Open Society Fund Bosnia & Herzegovina

Wages in the B&H Public Sector: Hurting the Economy?

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Abstract

This study has been provoked by unsustainable growth of wages in Bosnia and Herzegovina's public sector in the period 2006-2008. For a small open economy with a currency board arrangement, wage setting represents a key policy instrument for adjusting international price competitiveness. Wage setting in the B&H public sector exhibits a strong influence on the wage setting in the overall labor market and therefore its role in this respect is crucial. However, it is often neglected that the underlying motives in the wage negotiation process differ substantially between the public and the private sector employers. Revenue availability and political processes are some of the factors closely associated with the wage formation in the public sector. A responsible wage policy of the public sector implies avoiding competition with the private sector employers and adhering to strict limitations imposed on the private sector by constantly rising competitive pressures. B&H must be able to control its competitive position if it wants to sustainably steer its unemployment rate and current account deficit to lower levels. Therefore, this study attempted to assess the historical impact of wage developments in the public sector on the rest of the labor market and thus on the international competitive position of B&H. It further considered this problem in the light of the current global economic crises, evaluated four different policy options and proposed a systemic solution.

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1. Introduction

Wages in the public sector of Bosnia and Herzegovina (B&H) have recorded an acceleration of growth in the recent history, averaging 10% annually in 2006 and 2007 and reaching the whole 26% in 2008[1]. These wage increases took place in the light of favorable fiscal developments, primarily due to the introduction of VAT in 2006, strong economic performance and private consumption growth. Obviously, the B&H governments accommodated demands of the public sector unions and increased the rates of growth of public wages in the observed period. In the 2007 Progress Report for B&H, the European Commission observed the following: *„The 2007 budget execution at different levels of government shows continuing increases in public-sector wages...".*

[1] Calculations of the author based on the data from the official statistical agencies of Bosnia and Herzegovina. The data includes wages of employees at all levels of public administration in Bosnia and Herzegovina.

The average wage for total B&H economy also recorded a strong growth of 9% and 10% in 2006 and 2007 respectively and 19% in 2008. One reason for this is that the public sector accounts for roughly one third of total formal employment[2] in Bosnia and Herzegovina and hence every increase in the public sector is immediately reflected in the average wage of total economy. This indicates that the wage setting in the public sector has a large potential to affect wages in other parts of the labor market. Indeed, public sector wage agreements usually have strong signaling and spillover effects on the private sector wages (Demekas and Kontolemis, 1999; Lindauer, 1988). That this is also the case in B&H has been confirmed by previous studies (for example World Bank, 2005).

[2] This definition of public sector does not include the employed in state-owned enterprises.

One explanation for why excessive public wages often occur is that the wage bargaining in the public sector can lead to different outcomes than in the private sector due to political aspects of decision making in this process (Freeman, 1984). In that sense, in countries where the public sector has a significant share of employment, the government can become *de facto* a leader for the wage setting in the whole economy. This creates a potential problem because the decisions of the government in this respect are simply not guided by the issues of efficiency and competitiveness as it is the case with the private sector. The recent significant increases of wages in the public sector seem to support the suspicion that the policymakers are not considering the effects of these decisions on the rest of the labor market although it has been shown that the growth of public sector wages and employment can have adverse effects on overall employment outcomes (Stevenson, 1992; Lindauer, 1988 and Demekas and Kontolemis, 1999).

Furthermore, a situation where the growth of wages in one economy is not aligned with the underlying fundamentals, in particular the productivity growth, can lead to a reduction of competitiveness and unsatisfactory export performance (European Commission, 2006). In the recent period B&H has taken additional steps towards regional and global economic integrations through joining the regional free trade agreement CEFTA in 2007, signing the Stabilization and Association Agreement in 2008 and furthering the negotiations on joining the World Trade Organization. These processes clearly indicate that additional strengthening of competitive pressures can be expected in the future.

The mechanism through which wages affect international competitiveness and job creation is fairly simple. If wages grow faster than productivity, the cost of labor per unit of output increases and puts upward pressure on inflation. Domestic inflation rates higher than those of competitor countries lead to weakening of price competitiveness and eventually export performance. The impact of high wages on employment works through reductions in demand for labor induced by decelerated economic growth. But high wages can also cause lower labor demand through workings of other mechanisms such is the substitution effect between labor and capital. When labor is relatively expensive, the investments are made more in capital intensive sectors and less in those that are labor intensive.

Having in mind that unemployment and trade deficit probably represent two major economic imbalances of B&H economy, the issue of appropriate wage setting warrants the highest degree of attention. Moreover, the currency board arrangement in B&H has removed the exchange rate policy from the table of economic policy instruments leaving the wages as the most important mechanism for adjusting the international competitive position of B&H. This is also the case for all countries members of the euro-area and therefore it is not a surprise that European Commission pays close attention to the wage developments of these countries: "… *it is a matter of fact that wage formation processes are of paramount importance for achieving various policy objectives, both at the euro-area and Member State levels. At the euro-area level, wage developments should be aligned with such macroeconomic requirements as price stability and employment-friendly growth. At the individual country level, nominal and real wage flexibility is key to rebalancing relative competitive positions. This is all the more true for euro-area countries that share a common monetary policy."*(European Comission, 2008).

On the other hand, wages are far more than just an instrument of economic adjustment. Primarily, they affect the living standard and the wellbeing of their earners. This is why the wage setting represents a complex process that entails a tradeoff between different interests. In both entities of B&H, the Republic of Srpska (RS) and the Federation of B&H (Federation), there is a system of tripartite negotiations between the governments, trade unions and employers' associations. The social dialog and wage negotiations are country-specific processes whose results can vary depending on different factors, such as the types of institutions involved, labor legislation and historical and cultural elements. It has been observed that trade unions, together with the state owned enterprises (SOEs) have proved to be particularly influential in B&H and other former Yugoslav republics, partly due to the history of self-management before 1990s (Rutkowski, Scarpetta, Banerji, O'Keefe, Pierre, & Vodopivec, 2005).

Therefore, the goal of this study is to examine the historical results of the wage determination process in B&H and to assess to what extent they have been compatible with a need to address the B&H's major macroeconomic imbalances, namely the unemployment and the trade balance. In particular, the role of public sector wages and employment is evaluated in this respect under the assumptions of preservation of the currency board arrangement and no significant change in the flexibility of B&H labor market in short and medium term.

The first part of the study compares the development of the nominal and relative public wage and employment in B&H across number of countries. The goal of this part is to assess to what extent the public sector wage setting has been normal or rare internationally. The second part of the study analyses the development of B&H's international competitiveness in terms of nominal wages, productivity and unit labor costs. The goal here is to evaluate the impact of the historical wage setting practice on the B&H price competitiveness. The third part offers several policy options and evaluates them against a number of criteria. The last part provides conclusion and concrete policy recommendations based on findings reached.

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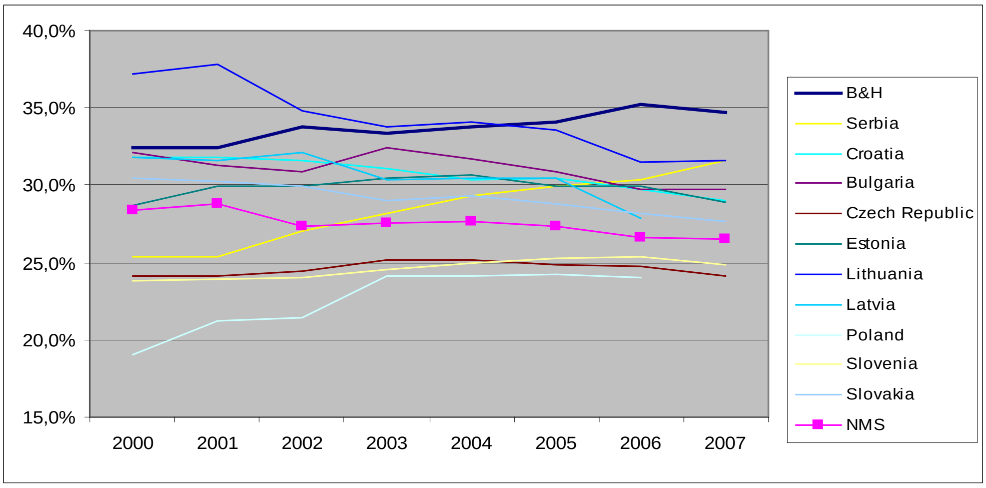
Ognjen Djukic is an economist involved in the fields of macroeconomics and development policies. For the last five years, he has worked at several advisory and executive posts in domestic and international institution. Ognjen is a member of the NGO Gea, a center for research and studies, which promotes informed policy debate in the areas of economic development and employment in particular. Ognjen received his M.A. in Development Economics at the Williams College in Massachusetts. He was born in Banja Luka where he graduated at the Banja Luka Faculty of Economics. His professional interests include transition countries' macroeconomic imbalances, structural reforms and employment policies.

