Serbia are higher than in the EU comparators in absolute terms. As shown in Table 4, the average public sector wage in Serbia is well below most of the other EU comparables, in euro terms (Bulgaria being the only exception). The problem is that Serbia's ability to pay wages is considerably lower than in the neighboring EU countries. While wages in Serbia are equal to 65 percent of the average of the neighboring EU countries, its GDP per capita is only 40

[6] The denominator

[7] Sector-specific analysis does provide some evidence of overstaffing in certain sectors. As discussed below, there is evidence of overstaffing in the education sectors and in certain occupations in the health sector.

percent as high. Serbian wage levels, for example, are roughly equivalent to those in Romania. But Serbia's per capita GDP is only 65 percent of Romania's. This suggests that prevailing public wages in Serbia are disproportionate to the Government's ability to finance them.

17. The key consideration in assessing public sector wage levels in Serbia is not, of course, how they compare with other countries but how they compare with wages in the domestic labor market; the market in which the Government must compete for talent. In principle, the Government should offer wages which are just sufficient to attract and retain the caliber of staff it wishes to employ. No less, but also no more.

18. A recent IMF (FAD) study provides an opportunity to compare public and private sector wages in Serbia. The preliminary draft of the study, drawing on data from the April, 2009 labor force survey, found that the average salary for public sector workers is 37 percent higher than average for workers in the private sector. But the average public sector worker tends to be older, better educated, and more experienced than his or her counterpart in the private sector--all factors that may result in higher productivity and thus justify higher wages. They also tend to be concentrated in Belgrade, where higher living costs may require higher wages to attract comparable staff. Controlling for variations in age, sex, experience, education and location reduces the public sector premium to 18 percent.

Box 1: Public Employment and Formal Sector Employment in Serbia

While public sector employment constitutes 17 percent of total employment in Serbia, it constitutes 21 percent of formal sector employment. Indirectly, this suggests (yet again) that the Serbian wage bill is oversized. The majority of workers in the informal sector presumably do not pay the income taxes and social contributions that help finance government expenditure. As a result, Serbia's tax base is narrower than it would otherwise be. The solution to this problem does not lie solely in reducing the wage bill. It also lies in reducing incentives to informality and improving tax administration.

19. The FAD study also analyzed public sector wage premia in specific occupations. As shown in Table 5, these vary considerably. The wage premium for physicians is reported to be 53 percent, meaning that doctors in the public sector earn 53 percent more than comparable persons (in terms of age, education, gender, and location) in the private sector. The wage premium for legislators, senior officials and managers is 35 percent; for health professionals other than doctors, 33 percent. For primary school teachers, who constitute the largest single block of public employees, the wage premium is 15 percent. Only employees in elementary occupations (janitors, messengers, etc.) earn *less* in the public sector than their counterparts in the private sector.

Table 4 Comparison of Average Public Sector Wage and Per Capita GDP (Euros)			
	avg wages	GDP/cap	ratio
Serbia	8,681	4,161	2.1
Bulgaria	4,964	4,500	1.1
Romania	8,901	6,540	1.4
Poland	13,856	9,500	1.5
Lithuania	10,745	9,600	1.1
Latvia	12,193	10,200	1.2
Hungary	14,336	10,500	1.4
Estonia	14,242	12,000	1.2
Slovakia	10,665	12,000	0.9
Czech Republic	15,692	14,200	1.1
Slovenia	27,100	18,400	1.5

Data for Serbia is for 2009; for comparables, 2008. Wages include government social insurance contributions. Wage data for Serbia includes wages financed from own source revenue.
Sources: Serbia wage data from MOF. Serbia GDP data from IMF Fourth Review. Wage and per capita GDP data for comparables from Eurostat.

20. As the authors of the IMF study point out, these findings are subject to important caveats. The definition of comparables, to begin with, is necessarily crude. The wage premium for government doctors, for example, does not reflect the difference in wages between doctors in the public and private sectors. Instead, it reflects the difference in wages between public sector doctors of a given age, sex, level of education and location and *all employed Serbians* with similar characteristics. Thus the wage of a middle aged male government doctor with an advanced medical degree is being compared with the wages of middle aged males with professional degrees of any kind. The timing of the survey may also influence its results. The survey was conducted in April 2009. Since then (as shown in Figure 2) private sector salaries have continued to increase while public sector wages have not. An analysis of more recent labor force survey data would presumably show smaller public sector wage premia.

Table 5 Public Sector Wage Premia, by Occupation		
Occupation	Coef-ficient	Signfi-cance
Physicians	0.530	***
Legislators, senior officials, managers	0.349	***
Health workers (excl. doctors)	0.327	***
Teachers (college)	0.292	***
Associate professionals	0.278	***
Other professionals	0.243	***
Teachers (primary and pre-primary)	0.147	***
Clerks	0.235	***
Other teachers and education workers	0.120	***
Service workers	0.201	***
Teachers (secondary)	0.078	-
Elementary occupations	-0.021	**

* p<0.1, ** p<0.05, *** p<0.01. Regressions also include indicators for gender, age and education.
Source: D. Coady and A. Leive (IMF/FAD) Public Sector Wage Premia in Serbia: Evidence from the April 2009 Labor Force Survey . Results updated through Oct 22, 2009.

Short term measures

21. Regardless of the scale of an ideally dimensioned public sector, Serbia confronts an immediate need to restrain the wage bill as part of its overall fiscal strategy. To date, the Government has been doing this primarily through a freeze on nominal wages and a partial freeze on the creation of new positions. Both went into effect in April 2009.[8]

[8] In 2009, the Government also temporarily reduced the salaries of elected officials and managerial and administrative staff, including civil servants and public service employees (at the central and local levels) but excluding military personnel, police, prison guards, and employees in education, health, culture, and social protection. Reductions were imposed on a sliding scale. Those earning RSD 40,000 to RSD 100,000 suffered a ten percent reduction; those earning RSD100, 000 to '6 times the average wage' suffered a 15 percent reduction of the amount over RSD 100,000; and those earning more, 100 percent of the excess. As

22. The Government's current wage bill policies are reflected in a letter of intent (LOI) accompanying the IMF's fifth review of the ongoing Standby Arrangement (SBA), representing discussions ending September, 2010. As of the fifth review, the Government proposes to maintain the nominal freeze on public sector wages through 2010. Regular semi-annual indexation of public wages would start in 2011, with an adjustment in January, 2011 based on the rate of inflation during the previous six months. A second adjustment would occur in April, 2011 based on the rate of inflation during the previous three months and one half of real GDP growth rate (if positive) in 2010. The October, 2011 adjustment would be based on inflation over the previous six months. In 2012, the adjustment for April would again be based on inflation over the previous six months and GDP growth in the previous year. The October adjustment would again be based on inflation over the previous six months. During 2013-2015, indexation policies would continue to ensure that the public sector wage bill grows at the rate of inflation and half of GDP growth. . Fiscal rules regulating the development of salaries would continue to apply after 2015 until salaries fall to eight percent of GDP. (The definition of salaries to be used in this calculation is described in Box 2.)Throughout this period, the adjustments will apply to individual wages, rather than the overall wage bill. (The trade unions, which have seen the wages of their members frozen in nominal terms over the last year, want to ensure that every worker receives the full benefit of the increase permitted by the Government's agreement with the IMF.) These policies have been adopted by the Government in the form of proposed amendments to the budget system law. The amendments have been submitted to Parliament.

23. The LOIs accompanying previous reviews of the SBA have obligated the Government to implement a 'strict hiring freeze across all levels of government, including temporary workers.' Evidence from budget execution figures suggest that the freeze has not been scrupulously observed to date. For the public sector as a whole, the number of staff authorized by the budget increased by about one percent between 2009 and 2010. If a strict hiring freeze had been in effect, one would expect the number of budgeted positions to fall, as positions vacated through staff retirement went unfilled. If the average career of a public employee lasts 35 years, for example, a strict hiring freeze would be expected to reduce staffing by about three percent per year. The growth in the number of budgeted positions suggests not only that retirees are being replaced but that new positions are being added or positions that were formerly vacant are being filled. As a result, the 'strict hiring freeze' may be more accurately described as a 'partially successful freeze on the creation of new positions'.

24. The LOI accompanying the fourth review no longer committed the Government to a hiring or position freeze, although this is implicit in the Government's overall wage bill target. It did, however, obligate the Government to implement certain cuts in central government staff. This would be accomplished through a law setting a permanent (i.e., of indefinite duration) limit on the number of employees in the central government and social insurance organizations. The cap applies to only a small subset of positions. In addition to exempting military personnel and police, the cap excludes teachers and health care professionals, who together account for roughly half of central government employment. The law set a cap of 28,400 on the number of positions subject to the law.

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the law was confined to a limited number of positions and was explicitly temporary (ending with the December 2009 salary payment) it had little short term impact and no long term impact.

25. To implement the ceiling, the law provides that the Government' shall allocate ceilings among each 'body of state administration…and organization of mandatory social insurance (Article 2). Each budget organization is then responsible for allocating cuts in individual positions. The law specifies the rules for doing so. Managers are required to conduct performance evaluations of all employees within 30 days of the Law's effectiveness, using the criteria specified in the civil service law. Employees appraised as unsatisfactory (taking into account two years of prior performance evaluations or the duration of employment if shorter) are to be dismissed immediately. Employees deemed to have inadequate work performance (which defined as 'lacking required knowledge and skills for conducting the assigned task') are to be dismissed immediately.