2. Public and Private Wages - Different Factors at Play

The public sector accounted for around 35% of total formal employment in Bosnia and Herzegovina in 2007, which represents an increase from 32% in 2000.[3] This ratio is extremely high in international comparison and stands out as the highest share in overall formal employment among the 11 compared transition countries (see Figure 1). For comparison, the average public share for the 8 new EU member states (NMS) from the sample declined from 28% in 2000 to 26% in 2007. The same ratios were somewhat higher for the neighboring countries Serbia and Croatia and stood at 32% and 29% in 2007 respectively but were still significantly lower than for B&H. Such a high share of public sector employment in B&H illustrates the size of potential influence that government decisions can make onto the rest of the labor market in terms of wages and employment. The large public share in the formal sector also points to the presence of large informal employment as well as overall unemployment levels in B&H (IMF, 2007).

[3] The public sector here refers to the public administration at all govrnment levels, govrnment agencies as well as enterprises with a majority state ownership. The aproximation of such public sector was made by including the following sector from the NACE methodology: L (Public administration and defence; compulsory social security), M (Education), N (Health and social work), O (Other community, social, personal service activities) and E (Electricity, gas and water supply).

Figure 1.
The share of public sector employment in overall employment



Source: National statistical agencies and EUROSTAT

Wages in the B&H public sector recorded a strong growth in the recent history. In the period 2000-2008 average gross public wages grew by 117% from 335 EUR to 702 EUR.[4] Especially strong growth was recorded in the last three years of the observed period where public sector wages grew by 10% annually in 2006 and 2007 and whole 26% in 2008 (see Table 1).

[4] Calculations of the author based on the weighted average of the average for Republic of Srpska and Federation of B&H.

The average wage in B&H public sector seems to be high by international standards. As shown in the Figure 2, public wages (Wpu) in the RS and the Federation are above the levels predicted by their GDP *per capita* (GDP/c). The data used for all countries in this sample originate from the year 2006. In the Figure 3, the data used for other countries were from those years in which their GDP *per capita* was closer to the levels recorded by the RS and the Federation in 2006. Here, the data on the RS and the Federation stand out even more from the rest of distribution. It is interesting to observe that the other 3 out of 4 former Yugoslav republics are also positioned above the average, suggesting that a common heritage of self-management has influenced the wage setting process and probably strengthened public sector trade unions in these countries.

The public/private wage differential, defined as the ratio between the average wages of the public and the private sector, is also the highest in B&H among all the countries in the sample (see Figure 4). Although it has declined from 148% in 2000 to 137% in 2007, it again jumped to 155% in 2008 due to strong increases of wages in the public sector. Especially strong increases were introduced in the RS in 2008 with the passing of new laws that regulated the pay of public administration but also of other public budget-dependent sectors. Although these laws introduced several welcomed novelties, such as the elimination of fringe benefits, unification of pay for the same-level positions across different ministries and separation of the wage setting process between the public administration and the private sector, they also included a significant increase of wages for public sector employees.

Table 1.
Average gross wage in B&H per NACE sectors, in EUR

		2000	2001	2002	2003	2004	2005	2006	2007	2008
Mining and quarrying	C	248	244	272	307	316	337	408	476	562
Manufacturing	D	188	205	235	266	281	304	326	356	393
Electricity, gas and water supply	E	383	449	479	467	496	543	618	663	794
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	G	199	215	237	266	268	287	310	337	384
Hotels and restaurants	H	190	201	214	234	250	264	300	315	362
Transport, storage and communication	I	339	400	435	478	497	524	552	586	654
Financial intermediation	J	526	564	641	716	783	834	862	907	943
Real estate, renting and business activities	K	295	323	358	383	369	402	437	483	522
Public administration and defence; compulsory social security	L	373	427	475	504	513	541	600	669	794
Education	M	291	302	329	344	369	382	426	466	611
Health and social work	N	298	324	364	406	435	449	478	537	744
Other community, social, personal service activities	O	277	302	295	322	349	376	399	434	497
Public sector	E+L+M+N+O	335	373	403	423	441	462	507	556	702
Total	C-O	271	296	329	357	374	397	435	478	571

Source: Author's calculations based on data from RS and Federation statistical agencies

Figure 2.

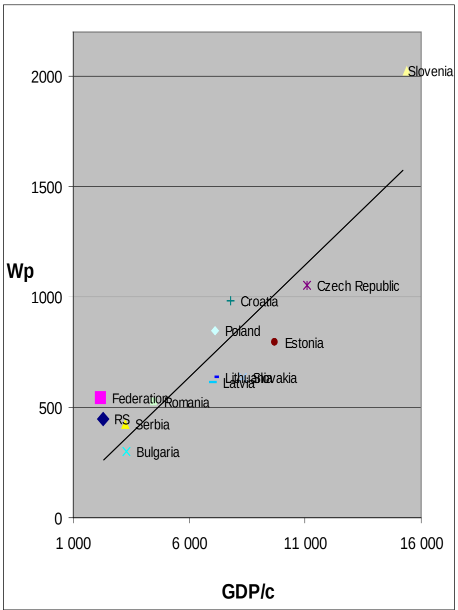


Figure 3.

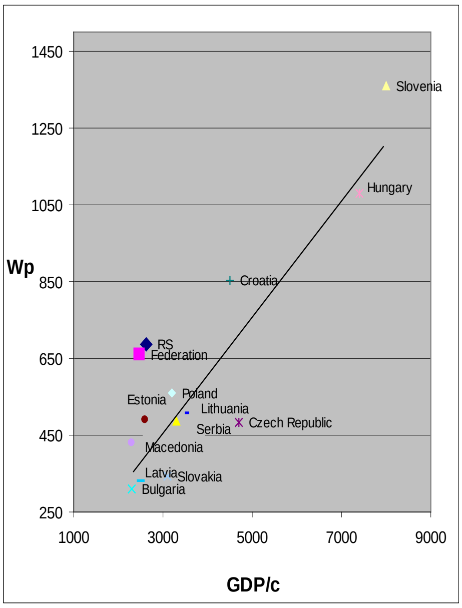
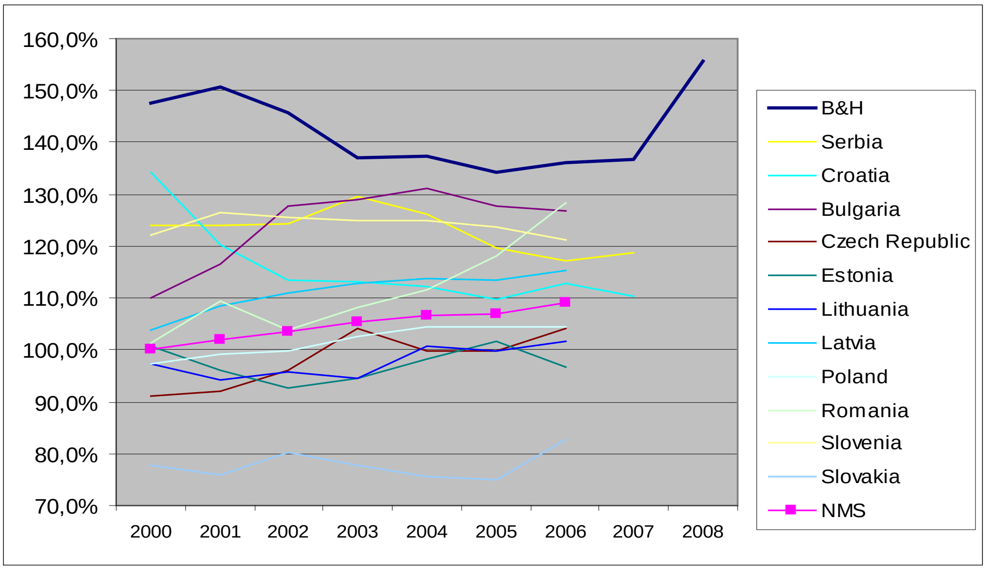