26. At first blush, it would appear that this approach is aimed at getting rid of poor performers, rather than eliminating redundant positions. If so, it could have dangerous consequences. Poor performers in vital positions could be dismissed, and their positions eliminated along with themselves. But Article 12 allows managers to fill vacant positions once new acts of systematization enter into force. As a result, it would be possible—although not mandated by the law—for managers to shift their remaining staff into positions occupied by former incompetents.

27. The law was intended to go into effect at the start of 2010. With this in mind, it provides that budget allocations for 2010 'shall be limited to the maximum number of positions allocated to each administrative body'. As it was not enacted until December, the Government was not able to meet the deadline. By early 2010, the Government had allocated the ceilings for all the ministries and agencies subject to the law. With some exceptions, these called for a ten percent cut in the affected positions, with the largest absolute reductions in the departments of tax administration (637 positions) and the pension fund (313 positions). Few positions have actually been vacated, however. As of September, 2010, the total number of vacated positions stood at 629; 2.2 percent of the total number of positions affected by the cap and only 0.1 percent of total public employment. Even if the law were to be eventually implemented, its fiscal impact would be relatively small. The total number of staff subject to the ceiling represents only about 6.5 percent of total central government employment (including employment in social insurance funds). Achieving the target reduction would reduce total central government employment by only 0.55 percent.

28. The Government initially also proposed a cap on the number of local government employees. The proposed law sets a ceiling of four local government employees per thousand inhabitants. According to the explanatory material accompanying the law, local governments now employ an average of 5.03 staff per thousand inhabitants. The law therefore mandates an average reduction of 20 percent. According to the explanatory material, the law implies staffing reductions in all but 35 Serbian local governments. The law makes certain exceptions. While it broadly applies to local government bodies and other institutions financed by local budgets, it exempts those providing education (including preschool) and health institutions, and public enterprises. Municipalities with fewer than 15,000 inhabitants and those that derive less than 20 percent of their revenues from central government transfers are required to reduce staff by only 50 percent of the number that would otherwise be required. Municipalities are also allowed to

finance staff in excess of the ceiling from their ‘own resources’. Like the cap on central government employees, this law was intended to go into effect at the start of 2010. Local governments with staff numbers in excess of the ceiling were required to adopt new job systematization acts by December 31, 2009. Those failing to reduce staff numbers by that date were to suffer proportionate cuts in central government transfers. As the law was not enacted until late December, none of these provisions were immediately implemented. . It is reported that local governments have largely evaded the caps by exploiting the ‘own resources’ loophole; declaring that staff in excess of the ceiling are in fact financed from service fees and administrative charges.

29. Even if the ceilings were applied, their impact on the central government budget would be minimal. Under the present system of local finance, local governments are largely funded from shares of centrally administered taxes (a 40 percent share of the payroll tax collected in their jurisdiction), an equalization grant funded from the central budget in an amount (fixed by law) equal to 1.7% of GDP, and a modest property tax. (Further detail is provided in the annex to this report.) Under these circumstances, quantitative restrictions on local staffing numbers simply free local governments to spend more on other categories of expenditure.

Box 2 Defining the Wage Bill

The Serbian budget classification system divides employee compensation (category 41) into eight subcategories. The largest, subcategory 411, consists of gross compensation paid to employees, including the employees' shares of contributions to the HIF, the pension funds and other mandatory social insurance schemes. The second largest (subcategory 412) covers the governments' share of social insurance contributions. Subcategories 413-418 cover various minor allowances and bonuses, including housing allowances for staff who are required to work away from their normal place of work, special allowances for sickness and pregnancy (over and above the benefits paid by the Ministry of Labor) and certain bonuses for members of parliament and judges.

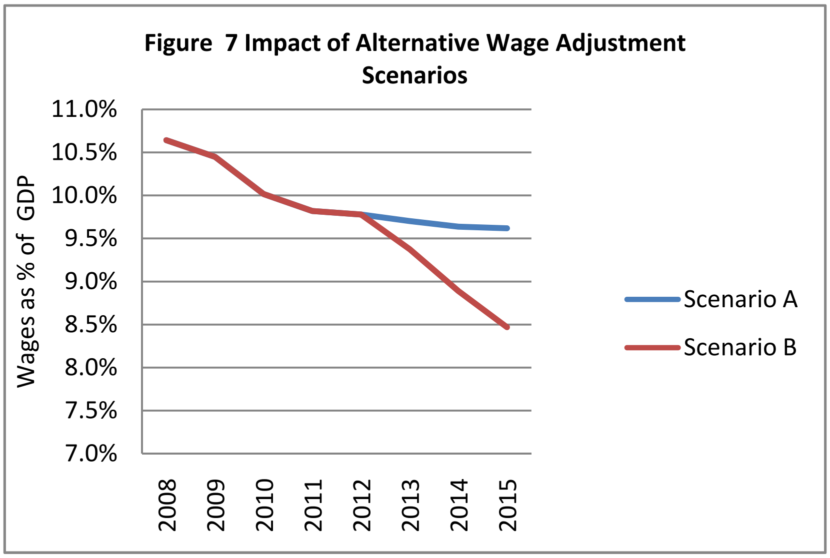
The vast majority of wage bill expenditures are financed from the budgetary revenues of the Republic, the local governments, and the HIF and other social insurance organizations. As shown in the table below, total employee compensation (the sum of categories 411-418) financed through the budgetary revenues of these organizations totaled RSD 329.5 billion in 2009. Of this amount, gross wages accounted for about 82 percent and employer contributions, 16 percent.

But wages are also paid from the own source revenues of government organizations. These include, for example, the wages of the state road enterprise (PEPS), an organization which is largely financed from tolls. Administrative fees finance a significant proportion the wages of the court system. Fees on banking transactions and other administrative fees finance a large proportion of the Treasury's wage bill.

Wage spending financed from own source revenues is not included in the detailed breakdown of wage spending used in the trend analysis and international comparisons discussed above, due to data constraints. It is however included in the definition of the wage bill target that the Government will incorporate in the fiscal responsibility law. That target, specifically, will consist of employee compensation (subcategory 411) and other allowances (subcategories 413-418) paid from the budgetary revenues and the own-source revenues of central, local, and social security organizations. But it will exclude the cost of government contributions to social insurance funds (subcategory 412) . Under this definition, government wage spending in 2009 is estimated to have been RSD 303.5 billion, as shown in the table below.

Composition of Wage Bill, 2009 (RSD bn)	
Wages financed from budget revenues*	
employee compensation (item 411)	269.0
employer contributions to social insurance funds (412)	53.0
other allowances (413-418)	7.5
subtotal wages financed from budget revenues	329.5
Wages financed from own source revenues	
PEPS	0.9
Other central government	6.4
HIF, other social insurance organizations	12.7
Local government	7.0
subtotal- wages financed from own source revenues	27.0
Total	356.5
Less employer contributions to social insurance funds	53.0
Basis for Government Fiscal Responsibility Target	303.5
*including budget revenues of Republic and local government budgetary institutions and mandatory social insurance funds. Data on wages financed from budget revenues is from the MOF. Data on wages financed from own source revenues was provided by the IMF.	

30. The key components of the Government's current wage bill policy therefore remain the freeze (and subsequent partial thaw) in wage levels, along with a presumed continuation of the partially successful freeze on the creation of new positions. Figure 7, below, illustrates the projected impact of these policies. (Trends are expressed as a percent of GDP. The wage bill is defined according to the Fiscal Responsibility Law definition.) The chart illustrates two scenarios, A and B. Both assume that a freeze on the creation of new positions will remain in effect throughout the projection period. This would permit staff who retire to be replaced but would not allow a net increase in the number of budgeted positions. Both also assume that the proposed 2010-2012 indexation scheme will be implemented as planned. The result would be only a modest decline in the wage bill in the short term: 2011 and 2012. In 2009 the wage bill totaled RSD 303.5 million (on the basis of the FRL definition) or 10.4 percent of GDP. Under the proposed partial thaw in wages, the wage bill would decline to 9.9 percent of GDP in 2012. Scenario A then assumes that these policies would continue through 2015. Under this scenario, the wage bill would drop to 9.7 percent of GDP by 2015. Scenario B assumes that the link to GDP would be dropped after 2012, with wages linked only to inflation. Under this scenario, the wage bill would drop to 8.5 percent of GDP by 2015, putting it within reach of the eight percent target.



Box 3 Translating Wage Bill Cuts into Deficit Reductions

If the aim of wage bill targeting is to restrain aggregate government spending and thereby limit the fiscal deficit, then additional measures will be required to translate personnel cuts in some parts of the public sector into cuts that affect aggregate spending.

Take the case of local government. The central government does not pay the salaries of local government staff. Local governments are instead funded from a fixed share of the payroll tax, an equalization grant whose amount is fixed as a percent of GDP, and a modest property tax. Controlling the local wage bill would therefore have no direct impact on central government expenditures. It would merely force local governments to shift spending from wages to other economic categories of expenditure. This would not reduce aggregate spending deficit. If the Government intends to reduce the fiscal burden that local governments represent, it would also have to reduce either the share of the PIT that local governments receive or the level of funding for the equalization grant.

The same logic applies, in principle, in the case of the HIF. The HIF is funded largely from insurance premiums. Employees are required to contribute to the Fund in order to maintain eligibility for themselves and their families. The national pension fund is required to fund the contributions of retirees. The Government is merely required to make contributions on behalf of certain groups (e.g., the unemployed) who are unable pay insurance premiums on their own. In principle, the level of HIF spending (including spending on personnel) is therefore dictated by the sum of its revenues from these sources. Reducing the HIF's personnel costs would not affect its revenues—including the Government's obligations to it--and would therefore not affect aggregate spending. To translate wage bill cuts into aggregate spending cuts, the Government would have to reduce its payments on behalf of the uninsured. But in fact, Government transfers to the HIF already fall far short of the amount of its obligations on behalf of the uninsured. With Government funding based largely on ad hoc budget negotiations, there is little more to cut.