Figure 2.
Average public sector wage (Wpu) and GDP per capita (GDP/c) in 2006 for selected countries
Wpu in EUR, GDP/c in 000 EUR

Figure 3.
Average public admin. wage (Wpu) and GDP per capita (GDP/c) in different years for selected countries
Wpu in EUR, GDP/c in 000 EUR

Source: Author's calculations based on data from national statistical agencies, EUROSTAT and central banks of Serbia and Croatia

Figure 4.
The ratio of the average wage of the public sector and the private sector



Source: Author's calculations based on data from national statistical agencies, EUROSTAT and central banks of Serbia and Croatia

The World Bank observed in 2006 that the share of public wages in GDP and in total expenditures were substantially larger for B&H than among comparable countries and attributed this result to higher relative wage rates.

The surge of public wages in the period 2006-2008 took place in the presence of a strong growth of public revenues (see Table 2) driven primarily by the introduction of VAT, which replaced the sales tax on 01 January 2006. Another factor that contributed to the increased stream of public revenues is the growing tax base, which increased significantly in the observed period. Its growth followed the rise of domestic consumption accommodated by the expanding credit to the private sector. This period was also characterized by a favorable international economic environment. The robust global economic growth increased the demand for B&H exports while a positive investment climate supported larger foreign direct investments (FDI) in B&H, mainly through the privatization process, e.g. the RS Telecom and Oil Refinery. These developments contributed further to the rise in domestic consumption. As a result, the growing domestic consumption together with the mentioned tax reform brought about a strong increase of public revenues and created a lenient fiscal environment.

It is visible from the Table 2 that the rates of growth of total public revenues in B&H were at the level of above 20% in both 2005 and 2006 and at 15% in 2007. On the other hand, total expenditures for compensation of employees grew by 8% in 2006, which was bellow the revenue growth in that year, but caught up with the growth of revenues in the following two years and increased by 21.1% in 2006 and 14% in 2007. It seems that the introduction of VAT and its successful implementation in 2006 created strong expectations on the future revenue growth and thus exerted additional upward pressure on the public sector wages. In the light of favorable fiscal and economic environment in the observed period and positive expectations about future revenue flows, the governments accommodated the requests of trade unions in the public sector to a large extent.

It should be noted that the general elections in B&H were held in 2006, which is the first year of the three-year period in which the strong wage growth took place. Again, the local B&H

		2005.			2006			2007.		
GFS code	Description	RS	Feder.	BH	RS	Feder.	BH	RS	Feder.	BH
		in millions KM								
1	Revenues	2.078	4.488	7.122	2.526	5.177	8.586	2.919	5.901	9.833
	Of which: Taxes	1.236	2.389	4.002	1.435	2.800	4.947	1.599	3.140	5.536
2	Expenditures	1.811	4.083	6.360	2.187	4.590	7.546	2.459	5.512	8.808
	Of which: Comp. of empl.	449	1.130	1.835	488	1.215	2.223	578	1.395	2.535
(1-2)	Gross operating balance	268	406	763	338	587	1.040	460	389	1.024
31	Trans. in nonfin. assets	169	118	352	212	198	489	434	248	746
(1-2-31)	Net lending(+)/ borrowing(-)	98	287	411	126	389	551	27	141	278
		annual change								
1	Revenues	12,1%	7,8%	11,6%	21,6%	15,4%	20,6%	15,6%	14,0%	14,5%
	Of which: Taxes	19,9%	7,6%	17,6%	16,1%	17,2%	23,6%	11,4%	12,1%	11,9%
2	Expenditures	3,8%	5,3%	7,9%	20,8%	12,4%	18,6%	12,4%	20,1%	16,7%
	Of which: Comp. of empl.	-0,9%	1,0%	3,3%	8,7%	7,5%	21,1%	18,4%	14,8%	14,0%
(1-2)	Gross operating balance	143,6%	42,5%	58,0%	26,1%	44,6%	36,3%	36,1%	-33,7%	-1,5%
31	Trans. in nonfin. assets	122,4%	-7,8%	53,0%	25,4%	67,8%	38,9%	104,7%	25,3%	52,6%
(1-2-31)	Net lending(+)/ borrowing(-)	188,2%	81,6%	61,8%	28,6%	35,5%	34,1%	-78,6%	-63,8%	-49,5%

Source: B&H Central Bank
Note: The data for the RS and the Federation are consolidated and include all government levels and public funds; the data for B&H consolidates the RS, the Federation, the Brcko District and the B&H state-level government

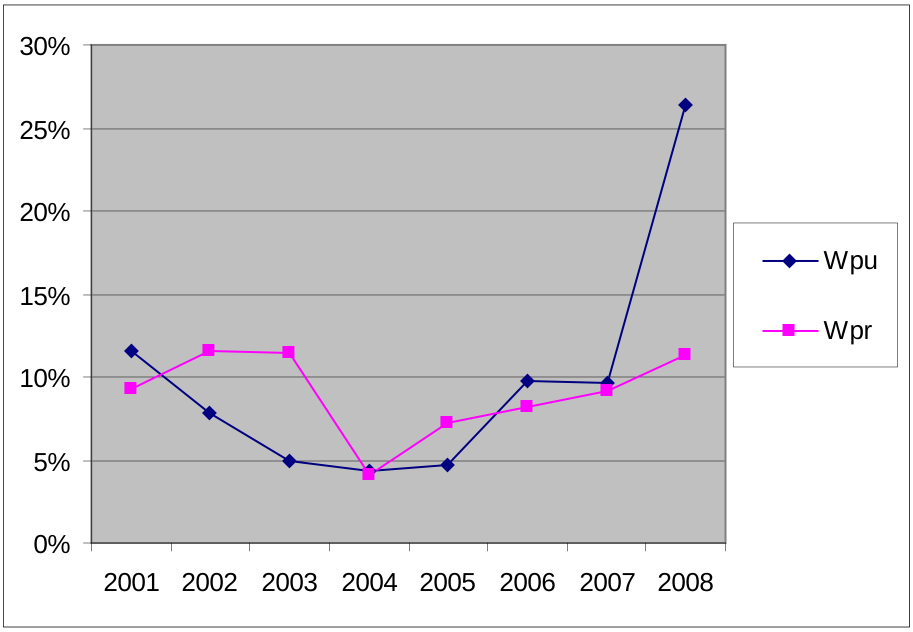
Table 2.
Revenues and expenditures of B&H consolidated government

elections were held in 2008, the year with the most significant annual increase of the average wage in the public sector, suggesting that the political process associated with the elections might have contributed to the wage increases. It has already been suggested that the wage determination in the public sector can lead to a different outcome than in the private sector because of the public sector unions' ability to affect the wages through the political process (Freeman, 1986). A particularly strong influence of the trade unions has already been identified in B&H and other former Yugoslav republics due to the legacy of the self-management system before 1990 (Rutkowski, *et al.* 2005). Therefore, it seems reasonable to suggest that the B&H public sector trade unions managed to realize their demands to a greater extent in the election years. From the perspective of workers, the most important reference indicator for wage demands is inflation. The workers are hence interested in changes of real wages as they determine weather the purchasing power of their nominal wages has increased or declined.

Overall, the wage determination in the public sector has been strongly influenced by the good fiscal conditions in the period 2006-2008 coupled with the strengthened political process due to the election years 2006 and 2008. Therefore, the decisions of the government as an employer have been affected by the factors that have little bearing on decisions of the private sector employers. According to the classical economic theory, a private employer sets the wage at the level that maximizes the profit, that is, at the level of marginal product of labor. It is important to distinguish here between the role of the government as an employer and the government as a member of the tripartite negotiation process. In this context, it is the role of the government as an employer that is stressed to highlight the different interests of the public and the private sector employers in the wage setting and employment decisions.

Although the private employers are guided by different interests than those of the government in the wage setting process, it does not mean that their decisions are not affected by the actions of the government as an employer. In fact, public sector wage determination usually has a strong signaling and spillover effects on the private sector wages (Demekas and Kontolemis, 1999; Lindauer, 1988). The existence of such an influence in B&H has been confirmed by previous studies (World Bank, 2005). Moreover, its strength could be above average in B&H due to the particularly large size of the public sector and the strength of the trade unions in the former Yugoslav republics. The Figure 5 confirms that the wages in the public sector and the wages in the private sector of B&H have been historically correlated.

Figure 5.
Annual change in average gross wage of public (Wpu) and private sector (Wpr) in B&H



Source: Author's calculations based on data from RS and Federation statistical agencies

3. The Role of Public Wages in the Economic Policy of B&H

With the unemployment level at 29% in 2007, according to the Labor Force Survey 2007[5], Bosnia and Herzegovina is positioned far above the average for selected countries (see Figure 6). Although the causes of the high unemployment rate are manifold, it has been proposed that generous public employment and wage policies might have discouraged unemployed workers from taking up jobs in the private sector (IMF, 2007). Furthermore, once higher public wages are transmitted into the private sector, the impact of high wages on employment works through reductions in demand for labor, which are again induced by a decelerated economic growth and lower competitiveness. High wages can also cause lower labor demand through other mechanisms such as the substitution effect between labor and capital. When labor is relatively expensive, investments are made more in capital intensive sectors and less in those that are labor intensive.

The second large imbalance of the B&H economy comes from the external side, namely the current account deficit at 13% of GDP in 2007. A negative current account indicates that a country is spending more than it is producing, that is, it represents negative savings of the country. A negative current account is not necessarily a negative feature of a developing country as it allows the country to invest and consume more and thus to increase its rates of

[5] The data from the Labor Force Survey was used because of the comparability with other countries in the sample based on the International Labor Organization (ILO) methodology. Those employed in the informal sector are accounted as employed according to the ILO methodology.

growth for a given period (Didik & Gligorov, 2007). If these extra resources are used productively, they will produce additional value in the future and allow the repayment of debt that was created by the negative current account. In general, the current account comprises the trade balance of goods and services, income and current transfers. The current account deficit of B&H completely stems from a negative trade balance in goods (37 % of GDP in 2007) while all of its other parts record positive values. The large trade deficit in goods indicates that the issue of competitiveness of domestic economy must be given close attention. A deterioration of domestic competitiveness means higher imports and lower exports and therefore larger and eventually unsustainable current account deficit.

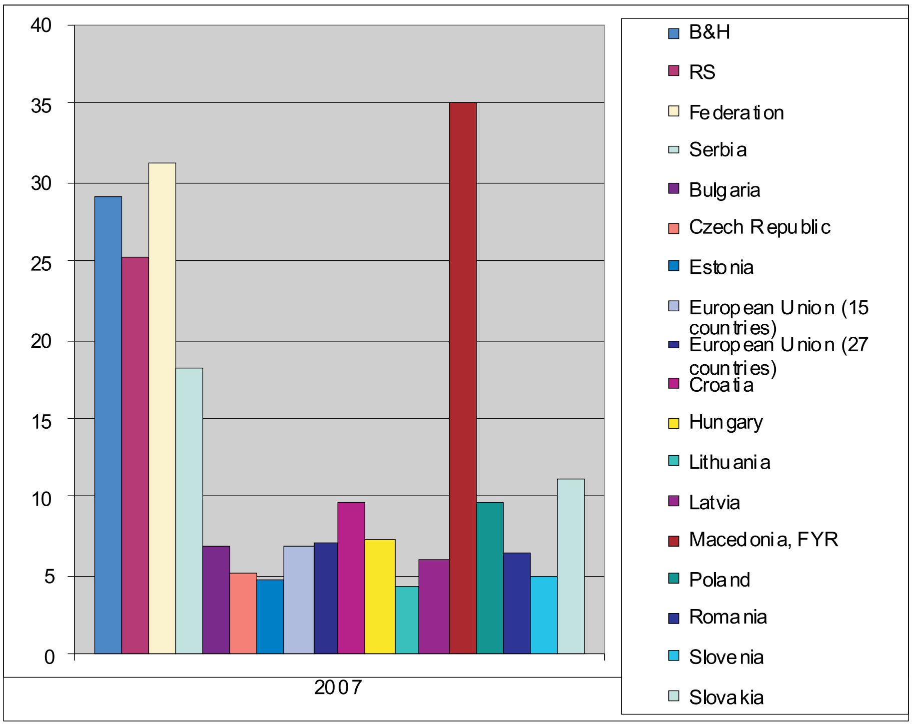


Figure 6.
Unemployment levels in selected countries in 2007, ILO methodology

Source: National statistical agencies and EUROSTAT

If we take into the account the currency board arrangement in B&H, the questions of domestic competitiveness and control of the current account balance are becoming even more essential. A negative and growing current account balance represents a potential threat to the parity between the Euro and the KM as it exerts pressure on international reserves of the Central Bank. If the external competitiveness is being deteriorated, it will lead to an inflation of the current account deficit to the levels at which its financing will not be possible through foreign investment and borrowing. Therefore, a key condition for the sustainability of the currency board arrangement, in the presence of the high current account deficit, is that the external competitiveness is not being eroded (Kristic, 2007).

External competitiveness of a country with a fixed exchange rate will be deteriorated if its inflation rate is above the inflation of the country from which the tracked currency originates. In the case of B&H this is the euro area. Therefore, we say that the price inflation of B&H must converge to the price inflation in the euro area. In other words, a long term inflation trend in B&H that is above the inflation in the euro area is not sustainable with a fixed exchange rate.
In the absence of monetary policy discretion under the currency board, wages represent the most important mechanism for adjustment of B&H inflation and competitiveness. A situation

when the growth of wages in one economy is not aligned with the underlying fundamentals, in particular the labor productivity growth, can lead to a reduction of competitiveness and unsatisfactory export performance (European Commission, 2006).

Labor productivity represents a measure of output per unit of labor, that is, it shows how much output is produced by one worker in a given time period. If wages are rising faster than productivity, it means that costs of labor are increasing per unit of output, which creates an upward pressure on prices. On the other hand, if productivity grows faster than wages, the participation of labor costs in production reduces and creates more room for price adjustments. From this we see that high wages represent a problem only when not backed by a corresponding productivity growth. Inflation would then tend to grow faster than in the reference countries and would undermine domestic competitiveness.

This is the reason why the European Commission monitors the wage developments in B&H. Moreover, the ability of the wage setting process to stay in line with the productivity growth is highly emphasized for all countries candidates for the euro area membership. In its 2008 Convergence Report[6], the European Central Bank noted the following: *"Wage increases should not exceed labor productivity growth and should take into account labor market conditions and developments in competitor countries"*. In other words, it is not enough to adjust the development of wages to productivity domestically but the development of these indicators should be compared with the competitor countries as well. For example, if the differential between the growth of productivity and the growth of wages is larger in other countries, it means that the domestic competitive position will be eroded despite the fact that the wages have not outpaced the productivity growth domestically.

[6] The Convergence Reports examine whether the Member States satisfy the necessary conditions to adopt the single currency. The EC Treaty requires the Commission and the European Central Bank to issue these reports at least once every two years or at the request of an EU Member State which would like to join the euro area.