If the purpose of constraining the wage bill of local governments and the HIF is instead to restrict what is perceived to be inefficient spending, that is a different matter. But to make this case, personnel spending would have to be shown to be less productive than other categories of expenditure; e.g., hiring more nurses would have to be shown to have a smaller impact on health outcomes than building new hospitals. This case has yet to be made.

31. These policies certainly make sense for the short term. The gradual thaw in the wage freeze responds to demands for salary increases, while confining that response within fiscally prudent limits. The freeze on positions, rather than a total freeze on hiring, allows positions vacated through retirement to be filled by new recruits. But over the longer term, wage and position freezes would undermine the quality of public administration. Persistent wage freezes would make it difficult to attract and retain competent staff. Position freezes would lock in existing patterns of over- and under staffing. On the other hand, a reversion to the former system of ad hoc increases in staffing and wages would render the Government to unsustainable wage bill growth in the future. Structural reforms in the system of establishment control and wage setting are therefore required.

Fixing the system of establishment control

32. Public employees in Serbia are governed by a variety of laws, regulations, and collective bargaining agreements. In principle, all staff whose positions 'consist of tasks associated with the power of the State and related legal, information technology, financial, accountancy, and similar tasks' are governed by the civil service act of 2005. The act provides certain protections against arbitrary dismissal and establishes a transparent, competitive procedure for recruitment and promotion, to be overseen by a Human Resources Management Service (HRMS)[9]. The Law on Civil Service Pay establishes a uniform pay and grading structure for civil servants. All other public employees are governed by the General Labor Law, the Law on Labor Relations in State Bodies (1998) and the Law on the Wages of Employees in State Bodies (2001), along with subsequent amendments, sector-specific regulations and collective bargaining agreements.

33. In practice, the writ of the 2005 civil service law is more limited than it might appear. The vast majority of public employees—including teachers, health care workers, and employees of local governments, are employed under the General Labor Law. Although employees of the Ministries of Defense and Interior are governed by the civil service law, they are exempt from some of its key provisions, including HRMS supervision. Similarly, employees of the tax and customs administration departments of the Ministry of Finance—who account for 83 percent of the Ministry's staff—are exempt from several provisions of the civil service law.

34. In principle, Serbia has a well developed system for controlling overall staffing levels. Every central government budget organization, at the time of its creation, is required to have an act of systematization setting out the number of positions the entity is permitted. These set out the job title, grade, and scope of responsibilities of each position. Until 2005, the number of authorized positions vastly exceeded the number actually filled, allowing managers to fill positions without new acts of systematization. In 2005, long-standing vacant positions were eliminated. As a result, there is now a rough correspondence between the number of authorized positions and the number actually filled.[10] But acts of systematization are not immutable. They can be revised when new ministries are created or when the functions of existing ministries are expanded. The 2008 governmental reorganization created many such opportunities, by expanding the number of ministries to 24 (along with 13 specialized organs) and reassigning the functions of five ministries which had been abolished. But even these legal niceties are routinely ignored. It is reported that acts of systematization are routinely revised following annual budget negotiations. It is the budget negotiations, rather than the acts of systematization, that act as the primary instrument of establishment control.

35. Each year, as part of the annual budget process, each central government budget organization is required to fill out a personnel plan, setting out the number of positions it would like to have funded (both existing and new) along with the title, grade, and estimated salary for each position. (Salary estimates are based on the standard base wage fixed by the Government, multiplied by the wage coefficient applicable to each grade, with provisions for wage supplements and overtime.) This process generally proceeds from the bottom up. In the

[9] As discussed later, these provisions have been weakened since the law was first enacted.
[10] The IMF estimates that there are only 1,873 unfilled (and unfunded) positions in central administration.

education sector, for example, school directors propose their staffing plans to the regional office of the Ministry of Education, which then passes them on the Ministry's central office, which sends them to the Ministry of Finance. In principle, the Ministry of Finance evaluates each plan to see if it is justified given overall budget constraints and Government priorities. In practice, this does not appear to occur. In normal years (i.e., when hiring restrictions are in abeyance) it is reported that powerful ministries and powerful unions largely dictate any changes in the authorized staffing levels. The MOF's role is merely to determine how to finance them.

36. The budget law requires that a consolidated personnel plan be enacted within 30 days of the adoption of the annual budget and that its salary estimates correspond to the amount allocated in the budget (Article 156). The personnel plan, however, does not in fact dictate the number of staff on the Government's payroll. The figures used in budget negotiations are strictly notional: they are used only to calculate the wage bill of each budget user and do not reflect the actual numbers of staff receiving salaries. Instead, the MOF controls the execution of the wage bill by imposing aggregate ceilings on wages for each budget organization and sticking to them during budget execution.

37. In executing the budget, the Treasury releases funds to each budget organization as a block. Each budget organization is then responsible for translating its respective ceiling into individual staffing decisions. At present, most (but not all) salary payments are made through the central government treasury system. Individual ministries provide the treasury's payroll department with the required information on each staff person (name, account number, and amount due, etc.) and the payroll department makes the corresponding transfer from the wage bill account of the ministry to the individual staff.[11] Under this system, each ministry is free to instruct the payroll department to add staff to the payroll, whether the position is included in the personnel plan or not. The payroll department is reportedly eager to oblige. The current approach nevertheless appears to function fairly effectively as a tool of aggregate wage bill control. In the education sector (where payroll ceilings are set for individual schools as well as for the Ministry as a whole) salary disbursements for an entire school can be blocked if its payroll request exceeds the school's ceiling—an event that reportedly occurs several times a year.[12]

38. *Determining Staffing Requirements* A key weakness in the current system of establishment control is the Government's inability to determine how many staff it needs. Although the Ministry of Finance must approve each budget user's personnel plans, it has little basis—other than the overall budget constraint—on which to make these decisions. As a result (in normal times) it is vulnerable to ad hoc requests for staff increases.

39. In principle, there are a several more reputable methodologies for determining staffing needs. One approach, popular with IFIs in Eastern Europe, is the so-called functional review. As described in Box 4, these are typically aimed at identifying government functions that could be

[11] As of January 2007, The Ministry of Education has provided the payroll department with the data required to calculate the salaries of primary and secondary teachers staff (hours worked, wage coefficient, etc.) rather than the final amount to be paid.

[12] At present the central government exercised no control over establishment levels at the local level. Local governments were (and remain) the statutory employers of their personnel and can hire as many staff as they can afford. Municipalities are required to adopt rulebooks, setting out staffing levels and position descriptions. These, however, are approved by municipal councils, not by the central government.

abandoned, privatized, or transferred to subordinate levels of government. This approach, however, has a mixed track record. As practiced in Eastern Europe, it has been particularly unsuccessful in identifying specific positions that should be closed. There is some evidence that more narrowly focused staffing norms can be used to determine staffing needs in some sectors. Norms were widely used in former socialist countries during the era of central planning, although they were often honored in the breach. If norms are set at affordable levels and are enforced, they could be useful in determining staffing levels now.

40. The Serbian health sector already has a well developed system of norms. The current book of regulations[13] sets out an elaborate and minutely detailed set of staffing norms. Some of these set out the minimum personnel requirements for the establishment a given type of medical facility. A primary health clinic, for example, must have one pediatrician and one pediatric nurse/technician for every 850 children up to six years of age and every 1500 children of school age; along with one doctor and one nurse/technician for every 1600 inhabitants in its catchment area. Similar standards apply to staffing in general hospitals, although couched in terms of beds rather than heads. For every 100 beds in the neonatal department, for example, a general hospital must have ten doctors of medicine and 60 pediatric nurses. The regulations also set out norms for non-medical staff. Hospitals providing long term care, for example, must have five administrative personnel and 25 technical and support staff per one hundred beds.

41. As the norms are couched in terms of floors rather than ceilings (i.e., minimum numbers of staff, rather than maximums) they do not explicitly limit staffing levels in HIF facilities. The data nevertheless suggest a considerable excess of non-medical staff, particularly in primary care facilities. According to the Ministry of Health's most recent staffing analysis, the number of non-medical staff employed in primary care facilities exceeds the norm by 31 percent (8,673 staff contracted as opposed to 6,609 normed, or an excess of 2,064 positions.) The extent of non-medical overstaffing is less severe in secondary and tertiary health care (about six percent, or 844 positions). In principle, these norms could provide the basis for targeted staff reductions in the facilities where the norms are exceeded. The same analysis, however, shows severe understaffing among other categories of personnel. According to the analysis, the current numbers of nurses and medical technicians falls short of the norms by about 3,000. (The number of doctors is about right.) As a result, universal application of the norms would result in very little change in the total number of medical staff. In fact it would presumably result in an increase in the wage bill, as the wages of nurses and technicians exceed those of non-medical staff.

[13] Službeni glasnik RS", br. 43/2006, 112/2009

Box 4 Functional Reviews: A Mixed Track Record

One technique for targeting staff reductions is the functional review. The scope of functional reviews varies. Some look broadly at the role of the public sector, in order to identify functions that could be abandoned, privatized, or transferred to subordinate levels of government. Functional reviews also vary in terms of units of government they cover. Some look at the entire public sector. Some look at specific ministries or even specific programs to see how existing functions could be performed more efficiently.

The record of functional reviews is, at best, mixed. Several formerly socialist countries of Eastern Europe and the former Soviet Union have used functional reviews to identify government activities that could best be performed by the private sector. This has led to the privatization of a wide range of formerly state-owned commercial and industrial enterprises. But efforts to right size the residual functions of government—defense and internal security, public education, and health care, have been less successful.

There are cases of ostensible success. Judging from a survey of the English-language literature, the most widely admired functional review is the Canadian comprehensive program review of 1994/95. The Canadian effort, launched after years of half-starts and in the midst of a fiscal crisis, required each agency of the federal government to review its own programs to determine which could be offloaded onto the provinces, the private sector, abandoned altogether or—if none of the above—performed more efficiently. The Canadian effort reportedly resulted in a 19 percent reduction in the federal work force (although many positions were merely transferred to the provinces) reduced the number of ministries from 35 to 23 and eliminated 73 government agencies/boards.

New Zealand's functional review, while also focusing on paring down the role of the central government, attempted to increase accountability in the functions that remained. It restructured the government into departments whose functions could be quantitatively measured. Targets were then specified for each department and incorporated in performance agreements, whose results were monitored and, if met, rewarded. The more recent Russian functional review began with an effort to identify unnecessary or duplicated functions, of which it found about 2,000. But it also attempted to improve accountability by reorganizing the government departments on the basis of their roles—policy making, regulation, and service provision. The impact of the Russian effort in terms of productivity or staffing is not yet clear. The Government is reportedly planning another round. Eastern Europe has also seen more modest efforts, such as the functional review of Latvian Ministry of Agriculture. This identified and evaluated 161 separate functions within the ministry, of which nine were pegged for privatization, 40 for rationalization and twelve for transfer to other ministries.

42. The application of staffing norms has a potentially higher payoff in the education sector. Declines in enrollment have resulted in extremely low pupil: teacher ratios in some schools in Serbia. There is also new evidence that the student population will continue to fall over at least the next five years (contrary to expectations of earlier studies). As a result, potential savings could arise not only from consolidating existing under-enrolled schools but by consolidating classrooms that become under-enrolled as Serbia's student-age population continues to decline.

43. Until recently, Serbia had no minimum class size norms. The regulations fixed a *maximum* class size of 30 students for both primary and secondary schools. The regulations did not, however, fix a minimum class size for classes of any kind. Thus 30 sixth-graders could be taught in a single class of 30 students or divided into three classes of ten students, without violating the regulations. Several recent analyses[14] show that there is scope for reducing teaching staff (along with non-teaching staff) in schools without hampering the quality of education. The recent studies show that significant reductions could be achieved merely by consolidating under-enrolled classes within the same grade within individual schools. Larger reductions could be achieved by consolidating classes in different schools in the same municipality or school district.

44. The MOE has now begun the school network rationalization process. Its first move was to issue minimum class size standards for primary schools with more than one class in the same grade. If a school has two classes in the same grade, the minimum enrollment in each class is 17. If it has three, the minimum number is 23; if four, 25. As the instructions do not set a minimum for schools with only one class in a given grade, the instructions affect only larger schools, mostly located in urban areas. The MOE started imposing this rule in September 2009 (for the 2009/2010 school year) but only in the first and fifth grades and in first year of secondary school. Next year, as those students pass into the second and sixth grades (and the second year of secondary education) they will remain in consolidated classes and the new classroom size standards will be applied to incoming crop of first graders, fifth graders, and secondary school freshmen. This process will continue each year until all eight primary grades and all secondary school grades are rationalized in 2012/2013. This timetable is intended to coincide with introduction of capitation based financing, which would go into effect in the 2014/15 school year.

45. According to the MOE, the application of the rationalization instructions resulted in the closing of 658 classrooms in 2009/10 and another 553 classrooms in 2010/11; a total of 1,211 or about three percent of the total.[15] Extrapolating from this result, it is expected that roughly 2400 classes will be closed through the consolidation of classes within individual schools once all 12 grades are optimized. More ambitious consolidation efforts could increase that impact. Table 6 illustrates the potential number of classes in grades 1-12 that could be closed under a variety of scenarios. As shown, within-school optimization, even if confined to the very largest schools (those with an average of 100 students per grade) could yield a reduction of about 5,800 classes, assuming a maximum class size of 30. Increasing the maximum class size to 33 would increase that figure to about 8800. Extending with-in school consolidation to all schools with more than one class in the same grade would permit 23, 599 classes to be closed (again assuming a maximum class size of 33.) Consolidating classes in smaller schools would further increase that figure. In particular, closing classes in schools that have only one class per grade (and bussing the students to other schools within the same municipality) would have a dramatic impact. As shown in Table 6, this scenario, assuming a maximum class size of 33, would result in the closure of about 33,000 classes.

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[14] These include the analysis in the World Bank's recent public expenditure review, *Doing More with Less* (2009), a more recent statistical analysis by Monica Robayo for the forthcoming World Bank report "*Skills, Not Just Diplomas - The Path for Education Reforms in Eastern Europe and Central Asia*" and a report by Milos Eric entitled "*Rationalization and Optimization Initiatives for the Education Sector in Serbia: Analysis and Fiscal Implications*" (2010).

[15] Based on the number of primary and secondary school classes reported in Table 5 of *Doing More with Less.*

Table 6 Potential Reduction in Number of Classes in Grades 1-12 under Alternative Scenarios						
	Scope of Rationalization					
				"Large" Schools		
Maximum Class Size	Whole Country	Municipalities	All Schools	Avg 50 students per grade	Avg 75 students per grade	Avg 100 students per grade
Max 33	34,641	32,831	23,599	16,227	12,405	8,841
Max 32	33,198	31,355	22,105	14,892	11,237	7,896
Max 31	31,658	29,835	20,605	13,575	10,056	6,946
Max 30	30,015	28,219	18,863	12,029	8,717	5,882
Source: Monica Robayo, unpublished report, 2010						

46. So far, the rationalization of smaller schools is proceeding slowly. In rural areas, the structure of education typically consists of a single central school and several satellite schools, generally offering only grades 1-4. Classes in these satellite schools are often severely under-enrolled. The MOE's ostensible policy is to close such classes and bus their students to the nearest central school. Not surprisingly, this has raised objections, particularly among parents in villages far from the nearest central school. Local governments are also opposed, in part because the costs of transporting such students would be borne by the local government, while the costs of paying teachers' salaries in under-enrolled classes remain a central government responsibility. In July of this year (2010) the MOE completed a draft set of criteria to be used in the consolidation of pre-primary and primary school networks throughout the country. This has now been submitted to the central government's legal department for review. A bylaw incorporating the criteria is expected to be issued in October 2010.

47. If the class and school consolidation is to have a significant fiscal impact, the MOE will have to ensure that it is accompanied by reductions in the number of teaching hours it pays for. One might expect that the elimination of classes would automatically result in a reduction in teaching hours. This is largely true. The MOE's class consolidation efforts alone in the past 14 months have reduced the teaching load of 4,460 staff. This will generate significant savings, as the net salary paid to an individual staff is proportional to the number of teaching hours he or she works. [16] Few staff have been dismissed outright, however. Instead, the cuts have taken the form of proportional reductions in the teaching loads of existing staff.

48. Actually removing staff from the Government payroll is considerably more difficult. It does, however, offer a more lasting solution to the problem of overstaffing. Staff positions, once eliminated, are difficult to reinstate. At present, staff cannot be dismissed on grounds of redundancy. The MOE has therefore instituted two voluntary separation programs. The first is for staff who meet one of the two conditions for normal retirement (age and years of service) but

[16] Social insurance contributions (e.g., to the pension and health insurance system) are not proportional to teaching hours, however. They are the same whether the individual is full time or part time. Thus savings will not be as great as they would otherwise be.

not both. Such staff would be offered six gross salaries as an incentive to depart. The second (available to all staff) would offer €200 per year of service.

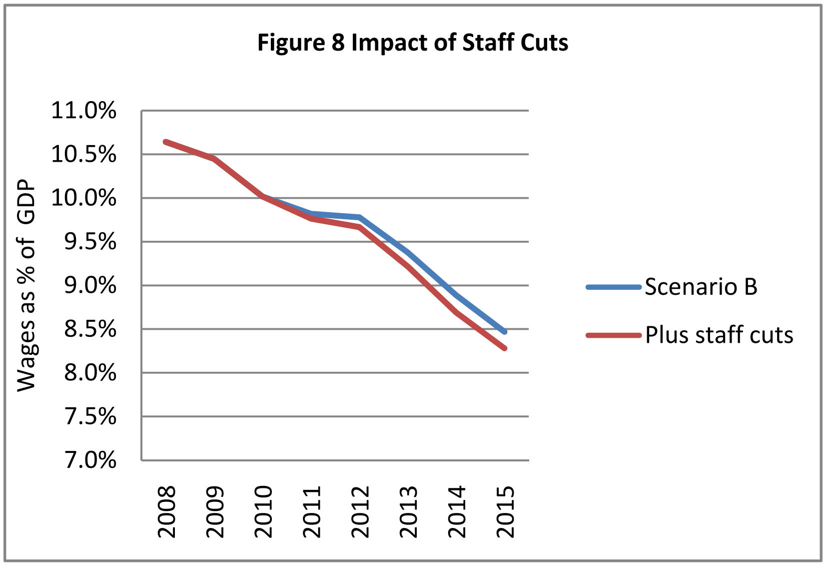
49. In the past such voluntary separation programs have been plagued by recidivism. Positions once vacated are later filled, either by former staff or by new recruits. To insure against this risk, MOE procedures require that the closure of any class be accompanied by the permanent elimination of a corresponding position (e.g., a classroom teacher for the first grade) or a given number of teaching hours (e.g. 6 hours of biology for a given 5th grade class). To ameliorate the impact of this policy, staff who lose their job due to classroom consolidation are offered the option of: (1) replacing teachers that have reached retirement age (within the boundaries of the regional school administration (RSA) or (2) occupying new positions resulting from the recent expansion of the curriculum (e.g., new elective courses in secondary education schools). Staff who are not re-employed through one of these mechanisms are required to opt for one of the voluntary separation packages or be dismissed. In the year 2009/2010, a total of 184 employees ending up taking voluntary severance; in the year 2010/11 103 employees are expected to take the package within the next two months.