Therefore, the flexibility of the wage setting system, which is able to adapt to changes in productivity and external competitiveness, is essential for countries with a fixed exchange rate such as B&H. In that sense, wage flexibility is key to rebalancing relative competitive positions (European Commission, 2008). However, parts of the B&H labor market have been found to be relatively rigid, predominantly those in the public sector, state-owned and non-restructured enterprises (World Bank, 2005). The causes of the labor market rigidity are manifold and these are not the subject of this study. Nevertheless, there are several important implications that stem from the rigid labor market. Firstly, an inflexible labor market makes it more difficult and costly for a country to adapt to a change in its competitive position (Forteza & Rama, 2001). Rutkowski *et al.* (2005) have found that during the transition recession job destruction was higher in the countries with lower wage flexibility and adjustment. This finding has strong implications for B&H, especially in the light of the global economic crises that started to be felt in the last quarter of 2008. Secondly, an inflexible labor market and shortcomings in its functioning stimulate the growth of informal sector (IMF, 2007). Thirdly, the influence of the public sector on the wage determination is normally larger in rigid labor markets (Rutkowski, *et al,* 2005). Consequently, the responsibility of the government to strive for an appropriate wage policy becomes more important.

In short, we have seen that the wage determination in the public sector is often guided by interests that are very different from those in the private sector. As stated previously, the strong growth of wages in the B&H public sector in the period 2006-2008 is attributed to interplay of various factors, some of which are the following:

- Introduction of VAT and strong growth of public revenues,

- Favorable economic developments and FDI inflow,
- History of self management from the former Yugoslavia and strength of the public sector trade unions,
- Political process connected with the wage setting in the public sector reinforced by the 2006 and 2008 elections.

It is obvious that these factors are dissimilar to the factors that shape the wage determination in the competitive sectors. The significant increases of wages in the public sector support the suspicion that the policymakers are not considering the potential effects of these decisions although it has been shown that the growth of public sector wages can negatively affect employment, competitiveness and eventually the stability of the currency board arrangement in B&H.

B&H has taken additional steps in the recent period towards regional and global economic integrations through joining the regional free trade agreement CEFTA in 2007, signing the Stabilization and Association Agreement in 2008 and furthering the negotiations on joining the World Trade Organization. These processes clearly indicate that additional strengthening of competitive pressures can be expected in the future.

All these reasons underline the importance of the wage and productivity developments as the key instruments for management of the B&H competitive position. The vital role of the B&H governments in this process must be stressed as the rest of the labor market is largely affected by the wage results in the public sector. As already noted, this has been confirmed by other studies and the close historical movements of the wages in the public and the private sector. The next section examines the historical change in B&H competitiveness by comparing the development of wages, productivity and unit labor costs with some neighboring and other European transition countries.

4. Wage Growth Taking a Toll?

If the level of development is taken into account, wages in B&H seem to be higher than average. The Figure 7a displays wages in a sample of European transition countries against their level of GDP *per capita.* The countries form a similar pattern to the one with the public wages (see Figures 2 and 3) again indicating the strong connection between wages in the public and the private sector. Once more, the countries of the former Yugoslavia are positioned above the average ratio of wages to GPD *per capita.* The Figure 7b shows that the wages in RS and Federation are higher by 25% and 46% respectively in respect to their projection based on the data for all the countries from the sample. In comparison to other countries, the RS and the Federation stand the furthest from the average ratio of wages to GDP *per capita.* This difference becomes even more pronounced once the sample gets compressed by using data for other countries from previous years in which their levels of GPD *per capita* were closer to those of RS and Federation in 2006 (see Figures 8a and 8b).

However, these observations tell us nothing about the dynamics of domestic competitiveness, the factor which is, as we saw, crucial for the sustainability of B&H economy. In order to measure how domestic competitiveness has developed over time we must compare domestic growth rates of wages and productivity with competitor countries.

In order to do so, we use the unit labor costs (ULC), an indicator of competitiveness. The ULC measures the change of wages against the change of labor productivity, i.e. it represents a ratio of change in average wage and change in productivity. For example, if ULC goes up, it means that wages have increased faster than productivity. The costs of labor per unit of output are thus increased, thereby squeezing the profit margins of companies and creating inflationary pressures.

Figure 7a.
Average wage (W) and GDP per capita (GDP/c) in 2006 for selected countries W in EUR, GDP/c in 000 EUR

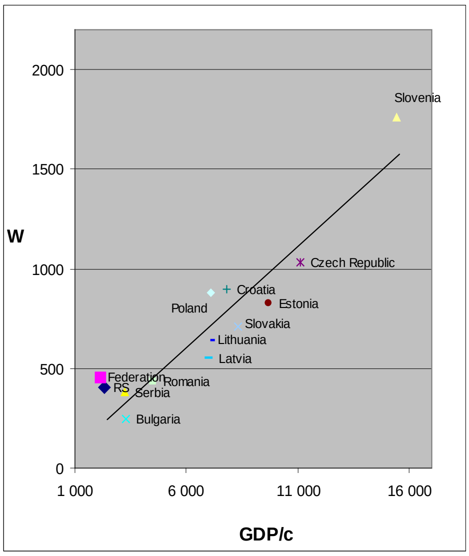


Figure 7b.
Difference from the projected wage (W/Wproj.)-1, in %

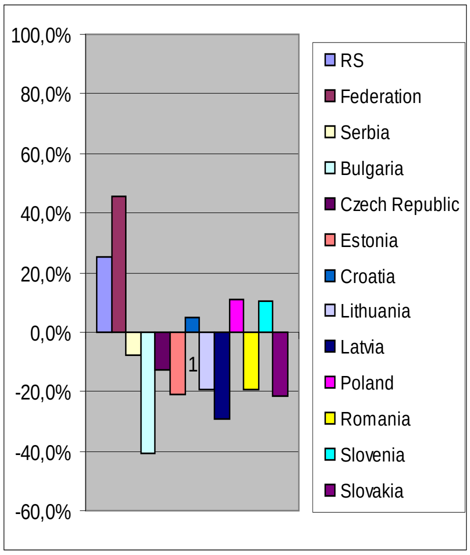


Figure 8a.
Average wage (W) and GDP per capita (GDP/c) in different years for selected countries W in EUR, GDP/c in 000 EUR

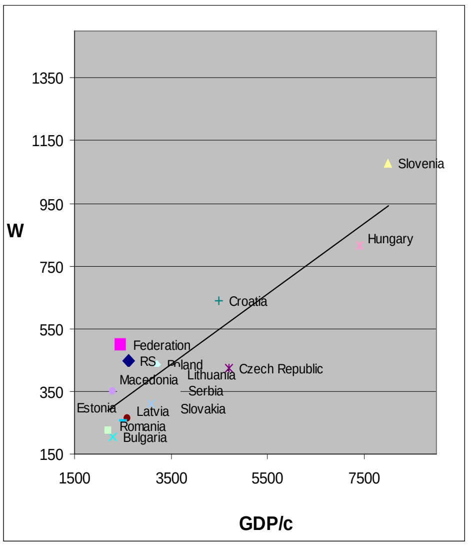
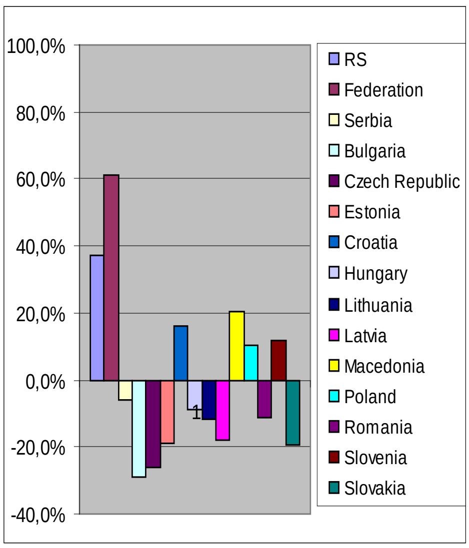