50. There is less progress to date on the introduction of capitation financing. A draft action plan for the reform was prepared in December 2009 and work is now underway on the design of a formula. Next year, the MOE plans to do 'virtual pilot' in a sample of schools—i.e., to calculate the impact of the formula on a sample of schools while continuing to fund those schools on the basis of the existing arrangements. At present, the MOE has not decided which schools to test, what the formula will be, or such basic parameters as whether formula will allow school directors to determine wage levels. Once capitation financing goes into effect, consolidation will become the responsibility of municipal governments. Wholesale rationalization of the rural school network should not be expected, however, even after capitation goes into effect. In some cases, municipalities will find it cheaper to keep under-enrolled rural schools open than to bus children over relatively long distances.

51. *Fiscal Impact* Modest cuts in staffing in both the health and education sectors would have correspondingly modest impacts on the aggregate wage bill. Cutting the identified number of non-medical staff in HIF facilities would reduce the HIF's wage bill by an estimated 2.8 percent.[17] The impact of cuts in education staff will depend upon the extent of classroom consolidation and any increases in the norm for maximum class size. The Government's current consolidation effort would reduce the number of classes (and presumably the number of teaching staff) by only 5.4 percent over four years. A more aggressive policy—such as consolidating all classes in schools with more than one class per grade to a minimum size of 33, would reduce the number of classes by 58 percent. On the other hand, cuts in teaching staff arising from classroom consolidation may be offset by the Government's recent decision to require additional classes in religious or civic education at the primary level and to expand education at the secondary level. The impact of proposed cuts in non-medical personnel in HIF facilities and the MOE's gradual consolidation of classrooms in larger schools is illustrated in Figure 8. (The chart shows the

[17] Even this figure exaggerates the impact, as it is based on the assumption that non-medical staff earn on average the same as all employees in health care facilities, whereas in fact they earn considerably less. It also does not take into account understaffing of nurses and medical technicians.

marginal impact of staff cuts on the wage bill under indexation scenario B. As shown, these cuts would have only a marginal effect on the wage bill. Taken together, these measures (if introduced over four years) would reduce the wage bill by only 0.2 percent of GDP.



52. *Dismissing Staff* Once the Government has determined how many staff it needs, it will have to dismiss the staff it does not need. While the political obstacles to doing so may be formidable, the legal obstacles are not—particularly in the case of public service employees.

53. Under the civil service law, most civil service positions are open-ended.[18] Involuntary termination is allowed for cause (i.e., if the civil servant has been convicted of a crime with a sentence of over six months) and for poor performance. Performance, as defined by the law, is to be measured through annual performance evaluations. Employees receiving two consecutive unsatisfactory evaluations are put on probation. Failure to improve after ninety days is grounds for termination. This provision is rarely employed, however, as threatened staff are quick to hire lawyers and managers generally decide that court cases are too expensive to pursue. A civil servant can also be dismissed if the position itself is abolished.[19] This reportedly provides a convenient pretext for dismissing inconvenient staff after a change in administration.

54. In late 2009, Parliament enacted legislation intended to facilitate the dismissal of civil servants. The new amendment, in theory, facilitates the dismissal of poorly performing staff by increasing the frequency of performance reviews in certain cases. In addition to the existing provisions for annual staff evaluations, the amendment allows managers to place certain staff under 'intense' quarterly evaluations. Staff receiving two quarterly unsatisfactory ratings in a row are then given 30 days to improve and if failing to do so, are dismissed. In principle this

[18] Exceptions are made for a limited number of so called appointed positions (assistant minister and directors and assistant directors of government departments) and fixed term positions, which can only be created to accommodate temporary absences of permanent staff or temporary increases in work volumes (not to exceed six months).

[19] Positions can be abolished when a state authority (e.g., a ministry) is abolished and its competencies are assumed by another state authority or abandoned altogether, or if the position is abolished by byelaw or amendment to existing law. Where competencies are assigned to another state authority, the new authority must offer the position to the dismissed person, as long as the position is similar and the dismissed person is qualified. If not, a dismissed civil servant becomes 'unassigned'. Unassigned civil servants have the right to partial salary compensation and may remain unassigned for up to six months, after which they are terminated.

might be expected to speed the departure of under-performing staff. In practice very few civil servants are ever dismissed on the basis of performance evaluations of any kind.

55. Unlike civil servants, public service employees are employed under the terms of the General Labor Law. In principle, the Government could dismiss these staff on the same terms as any private sector employer. The general labor law permits employers to dismiss staff if (inter alia), 'due to technological, economic, or organizational changes a particular job becomes redundant or the volume of work is reduced'. Under these circumstances employers are required to pay severance equal to one third of the employee's monthly salary for each year of service.[20] Nevertheless, the Government would appear to have considerable flexibility to downsize at relatively low cost—the severance payment is equal to 3.2 times the monthly wage.[21]

56. The track record of attempts at large scale public sector downsizing is extremely discouraging, however. A World Bank review of public sector human resource management in the ECA region[22] found that no country in the region has achieved significant sustained general government employment reductions through such one-off retrenchment exercises. Governments instead tend to prefer less coercive methods. One alternative is voluntary separation: i.e., providing financial incentives for staff to leave on their own accord. The second alternative is attrition; i.e., waiting for staff to retire and then not replacing them. Each approach has its advantages and disadvantages. Voluntary separation is expensive, requiring separation packages in excess of normal severance payments. It is also particularly vulnerable to adverse selection. In principle, the Government would like to buy out the worst performing staff. Instead, it runs the risk of losing the best performing staff, as those with ambition and marketable skills tend to be the first to leave. Attrition, on the other hand, is cheap but painfully slow. The Government would have to wait until a staff person retires before closing his or her position.

57. Regardless of which instrument (or combination of instrument) the Government pursues, it will have to ensure that the reductions are targeted on positions that are in fact redundant. Untargeted programs of voluntary separation or attrition can produce random gaps in public employment. If every position is closed after its occupant retires, vital positions could go unfilled. To an extent, this problem can be addressed by facilitating staff mobility within the public sector. Staff who remain can be reassigned from redundant positions to those that have been vacated. But individuals are not always so fungible. Highway engineers cannot become anesthesiologists overnight. In the case of voluntary separation programs, eligibility should therefore be limited to positions that have been identified as redundant. In the case of attrition, only positions that have been identified as redundant should be closed once the incumbent staff retires.

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[20] Persons employed for more than ten years receive one-quarter of their monthly wage for each additional year.

[21] This power may be restricted by other legislation (e.g., the Law on Employment in State Bodies) and collective bargaining agreements

[22] Reid, Gary and Jana Orac, *Human Resource Management Issues in ECA Countries*

Fixing the system of wage determination

58. The Government also needs to reform the system of wage determination. The current structure of wages is the product of ad hoc wage adjustments granted to particular sectors over the last decade. As a result, equal work is not equally rewarded. Compensation in some sectors may be too high; in other sectors too low. Absent the current regime of wage freezes, the system of ad hoc wage adjustment in wage coefficients also renders government vulnerable to wage pressures from powerful unions.

59. Both civil servants and public service employees are paid on the basis of fixed wage scales. The regulations governing each group (and various subgroups within them) lay out coefficients for each position. These are then multiplied by a base salary figure, expressed in dinars and periodically adjusted by the Government, to determine the wage of each individual. (At present there are three different 'base salaries'.)

60. As part of the civil service reform of 2005, a major effort was made to rationalize civil service salaries. This was intended to eliminate salary anomalies within the civil service, so that similar positions in different ministries would have similar levels of compensation, and to adjust overall salaries to better reflect private sector comparators. The reform required the reclassification of all civil service positions into what are now 13 grades (five managerial grades and eight executive grades) each defined by a specific scope of responsibilities. The resulting pay law for civil servants (enacted in May 2006) increased civil service pay by an average of 41.2 percent, with increases in all but the lowest grades. The new law also deliberately decompressed the wage structure—the ratio of the highest wage to the lowest is now 1:9, and introduced a system of performance evaluation.

61. Wages for public service employees are also determined on the basis of coefficients, but less systematically. The current law on wages for public service employees is very terse. It consists of 16 articles, specifying only the barest bones of the wage determination process. Article 2 states that 'the wages of …employees referred to in. ..this law shall be determined on the base of (1) the base salary, (2) the coefficient multiplied by that base, (3) wage extras (referring to overtime, danger pay and field allowances but also to length of service) and (4) contributions to mandatory social insurance.' The rest of the law is focused on setting wage coefficients for a small subset of high level government officials, leaving the coefficients for all other employees to be determined by an 'act of Government'.

62. The 'act of Government' to which it refers is a series of decrees incorporating the results of collective bargaining between recognized unions (those having over ten percent of the membership of particular service) and the ministry of finance.[23] The current regulation governing public service employees specifies 16 separate schedules governing employees in education, health, social protection, culture, and social insurance organizations (e.g., employees of the health insurance fund) alone. (The police and military personnel have their own schedules.) Each

[23] Unionization is strongest in education, where there are four recognized unions, and in health where there are three. Negotiations are normally conducted service by service. Unions are required to negotiate on a common basis across the service as a whole.

schedule specifies a list of job titles and a corresponding coefficient. Thus the schedule for primary schools is comprised of twelve titles, ranging from manual worker (coefficient=5.99) to 'teacher with a university education' (coefficient=17.32). In total, the regulations governing these sectors specify approximately 450 different job titles, each with its respective coefficient. In addition, the regulation includes provisions for roughly 160 supplementary coefficients largely related to managerial responsibilities. Thus a director of an elementary school is granted an additional 20 percent allowance over her salary as elementary school teacher to reflect her managerial responsibilities. (By contrast, managers in the Health Insurance Fund have both a higher coefficient to reflect their management responsibilities *and* a management allowance.) The regulations also specify an automatic 0.4% increase for each year of service. Requests for changes to coefficients or the introduction of new coefficients are normally initiated by unions. Although practices vary, they are then considered first by the relevant ministry and then referred to the Ministry of Labor and Social Policy and, if approved, by the Ministry of Finance.

63. In 2006/7, an attempt was made to rationalize the salary structure for public service employees, along the lines of the civil service exercise. Working with four pilot ministries (health, education, culture, and labor) consultants developed a job classification system, conducted surveys of public and wages, and developed a proposed pay and grading matrix. According to the consultant's calculations, the new pay and grading system would have increased the aggregate wage bill for public service employees by 35 percent. Further progress was derailed by the elections of January 2007. In the meantime, the Government has conceded ad hoc wage increases to specific categories of public employees (e.g., teachers), often in response to pressures from unions. These increases have taken the form of changes in one of the base salaries (in which case they apply to all public service employees subject to that base salary) or in the coefficients of specific groups. In 2006, the Government increased salaries in education and health by an average of 30 percent. Subsequent wage increases in 2008 varied from 7.1 percent (for staff in the Ministry of Interior) to 22.5 percent (for staff in the Ministry of Culture without high school or university degrees.) The Government also fixes the wage scales of local governments; again on the basis of coefficients. Municipalities may, however, 'top up' these wages. As a result, some municipalities pay higher wages for a given position than others.

64. *Pay and Grading Reform* The Government is in the process of reviving the pay and grading reform for public service employees (as opposed to civil servants) begun in 2006. The ostensible objective of this exercise is limited. It aims only to harmonize salary levels within the public service; i.e., to ensure that similar positions within different ministries and agencies are similarly compensated. But the exercise also provides an opportunity to introduce greater uniformity and transparency into the wage negotiation process. As such it provides an opportunity to address some of the more fundamental problems in the wage setting process.

65. To initiate the work, the Government has constituted a working group under the direction of the Ministry of Labor. The working group includes representatives of the Ministries of Finance, Economy, Education, Health, Culture, and Sports. The work will consist of two major phases. The first is a policy and legislation stage, during which the parameters of the new pay and grading system will be determined and incorporated in law. The Ministry's intention is to have an "umbrella law" which will set out the basic parameters of the salary system, including the principle of equal pay for equal work, with salary coefficients based on the relative

responsibility and complexity of jobs, and the use of a single common salary base for calculating salaries across the whole public service sector (a ‘single spine’). This would be complemented by secondary regulations that would set out the specific coefficients for each grade. These coefficients would be considered largely immutable. Changes in salaries would instead be accomplished through periodic changes in the base salary by which all of the coefficients would be multiplied. The planning and legislation phase will then be followed by an implementation phase. This is a much more time consuming task, in which each individual position must be assigned to a specific grade in the new structure.

66. The planning and legislation phase is already well under way. Certain key policy decisions have already been made. The first concerns the definition of the categories of staff who will be subject to the new pay and grading system. The Ministry intends the reform to cover most staff covered by the current law on wages for public service employees, including the non-civil service employees of the ministries of education, health, culture, sports, and labor and social policy (whose salaries are funded directly from the budget) and employees of the HIF, the pension and disability insurance funds, and the national employment services (whose salaries are primarily funded from employee and employer contributions). As such, it would include the two largest groups of central government employees: teachers and medical workers. The only major groups of staff to be excluded would be existing civil servants (who are already subject to the civil service law of 2007), police and military personnel and staff of local government. As such, the reform will affect about 55 percent of all public employees.

67. The law will not include provisions for rewarding good performance (except in the health sector, as described below). This issue has been debated at some length. The 2005 civil service law does provide for annual performance evaluations for staff affected by the law. Based on performance, a staff person can advance though a series of eight salary ‘steps’ within each grade, ultimately gaining a 40 percent increase in his/her wage coefficient. The legislation governing public service employees, on the other hand, makes no provision for performance evaluations or rewards for good performance. For a good performer, the only route to a salary increase is though a promotion. Given the constraints on growth in public employment, opportunities for promotion are likely to be limited. The Ministry has nevertheless chosen not to include such provisions in the proposed pay and grading reform. This is wise. Performance evaluation systems are often difficult to operationalize—as is already apparent in the application of the civil service law. It is too early to extend this form of performance evaluation and awards to public service employees as a whole.

68. More narrowly focused performance rewards are, however, feasible. The Health Ministry intends to introduce a performance element into the pay of primary physicians and their teams. Under the current proposal, 80 percent of compensation would continue to be based on the current system of coefficients. But the remaining 20 percent would be allocated on the basis of productivity. Productivity would be measured in part on the basis of number of the number of patients registered with each staff (at the outset, the system will apply only to doctors; later to medical teams, including nurses) and on indicators of efficiency. In order to harmonize this approach with the existing pay and grading system, the current coefficient for each position would be understood to reflect a ‘standard’ level of performance. Staff who underperform would receive less than the full coefficient; staff who over-perform would receive more. To implement

this reform, the Government has approved three amendments to the Law on Salaries in State Authorities and Public Services, authorizing, in very broad terms, the use of productivity factors in the determination of public sector wages. These have been submitted to Parliament, which has scheduled hearings on them in November. Bylaws establishing the specific procedures for measuring and rewarding performance in the health sector would be issued subsequently.

69. The task of defining the new grades for the overall pay and grading reform has been completed. This has followed the methodology of the 2006/7 effort. As noted above, this was based on an evaluation of 140 'benchmark' jobs in four pilot ministries: health, education, culture, and labor. In that exercise, jobs were evaluated and assigned points based on five factors: (1) scope of responsibility for resources, work organization, and staff management; (2) extent of decision making authority, (3) complexity of duties and requirements for creative thinking; (4) requirements for knowledge, skills and experience; and (5) extent, level, and purpose of contacts with people inside and outside the organization (ranging from minor and infrequent contacts with the public to representation of ministerial views at international conferences). These jobs were then grouped, according to their total points, into 12 grades representing all the jobs level from senior management to basic support functions. A set of pay ranges for each grade was then devised, with appropriate percentage differences between grades, to provide an incentive for staff to seek jobs at high grade levels as and when vacancies arise.

70. The present exercise followed the same approach. The proposed pay and grading structure will consist of twelve grades each with a corresponding wage coefficient. (Two or three additional sub-grades may be added in the education and health sectors.) The team that is assisting the MLSP with this task has finished gathering the required information on job characteristics, reclassified all existing positions into the new grade structure, and submitted the proposed grading structure to the MLSP.

71. The team has also prepared a draft set of coefficients along with a proposed base salary. In principle, it might be desirable to base the coefficients and base salary on private sector comparables—i.e., to set the coefficients at levels that would ensure that, when multiplied by the base salary, wages in a given grade in the public sector would match those of a comparable grade in the private sector. No such attempt was made in this exercise, however. There are two reasons. First, as noted earlier, private sector comparables may not exist in some sectors. Second, achieving private sector comparability may not be affordable in the current fiscal environment. Instead, the following methodology was used. First, the base salary was set at the current minimum wage. The lowest grade (with a coefficient of 1.0) would therefore receive the minimum wage.[24] The coefficient for the highest grade was set at 6.562, yielding a net salary of RSD 102,756. This figure was designed to be only slightly above the salaries of the positions that would be reclassified into grade 12 and is substantially below the net salary of comparable positions in the civil service (RSD 140,000). It is, nevertheless, required by current economic conditions.[25] The salaries for the remaining grades would be set at or near the median of the

[24] In the final version of the pay structure it would be appropriate to set the salary base slightly above the current minimum wage because the minimum wage is adjusted at intervals throughout the year, which could result in the net salary for grade 1 falling below the minimum wage in the course of the year.

[25] In practice, increasing the salary for grade 12 to RSD 140,000 would not increase the total wage bill significantly, because there are few jobs at that level. But this might then create pressure for an increase the salaries in grades 11

existing coefficients to be consolidated into that grade. In this way, the reform will reduce spurious disparities in compensation within a given grade but will not have a substantial impact on the average level of wages. The coefficients for each grade are shown in Table 7.

72. Table 7 also compares the proposed level of salaries in the public service with the salaries in equivalent civil service positions. As shown, the proposed wages in the highest grades of the public service would be substantially lower than their civil service equivalents, for the reasons cited above. Salaries in grades 2-10 would be roughly equivalent. Salaries in the lowest grade—1—would be substantially *higher* than their civil service equivalents, as the civil service equivalent for such positions is currently below the minimum wage.

73. The table also compares the proposed salary levels with the salaries of equivalent positions in the private sector. Data on private sector pay levels was obtained from an existing annual private sector pay survey by a leading private sector organization in Serbia (Consulteam). The survey is based on a global survey methodology developed by a US-based human resource consulting firm (Mercer) and is known to be of high quality. (Mercer surveys are carried out in many countries and use a methodology that requires a close evaluation of all jobs in the surveyed organizations to ensure accurate classification.) Because the survey is largely confined to leading organizations, the results are presumably biased toward the higher-paying end of the market. For that reason the figures in Table 7 compare public service salaries not with the median but with the lowest 10th percentile and 25th percentile of the private sector data. The final column of Table 7 shows the ratio of the proposed public service salaries with the salaries of equivalent positions at the lowest tenth percentile in the private sector. As shown, salaries in grades 11-12 would (again) be substantially lower than their private sector equivalents, with salaries at grade 12 equal to only 46 percent of their private sector equivalents. Salaries in grades 1-10 would range from 69 percent of their private sector equivalents (grade 2) to 99 percent of their private sector equivalents (grade 9).