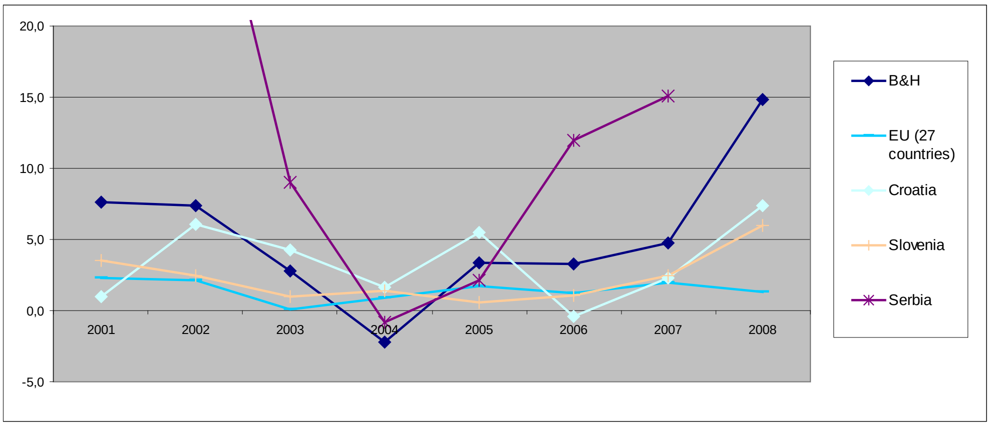
Figure 8b.
Difference from the projected wage (W/Wproj.)-1, in %



Source (7a, 7b, 8a, 8b): Author's calculations based on data from national statistical agencies, EUROSTAT and central banks of Serbia and Croatia.
Note for 7a and 8a: Data for RS and Fed. originate from 2006. Data for other countries is selected from different years in order to obtain a less dispersed sample.
Note for 7b and 8b: A positive value means that a wage is higher than its projection. Wage projections are based on the OLS method.

The comparison of ULC was done with the main B&H competitor countries: Croatia, Serbia, Slovenia and EU. These countries together comprised 86% of B&H foreign trade in 2008. The Figure 9 shows that the growth of ULC in B&H in the period 2006-2008 exceeded the growth of ULC in other countries, except in Serbia. However, the data for Serbia exhibits exceptionally strong volatility, especially in the period 2000-2001 (which was excluded from the sample). Obviously, there is a strong structural break in the series for Serbia associated with the NATO bombing in 1999. The average wage in Serbia was 65 EUR in 2000 but increased by 128% to 148 EUR in 2001 causing a large jump of ULC. It is possible that Serbia still has not returned to its long-run equilibrium and hence high volatility of ULC.

Figure 9.
Annual change in ULC



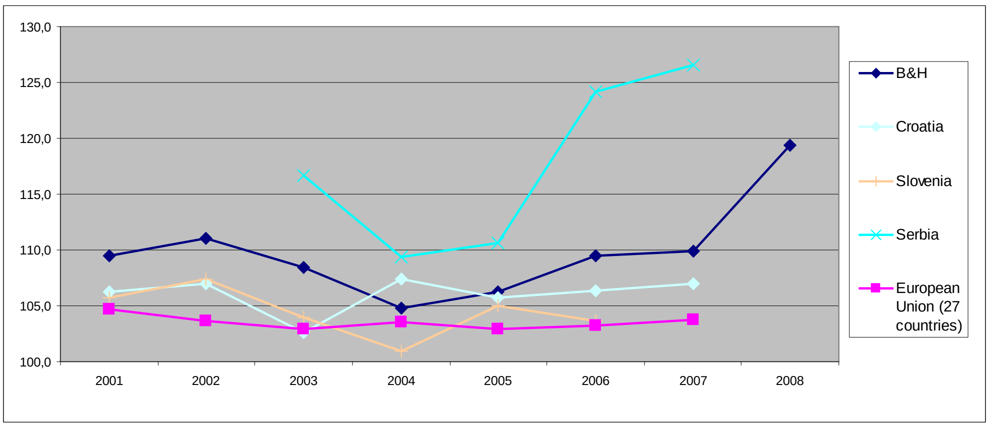
Source: Author's calculations based on data from national statistical agencies, EUROSTAT and central banks of Serbia and Croatia

Note: The 2008 data for EU 27, Croatia and Slovenia are forecasts.

Overall, we can say that the 2006-2008 wage increases have brought about a deterioration of the external competitive position of B&H. This deterioration was mainly caused by a strong growth of wages that exceeded the growth in other countries, again with the exception of Serbia (see Figure 10).

One potential source of the wage growth in B&H is also the process of wage convergence between the two entities. In the Figure 11 it is visible that the RS average wage stood at 63% of the Federation average wage in 2000 but grew fast in the whole period afterwards and caught up with the Federation in 2008.

Figure 10.
Annual growth of average wage

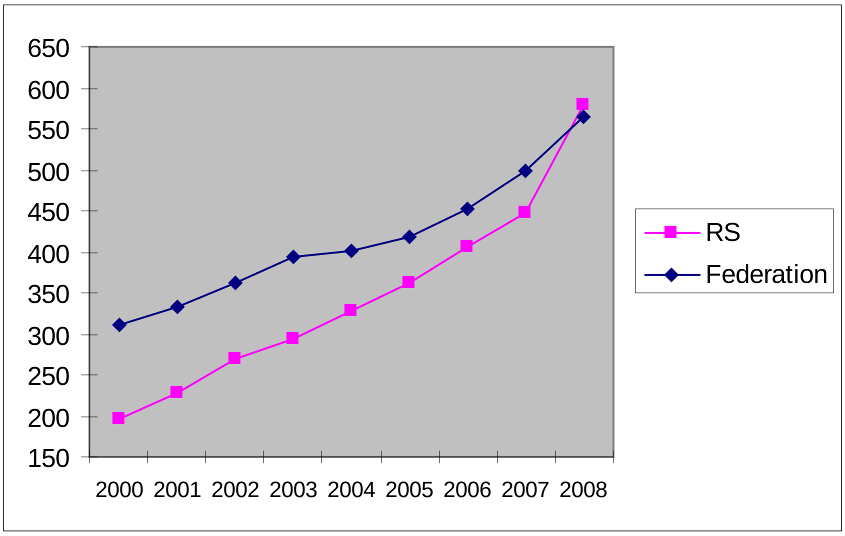


Source: Author's calculations based on data from national statistical agencies, EUROSTAT and central banks of Serbia and Croatia

Note: Data for European Union is based on the data for industry and services (excluding public administration).

The process of wage convergence has been also recorded in the EU and was identified as a factor that increases downward rigidity of wages and thus reduces individual countries' ability to respond to adverse external shocks (European Commission, 2006). This process has undermined the position of countries with low initial levels of productivity and wages but with slow growth of productivity.