74. Because the reform would not substantially change the average level of wages, it is expected to be relatively inexpensive. The reform will, nevertheless, imply transition costs. The consolidation of positions into a limited number of grades will inevitably result in increased coefficients for some positions—in this case, those that are currently below the median for the respective grade. In theory, these costs could be offset by decreases in coefficients for positions that are currently above the median for that grade. It is expected, however, that such positions would be grandfathered; e.g., by providing a temporary allowance to offset all or part of the reduction in salary, with the allowance gradually reducing to zero over subsequent years (and eliminated entirely if the position is vacated). The costs of grandfathering are modest under the proposed scenario. This is because, for the largest categories of staff (teachers and medical workers) the number of positions receiving salary reductions would be relatively small. (Most would receive a small increase.)

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and 10 (given the large salary discrepancies among grades that would otherwise result.) The consultants assisting the MLSP recommend that the salaries for these grades be adjusted over the next 3 to 5 years to bring them closer to pay levels in the civil service and in the private sector.

Table 7 Comparisons of Proposed Salaries with Civil Service and Private Sector Equivalents								
Proposed New Grading Structure for Public Service Employees			Civil service equivalent		Ratio of Public Service Wage to Avg Civil Service Equivalent	Private sector equivalent**		Ratio of Public Service Wage to Lowest 10th percentile private equivalent
Grade	Coefficient	Net Salary*	Minimum	Maximum		Lowest 10th percentile	Lowest 25th percentile	
12	6.562	102,756		144,441	71%	225,566	299,903	46%
11	5.712	89,455		114,108	78%	149,045	190,761	60%
10	4.973	77,876	69,974	89,393	98%	95,595	116,249	81%
9	4.329	67,796	63,554	69,974	102%	68,144	82,725	99%
8	3.769	59,021	50,715	56,011	111%	62,022	73,053	95%
7	3.092	48,417	40,604	44,777	113%	56,196	65,079	86%
6	2.639	41,324	32,579	45,740	106%	46,259	56,361	89%
5	2.165	33,900	25,999	36,592	108%	39,913	45,516	85%
4	1.885	29,512	21,666	36,592	101%	37,010	43,192	80%
3	1.457	22,814	18,135	30,493	94%	29,845	39,660	76%
2	1.126	17,636	16,049	25,357	85%	25,568	31,190	69%
1	1.000	15,660	12,036	14,123	120%	18,986	23,258	82%
*Base salary equals minimum wage ** Figures for grades 1, 2, 6, 10, 11, and 12 represent averages of multiple grades in the private sector survey data.								

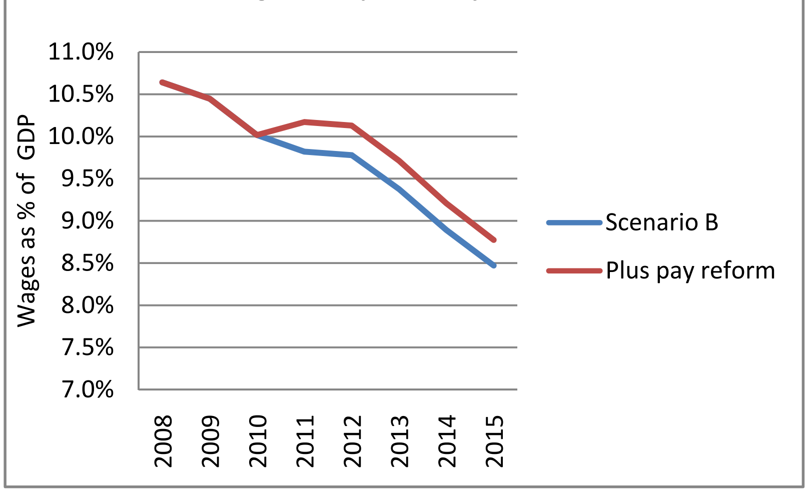
75. Overall, the pay and grading reform, if implemented using the proposed base salary and coefficients, would increase the wage bill of public service employees by 6.11 percent or 0.35 percent of GDP. (See Figure 9.) This estimate assumes that the reform will be implemented entirely in 2011 and that the individuals occupying positions that would be downgraded will be grandfathered.[26] As shown in Table 8 below, most of the increase will come from the education and health sectors, reflecting their large proportion of total public service employment. These, in turn, are largely the result of salary increases, rather than grandfathering. (Grandfathering in primary and secondary education would account for only 2.7 percent of the increase in that sector. Grandfathering in the health sector accounts for only six percent of the increase.) Lower salary increases would of course, increase the costs of grandfathering while reducing the overall costs of the reform.

[26] To simplify the calculations, it is assumed that none of these individuals will retire over the projection period and that their wages will be indexed to inflation and GDP growth at the same rate as staff who are not downgraded.

Table 8 Estimated Cost of Pay Reform on Wages in Public Service Positions					
	Wage Bill 2008-2010			Cost of Pay Reform Compared to 2010 wage bill	
	2008	2009	2010		
	RSD mn			% increase	RSD mn
Public Service Positions	actual	actual	budget		
Financed from the Budget of Republic:					
Education (incl. Vojvodina)	92,531.3	94,995.0	95,477.4	6.4%	101,588
Culture, social security & sports (incl. Vojvodina)	6,282.1	6,468.9	6,560.4	6.0%	6,954
Financed mainly from Contributions:					
RZZO Institutions (Health facilities)	78,545.2	81,788.8	81,960.0	5.9%	86,796
National Employment Service (NES)	1,719.1	1,811.2	2,149.4	5.0%	2,257
Health Insurance Fund (RZZO/HIF)	2,363.9	2,545.6	2,437.8	5.0%	2,560
Pensions Insurance & Disability Fund (PDIF/PIO)	3,147.9	3,390.3	3,537.0	5.0%	3,714
Total Cost, Public Services	184,589.5	190,999.8	192,122.0		203,868.0
% increase in Total Cost		3.47%	0.59%		6.11%

76. If and when the law is enacted and the regulations and methodologies finalized, implementation will begin. This will be considerable task. If the universe of positions subject to the law is defined as 'all employees paid by the central government budget, excluding defense, interior, and existing civil servants, plus employees in the health system (and teaching staff paid through the budget of Voivodina)' then 245,000 positions will subject to reclassification. Each will require an individual decision. In this process, the working group will have to guard against grade creep--the classification of positions into higher grades than would be justified by the position's skill requirements and scope of responsibilities—which could substantially increase costs.

Figure 9 Impact of Pay Reform



77. The Government will also have to devise a policy for adjusting wages in the post-freeze period. As noted earlier, the Government intends to maintain the current freeze though the April 2011 and then peg increases to inflation plus one-half of GDP growth over the following twelve months. Once this regime ends, competition among various employee groups for ad hoc wage increases will resume. The pay and grading

reform for public service employees is expected to limit the scope for individual maneuvering. Consolidating the wage coefficients of public service employees into a single spine will make piecemeal negotiations more difficult. But pressures for ad hoc increases in the base salary will remain. The Government should consider mechanisms for restraining such pressures. One approach would be to extend the proposed linkage of wage levels to inflation in 2011 and 2012 to a longer time period. In effect, the freeze of 2009-2010 will have 'reset' wages at a significantly lower level in real terms, compared to the levels prevailing in 2008 increases. Tying wage increases to changes in the cost of living thereafter will protect the purchasing power of government employees without increasing the Government wage bill in real terms.

78. There is ample international precedent for this approach. According to the OECD [27] pay levels for government employees are indexed to inflation in Belgium, Hungary, Italy, and Slovakia—although in some cases the index acts as a floor for subsequent negotiations, rather than an absolute determinant. Tying wages to inflation does not, however, guarantee that public sector wages will remain competitive. Wages for equivalent positions in the private sector may rise, due to increased productivity. To ensure competitiveness, some countries base public sector wage increases on surveys of wages in the private sector. Changes in the wage scales of US federal government employees, for example, are based on surveys of private sector wage levels. See Box 5. While much maligned[28], this system has succeeded in maintaining a rough parity between private and public sector wages. Over the longer term, the Government could consider a similar approach, indexing public sector wages to wages in the private sector. At the same time, the Government should periodically review individual ministries' experience in recruitment and retention—particularly in high skilled more competitive jobs—to ensure that wage levels remain sufficiently high to attract and retain qualified staff. Substantial and sustained problems in recruitment and retention would justify an eventual adjustment in the coefficients for such positions.

80. Table 9 summarizes the impact of the proposed indexation scenarios, staff cuts, and pay reforms discussed in this report on the aggregate wage bill. As shown, it is the choice of indexation formulas that has the largest impact. Under indexation scenario A, the wage bill would drop to 9.7 percent of GDP by 2015. Under indexation scenario B, it would drop to 8.5 percent. The impact of staff cuts--on the relatively small scale discussed in this report--would be fairly small. Cuts in education and health would reduce the wage bill by 0.2 percentage points of GDP. The proposed pay and grading reform, by the same token, would increase the wage bill by 0.35 percentage points of GDP. Taken together, the staff cuts and pay and grading reforms would yield a wage bill equal to 9.9 percent of GDP under Scenario A and 8.8

Table 9 Impact of Alternative Policies on Wage Bill in 2015

Structural Reform	Indexation Scenario	
	Scenario A (CPI + .5 GDP growth through 2015)	Scenario B (CPI + .5 GDP growth through 2012, then CPI only)
None	9.7	8.5
Staff cuts in education and health	9.5	8.3
Pay and grading reform	10.1	9.7
Staff cuts plus pay reform	9.9	8.8

[27] OECD. 2008. *The State of the Public Service*

[28] See for example, James, Kay. 2002. *A Fresh Start for Federal Pay: the Case for Modernization.* US Office of Personnel Management.

percent of GDP under scenario B. The Government could of course choose to adopt more aggressive approach to downsizing and lower coefficients under the pay and grading reform. Over the long term, the adoption of more systematic methods of establishment control and wage setting will be the strongest guarantors against run-away wage bills.

Box 5 Central Government Wage Adjustment Practices in the US and Germany

US In the US federal government, wage levels for white collar employees are set down in a schedule consisting of 15 grades and 10 steps.* Each step in each grade is designated a base salary expressed in US dollars. Every year the federal Bureau of Labor Statistics conducts a nationwide survey of wages paid to non-federal workers. On this basis a federal salary council, consisting of nine presidentially- appointed experts (three experts in labor relations and six representatives of unions representing federal employees) prepares recommendations for changes in the wages of each grade and step. These are transmitted to a smaller advisory group (comprised of the Secretary of Labor and the Directors of the Office of Management and Budget and the Office of Personnel Management) which makes final recommendations to the president, who may either accept it or propose an alternative. Adjustments to the schedule are imposed by executive order and do not require Congressional authorization.

The US system has been criticized on a number of grounds. First, it fails to adequately take into account regional variations in labor markets. Prevailing wages vary widely across the United States. Salaries that would be competitive in a small inland city would not be competitive in New York. In an attempt to take these variations into account, the pay structure for federal employees includes a so-called locality adjustment, which is intended to reflect differences in prevailing private sector wages in different parts of the country. This component of the pay system has never been fully implemented, however. Critics have also noted that the system fails to reflect variations in wages in different occupations (as opposed to grades) and that it fails to reward individual performance. Empirical analysis has also shown that, despite the system's apparent objectivity, federal government wages tend to rise disproportionately in election years.**

Germany Employees of the German federal government are also remunerated on the basis of wage grids. Federal employees are divided into two distinct groups: civil servants (who are guaranteed lifetime employment and are not permitted to strike) and public service employees (who have no lifetime employment guarantee but are permitted to strike). Wages for both groups are defined in schedules, consisting of 15 grades and eight steps for civil servants and 15 grades and five steps (with an additional sixth step for grades 2-8) for public service employees. Wages for each grade and class are expressed in Euros.

Unlike in the US, adjustments in wage grids are not formally linked to developments in the private sector. They are, however, strongly influenced by them. Changes in the wages of public service employees are determined through collective bargaining between the federal government and the unions representing public service employees. Any percentage increase in wages that is agreed upon applies uniformly to all pay scales and all career groups. But these negotiations tend to follow after negotiations between the more powerful private sector unions and the associations of private employers. As a result, agreements affecting private sector workers tend to establish bench-marks for public service employee wages. These, in turn, influence negotiations over the wages of civil servants.*** This system of cascading negotiations has not always worked smoothly. In seven of the last ten years, the federal government has failed to reach an agreement on a uniform wage increase for federal employees. Instead, increases have been granted in the form of once-off payments. One result has been a gradual decline in public sector wages in real terms.

*This so-called 'GS schedule' covers 71 percent of federal government civilian employment. The remainder are largely covered by the Federal Wage System--which applies to blue collar employment--the Senior Executive Service, and the Executive Schedule.)

**Borjas. G.J., 1984. 'Electoral Cycles and the Earnings of Federal Bureaucrats, in *Economic Inquiry* 22

*** Dustman, Christian and Arthur van Soest, 1997. Wage Structures in the Private and Public Sectors in West Germany *Fiscal Studies*. (1997) vol. 18, no. 3, pp. 225-247

Annex: The Local Government Wage Bill

Local government organization and functions The basic unit of local government in Serbia is the municipality. Municipalities are geographical subdivisions of the national territory. In rural areas, a municipality may include both towns and surrounding countryside. Belgrade, as the capital and largest city, has a special status with its own legislation. Although authorized to perform a wide array of functions, the primary responsibilities of municipalities are largely confined to urban infrastructure services. These include: (a) urban water supply and sewerage (b) district heating, (c) refuse collection and disposal, (d) street cleaning and (in larger jurisdictions) (e) public transport. Municipalities are also responsible for the construction and maintenance of streets and rural roads. These services (with the exception of the maintenance and construction of streets and roads) are performed by off-budget municipally owned enterprises. While these enterprises have their own sources of revenue (i.e., tariffs), they rely on subsidies from the municipal budget to cover operating deficits. Municipalities finance capital investments in these sectors directly from budgetary resources.

Municipal responsibilities in the social sectors are relatively limited. In education, local governments are responsible for financing the heating, lighting and similar operating costs of primary and secondary schools. They do not, however, pay the salaries of teachers or other staff. As a result, municipal spending on education consumes less than ten percent of municipal budgets. Municipalities play a similarly small role in social assistance. While they assist the Government in determining eligibility for child allowances, they have no financial responsibility in this area. Nor do they have any formal responsibility in the health care sector. Municipalities are, however, responsible for paying the salaries of teachers in preschools. While this service is provided on a voluntary basis, it consumes a significant proportion of municipal expenditure.

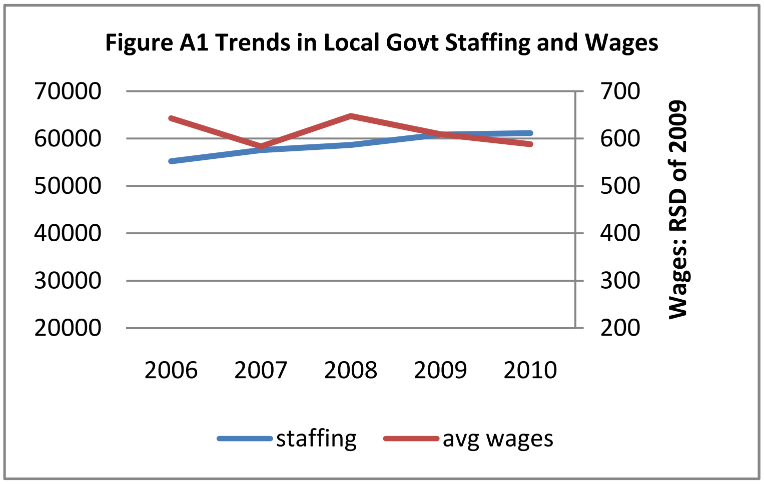
Sources of revenue Serbia has a highly centralized system of tax administration in which virtually all taxes are administered by central government. The current Local Government Finance Law (which took 2006, effective January 2007) assigns two principal sources of revenue to local governments: (1) a forty percent share of the centrally administered payroll tax, distributed among local governments on the basis of origin and (2) an equalization grant, funded by the central government at an amount equal to 1.7 percent of GDP and distributed among local governments according to a formula designed to reduce disparities in per capita tax revenues.[29] In addition, local governments are authorized to impose a property tax, with rates subject to a centrally determined ceiling.

Control on establishment and pay levels Prior to the recent attempt to cap local government administrative positions (see main text) the central government did not impose any form of establishment control over local governments. The Government does, however, determine the level of local wages. The Law on Wages in Government Agencies and Public

[29] The law on governing the distribution of the equalization grant specifies a hierarchy of distribution mechanisms. First, a sufficient amount is distributed to bring the per capita tax revenues of all municipalities up to 90% of the national average. (‘Taxes’ in this case refers largely to the municipal share of the payroll tax.) The four officially-designated cities (Belgrade, Novi Sad, Kragujevac, and Nis) are excluded from this calculation. Any remaining funds are then used to finance parallel ‘compensation’ and ‘transition’ grants.

Services sets out specific parameters for the salaries for local elected officials and political appointees and authorizes the Government to establish wage coefficient for local government public service employees.

Trends in local wage spending Local government wage spending accounts for a significant share of the public sector total. In 2009, local governments accounted for about 11.5 percent of the total public wage spending (as defined in the main text) and 14 % of public sector employment. Trends in wage spending parallel those of the central government. As a percentage of GDP, the local wage bill increased from 1.17 percent of GDP in 2008 to 1.28 percent in 2008. It remained at that level in 2009. According to the 2010 budget, it will fall back to 1.17 percent of GDP this year. As illustrated in Figure A1, this trend is the result of changing wage levels rather changing staff numbers. Local employment has steadily increased over the last five years. But wages, after increasing substantially in real terms between 2007 and 2008 have since declined.



Source Ministry of Finance. Figures exclude staff in education and culture paid through Voivodina.

Next Steps As noted in the main text, the Government has expressed concern over the level of staffing at the local level. According to a recent analysis by the Ministry of Economy and Regional Development, 110 of the 145 local governments surveyed exceeded the four-per-thousand standard for administrative staff. The extent of large scale overstaffing, however, is limited. Only eight municipalities exceed the standard by more than thirty percent. Unless this group of outliers includes Belgrade—a fact yet to be determined—the impact of municipal overstaffing on the aggregate wage bill is likely to be small.

If the Government believes that municipalities are spending too much on wages, it has the authority to control wage levels and should use it. Attempts to control municipal staffing numbers, however, are probably ill advised. Local conditions vary too widely to permit a one-size-fits-all rule to be applied.