Figure 11.
Average wage for RS and Federation, in EUR

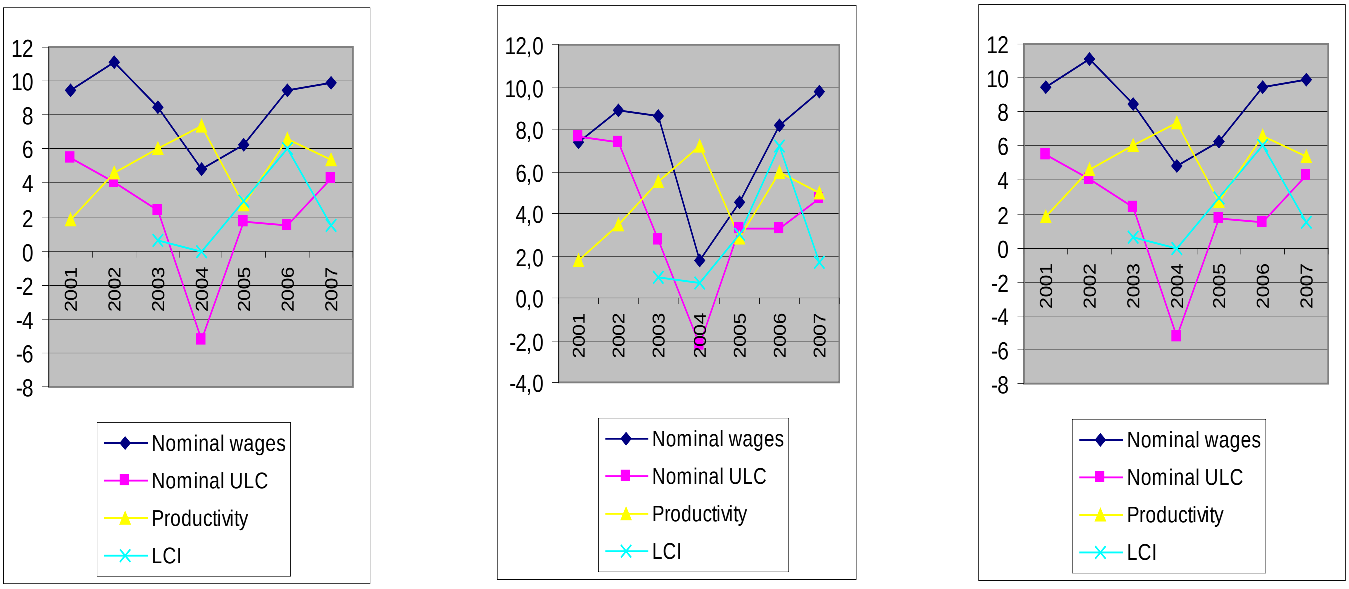


Source: RS and Federation statistical agencies

If the annual growth rates of wages and productivity are compared it can be observed that they have not been historically aligned in B&H. The Figure 12 shows that the growth of wages has outstripped the growth of productivity in all years except 2004. It can also be seen that the increase of ULC in the last three years has been primarily driven by strong wage increases while higher inflation rates in the same period were also observed. Also, the wage developments between two entities seem to display more difference than productivity. These observations are in line with the proposition that the wages in B&H, especially in the recent period, have mostly been driven by non-competitive factors.

Obviously, on average for the whole B&H economy, the growth of wages has surpassed the growth of productivity and thus increased the ULC. However, this picture hides significant differences across sectors. Djukic, Vidovic and Tutnjevic (2008) and Kristic (2007) have shown that the ULC in B&H reduced in the tradable sector (industry), remained more-less unchanged in the private non-tradable sector (services) while it increased in the public sector in the period 1999-2006. Although sector-level assessments of ULC developments may be subject to measurement problems and potential errors, these conclusions are in line with the findings for other countries (European Commission, 2006). The fall of ULC in the tradable sector arises from strong gains in productivity and confirms the hypothesis that an increase of competitiveness is associated with improvements in productivity. On the other hand, the growth of ULC in the public sector drove up the average ULC for total economy. Normally, the influence of the public sector is higher the higher is its share in total economy. This has strong implications for the effects of B&H's large public sector.

a) B&H b) Federation c) RS



Source: Author's calculations based on data from RS and Federation statistical agencies

Figure 12.
Annual changes of ULC, wages, productivity and living cost index (LCI)

So what are the implications for the ULC developments, in the presence of an inflexible labor market and the currency board arrangement, in terms of adjustments to external shocks such as the global economic crisis that has contaminated the Europe since the last quarter of 2008? Basically, such a slowdown of global economy means a drop in overall consumption and investment activity. For B&H this has caused a significant deterioration of external terms of trade due to the sharp fall in prices of B&H exports. This situation, together with a slowing domestic demand, exerts a strong downward pressure on domestic prices, especially those in the tradable sector. As we already saw, in the presence of a currency board arrangement, the main remaining instrument of adjustment is the labor market. If wages are not able to respond to the new circumstances, this leads to increased company bankruptcies and layoffs of workers. Adjustment in this case hence works through reductions in employment and growth. If wages are more flexible, a slowdown or recession is than less pronounced. Furthermore, a stronger recession shock means also a stronger test for the currency board as the international reserves deteriorate due to a falling competitiveness and raising devaluation pressures.

5. Policy Options

Although an improvement of labor market flexibility has been emphasized as a requirement for B&H in this study, an assumption has been made that its flexibility remains unchanged in the short and medium term. As said, this assumption implies strong influence of the governments' wage setting policies on the overall labor market. Another important assumption taken in the study is no change in the exchange rate policy. Therefore, this section examines four different policy options as alternative ways to go forward for the B&H governments in terms of the wage setting policy in the given environment. The four options are as follows:

1. Maintain the current wage setting practice in the public sector
2. Link the growth of public wages to the inflation growth
3. Link the changes of public wages to the changes of productivity in the economy
4. Bring the public wage levels in line with wages for comparable positions in the private sector and link their further growth to the growth of private sector wages

Each option is assessed against a set of criteria in order to identify the strengths and weaknesses of each option and to finally select the most suitable option for the way forward. A summarized overview of the policy alternatives and their assessment is presented in the Table 3.

The following criteria for assessment of the policy options have been selected:

1. Effect on employment outcomes
2. Effect on the current account balance
3. Effect on the living standard of public sector workers
4. "Fairness" of pay in the public sector
5. Feasibility

The selected criteria represent the most important goals that any B&H wage policy must or at least should attempt to achieve. The first two goals are derived from the two large imbalances of B&H economy, unemployment and current account deficit. The third criterion has been included due to the fact that any adopted policy on wages will directly affect incomes of workers and thus alter their well-being. The fourth criterion relates to a goal of achieving a certain level of fairness when the public sector in comparison to the private sector is concerned. This goal has been included due to the striking difference between the average wage in the public and private sector in B&H. The last criterion means that a selected proposal must be feasible. If it is not, than a selected policy proposal is useless.

Policy option 1: *Maintain the current wage setting practice in the public sector*

This option means preservation of *status quo*. We have seen that the wage setting policy in B&H public sector has been affected by many factors disconnected from the restrictions imposed on more competitive sectors. These looser conditions in the public sector have resulted with high public sector wages, well above what would be expected based on international data. Theory and evidence suggest that such developments have negatively affected the job creation and current account balance in B&H. This policy has been feasible due to the political gains for governments and strong and well organized trade unions whose voice has been much lauder than of the unemployed. To conclude, a continuation of the same wage policy practice is not acceptable as it would lead to further deterioration of B&H competitiveness and would not resolve the large imbalances of B&H economy.

Policy option 2: *Link the growth of public wages to the inflation growth*

This policy option implies no change in real wages for public sector workers. If applied retroactively, this option would insure much lower public wages as they historically exceeded the inflation growth. This option is very straightforward in terms of impact on the workers' living standards and means preservation of the current level. In this sense it provides a certain level of political sensibility as it allows the government, while leading a more restrictive wage policy, to promise that the material condition of its employees would not be deteriorated. From the position of workers this is worse than the Policy option 1 and hence its feasibility has been assessed as medium. The biggest downside of this policy is that it still does not provide an instrument for adjustment to external shocks. Let's take the example of inflation pick-up by end of 2007 and in the first three quarters of 2008, which was followed by an external shock in terms of global economic crises. If this policy option was applied, it would lead to a stronger wage growth driven by inflation (mostly imported in this case) and would not provide the necessary price adjustment imposed by worsened terms of trade. Therefore, its effects on employment and trade balance could be positive in times of low inflation and high productivity growth but in times of crises its effects could be opposite.

Policy option 3: *Link the changes of public wages to the changes of productivity in the economy*
This policy attempts to establish a closer link between the overall growth of wages and the average productivity growth in B&H. This would ensure that the domestic productivity is not eroded as it entails, if achieved completely, that the nominal ULC do not change. If historical changes of ULC for the EU 27 countries are observed, it can be seen that they have been growing by 0-2% annually. Therefore, this policy would ensure a gradual improvement of the B&H competitive position. One additional advantage of this policy is that, once implemented, it slowly shifts the focus of wage negotiations from the issues of what is "socially appropriate wage" to ways for increasing of productivity and thus increasing of wages. This changed perspective would probably help create a better understanding of why some other policy reforms are necessary and how they help improve productivity. The feasibility of this policy option has scored low as its successful implementation requires precise, methodologically correct and timely statistical data on productivity changes that would serve as primary basis for policy decisions. However, an index of productivity change is currently not being published by statistical offices in B&H and it would certainly take some time to develop and publish reliable and accurate data. Furthermore, this option does not provide for an automatic reduction of the public/private differential, that is, it takes the initial level of public wages as a fair starting point. Therefore, the last two criteria have ruled against this policy option.

Policy option 4: *Bring the public wage levels in line with comparable positions in the private sector and link their further growth to the growth of private sector wages*
This policy option has been selected as it provides satisfactory results across all five criteria. It proposes that the public sector wage rates should be reassessed and aligned with the rates in the private sector for comparable positions. This means that for every pay level in the public sector a benchmark rate from the private sector would be introduced. This would insure that public sector employees are paid at market terms but would still allow the recruitment of suitable people. As this policy would imply significant reductions (but also increases) of some wages, these reductions could be phased in gradually with only a part of it introduced at the beginning as a necessary response to the crises. Once public wages have been aligned with the private sector, their future growth would then be linked to the growth of the average wage in the private sector. In this way, it would be avoided that public sector sets pace for the overall wage growth. Moreover, the employees in the public sector would in this way share the destiny of the private sector in terms of wages and would thus get additional incentive to contribute to the economic development. This policy would also function as an automatic fiscal stabilizer as it would reduce the growth of the public wage bill in times of crises. Therefore its effects on employment and current account balance have been assessed as positive while its high level of fairness for the public sector wages is straightforward. The weakest link of this policy is that, although it provides a fair treatment of the workers in the public sector, it negatively affects their present status. This factor can therefore mobilize significant resistance to implementation of this policy by the influential trade unions of the public sector. This is why the feasibility of this policy option has scored a medium result. Therefore, strong political will is crucial for the implementation of this policy option.

	Effect on employment	Effect on current account balance	Effect on living standard of public sector workers	"Fairness" of pay in the public sector	Feasibility
1. Maintain the current wage setting practice in the public sector	negative	negative	positive	low	high
2. Link the growth of public wages to the inflation growth	historically positive, negative when adjustments to shocks are necessary	historically positive, negative when adjustments to shocks are necessary	neutral	low	medium
3. Link the changes of public wages to the changes of productivity in domestic economy	positive	positive	negative when adjustments to drops in productivity are necessary, positive with productivity growth	medium	low
4. Bring the public wage levels in line with comparable positions in the private sector and link their further growth to the growth of private sector wages	positive	positive	negative initially and when adjustment to shocks are necessary, positive with economic recovery and growth	high	medium

Table 3.
Assessment of the policy options

6. Conclusion and Recommendations

The current wage policy is simply not sustainable with the increasing competitive pressures and advancement of regional trade integrations for a small open economy such is B&H. Opening up and reducing barriers to trade, the process which has been supported by B&H policymakers, means also accepting a direct price competition where wages play a vital role.
Moreover, the global economic crisis that has spread over the Europe in the last quarter of 2008 warrants an immediate policy action in this respect. The previous surge of public wages had been associated with a global economic boom that has ended with a "hard lending". A reduction of wages in the public sector is now necessary as it would relax the pressure from the tightening fiscal revenues and would signal to the private sector that there is room for necessary wage and price adjustments. If this does not take place, the adjustment will take place through higher number of layoffs and company bankruptcies. Therefore, an impact of the external shock on domestic economy is inevitable but in which way the shock will be absorbed depends on a policy chosen. As we saw, a no-policy-change scenario leads to further deterioration of internal and external balance and eventually endangers the stability of financial system.

The main policy recommendations can be summarized as follows:

- *Bring the public sector wage levels in line with comparable positions from the private sector.* The benchmarking of public wages to the private sector could be done by the government or economic-social councils whose role would be especially important in determining the appropriate benchmarks for jobs that have no clear comparisons outside the public sector, e.g. army and police. In the benchmarking process, factors such as a greater level of security in the public sector and other benefits should be taken into account. The wage correction could be phased in gradually with an initial reduction at the level necessary to satisfy fiscal constraints and signal a policy change in the wage setting.

- *Link the further growth of wages in the public sector with the growth of the average wage in the private sector.* This will ensure that the same mistake does not take place again in times of economic booms and that over time public wages remain anchored and do not compete with the private sector.
- *Introduce these measures at the level of Fiscal Council.* This is important as it would remove a possibility of wage competition between different government levels and would provide the necessary coordinated implementation. The strong commitment of the Fiscal Council to long-term implementation of this policy would send an important signal that the overpayment in the public sector cannot be again expected. This would increase the attractiveness of employment in the private sector and could help stimulate entrepreneurial activity.
- *Improve the quality of statistical information and reporting on wages.* According to the World Bank (2005b) the official statistical data on wages are not representative as only a smaller share of companies (11% in 2004), mostly from the public sector, reports this data while the data submitted from the private sector might be biased downwards. The reliability of statistical data on wages under this policy option is highly important as it serves as primary basis for policy decisions.

A main caveat of this policy option is that it does not come without political costs. Social unrests and riots in countries that have recently tried to implement austerity measures (for example Ireland, Iceland, Hungary, Latvia, and Greece) illustrate this very well. However, not reacting now only postpones, but also aggravates, the problem. The first shy attempts of the RS Government in terms of 10% wage cuts for the public sector employees whose monthly salary exceeds KM 2000 is far from enough as it affects a small number of employees and creates little savings. This measure is also temporary in character as it further squeezes the already compressed wage spread in the public sector, which is not sustainable in the long run.

Therefore, an appropriate implementation of this policy requires substantial political capital, which has probably contributed to the fact that a number of European governments, including B&H, have resorted to arrangements with the IMF trying to shift some of the pressure from their shoulders. In the time of conclusion of this study, it seems that a good share of domestic policymakers still has not comprehended the significance of this problem (or have not cared) as the representatives of the Federation Parliament have made a decision to increase their salaries in January 2009, the representatives in the RS Parliament have not considered any reductions and the representatives in the B&H Parliament agreed only to withdraw their raise from the beginning of the 2009.

7. Bibliography

Demekas, D.G., Kontolemis, Z.G. (1999). *Government Employment and Wages and Labor Market Performance* (Working Paper 99/55). Washington, DC: International Monetary Fund.

Didik, N. Gligorov, V. (2007).*Current Account Deficit Sustainability in Bosnia and Herzegovina.* Sarajevo: Bosnia and Herzegovina Economic Policy and Planning Unit.

Djukic, O. Vidovic, I. and Tutnjevic, M. (2008). Plate i produktivnost: konkurentnost BiH u međunarodnom kontekstu (Wages and Productivity: Competitiveness of B&H in International Context). *Nezaposlenost u BiH: (ne)efikasnost postojećeg tržišta rada,* 5-36. Banja Luka: NGO Gea.

European Central Bank. (May 2008). *Convergence Report.*

European Commission. (2006). *European Economy* (Special Report No. 4/2006).

European Commission. (2008). *Wage and unit labor costs* (web page text). Retrieved on December 12, 2008 from http://ec.europa.eu/economy_finance/analysis_structural_reforms/labour_markets4222_en.htm.

Freeman, R.B. (1984).*Unionism Comes to the Public Sector* (Working Paper No. 1452). Cambridge: National Bureau of Economic Research.

Forteza, A., Rama, M. (2001). *Labor Market Rigidity and the Success of Economic Reforms across More than 100 Countries* (Policy Research Working Paper No. 2521). Washington, DC: World Bank.

International Monetary Fund (2007). *Bosnia and Herzegovina: Selected Issues* (Country Report No. 07/269).

Kristic, I. (2007). *Sustainability of the Currency Board Arrangement in BiH.* Sarajevo: Bosnia and Herzegovina Economic Policy and Planning Unit.

Lindauer, D.L. (1988). *Government Pay and Employment Policies and Government Performance in Developing Countries* (Working Paper WPS 42). Washington, DC: World Bank.

Rutkowski, J.J., Scarpetta, S, Banerji, A., O'Keefe, P., Pierre, G., Vodopivec, M. (2005). *Enhancing Job Opportunities (Eastern Europe and Former Soviet Union)*. Washington, DC: World Bank.

Stevenson, G. (1992). *How Public Sector Pay and Employment Affect Labor Markets* (Working Paper WPS 42). Washington, DC: World Bank.

World Bank. (2005b). *Bosnia and Herzegovina, Labor Market Update: the Role of Industrial Relations* (Report No. 32650-BA).

World Bank. (2006). *Bosnia and Herzegovina: Addressing Fiscal Challenges and Enhancing Growth Prospects* (Report No. 36156-BiH).

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