### 3. Employment and Wages

The basic indicators on the labor market show an improvement compared to Q1 2014 as well as a deterioration compared to the second half of the previous year. According to the Labor Force Survey (LFS) data, the rates of activity and employment have risen while the unemployment rate has dropped. The extent and structure of employment growth are causing a number of dilemmas. The overall employment growth stands at 6.5% (about 150,000) and it happened over the same period in which economic activity dropped by 1.8% while income from taxes and social security continutions (SSC) dropped by about 1%. According to the LFS, the number of people employed in sectors which are completely or partly within the public sector has risen significantly. According to the LFS, employment rose in the private sector which is hard to explain with the growth of economic activity but can be partly explained with the reduction of the gray economy. However, certain sectors have recorded an extremely high growth of employment and real net wages which are not accompanied with the adequate growth of the extent of activities and Gross Value Added (GVA<sup>1</sup>), but it is highly unlikely that this is the consequence of the suppressing of the gray economy. Also, in the real estate business, the y.o.y. growth in the number of people employed stands higher than 100% while the GVA has grown a modest 0.1%. Similarly, the growth of employment and real net wages in the construction industry is not accompanied with the appropriate rise in the GVA and economic activity. Wages in Q1 nominally dropped for the first time following a constant rise in the 2012-2014 period and that is primarily the consequence of a drop in public sector wages by 10% late last year. In the first quarter, wages in real terms dropped by 1.3% as the result of a relatively high drop in the public sector and growth in the private sector. Because of the drop in wages in the public sector, the difference in wages between public and private sector narrowed from about 20% in the first three quarters of 2014 to 14% in Q1, 2015.

#### Employment

Rates of activity and employment rising, unemployment rate dropping in Q1 2015 compared to same quarter of previous year. According to the LFS data, we are seeing an improvement in the basic indicators of the labor market in the first quarter of 2015 compared to the first quarter of the previous year. Improvements on the labor market can partly be explained with the reduction of the informal employment from the middle of the previous year but there are dilemmas over the significant discrepancies with other macroeconomic data. Namely, the Gross Domestic Product (GDP), industrial production etc., in the first quarter are still recording significant drops and a recovery of the economy can be expected not before the second quarter while the labor market, according to the LFS data, has recorded continuous improvements since 2012?! Also, the change in unemployment rate usually lags behinde the change in economic activity, that means that economic activity rises first and then the unemployment rate drops. However, the opposite holds in Serbia, with the GDP dropping along with the unemployment rate!? Table T3-1 shows that the rates of activities (15-64) and employment (15-64) rose by 1.1 and 1.9 percentage points respectively in Q1 2015 compared to the same quarter of the previous year. The unemployment rate (15-64) dropped in the same period by 1.7 percentage points. According to the LFS, the y.o.y. rise in the number of employed stands at 6.5% in Q1 2015 which indicates a strong improvement of the situation on the labor market. However, in the same period we have seen a relatively high drop in the GDP of 1.8%, a drop in the real terms of taxes and SSC which casts doubts on the reliability of the data on a rise in employment.

<sup>1</sup> Source: QM caluculation. Note: real growth rates seasonally adjusted data, reference year 2010.

|                           | Q1 2014 | Q2 2014 | Q3 2014 | Q4 2014 | Q1 2015 | Change in pp<br>Q1 2015/<br>Q1 2014 |
|---------------------------|---------|---------|---------|---------|---------|-------------------------------------|
| Activity rate (15-64)     | 61.2    | 62.5    | 62.2    | 61.2    | 62.3    | 1.1                                 |
| Employment rate (15-64)   | 48.0    | 49.3    | 50.8    | 50.4    | 49.9    | 1.9                                 |
| Unemployment rate (15-64) | 21.6    | 21.2    | 18.4    | 17.6    | 19.9    | -1.7                                |
| Inactivity rate (15-64)   | 38.8    | 37.5    | 37.8    | 38.8    | 37.7    | -1.1                                |

Table T3-1. Trends in rates of activity, employment, unemployment and inactivity, (15-64), 2014-Q1 2015.

The unemployment rate is higher than in the previous quarter but it has dropped compared to the same quarter of the previous year. The population (15+) has recorded a y.o.y. drop of 0.4% while the number of active persons (15+) has recorded a growth of 4.5%. The active population (15+) increased in Q1 2015 compared to the previous quarter by almost 133,000 people. The structure of the active population (15+) in the first quarter is as follows: employed workers 56.2%, self-employed 18.1%, helping households' members 6.5%, unemployed 19.2%. Compared to the same quarter of the previous year, the participation of the employed increased by 2.7 percentage points while the participation of the unemployed dropped by 1.6 percentage points.

According to the LFS employment is rising in most sectors but it is contradictory to economic activity trends and data from other sources. Table T3-2 shows the trend in the number of employed by economic activity over the past year. According to it, 13 sectors have recorded growth in the number of employed in Q1 2015. In some sectors (the processing industry for example) the growth of employment is in accord with the economic activity trends while in other sectors, the growth drastically differs from the economic activity trends or Gross Value Added. The most extreme growth of more than 100% was recorded by the real estate sector. The number of people employed in that sector grew from 2,255 to 4,877. That trend is very hard to explain even if we take into consideration the changes to regulations on doing business in this sector because the Gross Value Added shows a modest growth of 0.1% while net wages in real terms dropped by 3% (see part on Wages).

According to the LFS, there is a high growth of the number of employed in most sectors which fall mainly or completely into the public sector which is oppoiste to reliable data from other state institutions. The problem with the data on employment growth according to the LFS can be illustrated on the example of health care and social security. According to LFS figures, the growth of the number of employed in overall (public and private) health care and social security stands at almost 10% over the past year or about 14,000. However, the public sector dominates health care and social security in Serbia and the number of employees has been reduced in that sector. The conclusion from the LFS is that there was an increase in the number of people employed in private health care and social security by about 100% (which is not very likely). Similar dilemmas exist in regard to the growth in the number of people employed in education, the state administration, defense and mandatory social security of 6.6%!?

20

|   |              |           |           |           |           |           | Index<br>Q4 2014/<br>October | Index<br>Q1 2015/ |  |
|---|--------------|-----------|-----------|-----------|-----------|-----------|------------------------------|-------------------|--|
|   | October 2013 | Q1 2014   | Q2 2014   | Q3 2014   | Q4 2014   | Q1 2015   | 2013                         | Q1 2014           |  |
| Total   | 2,394,004    | 2,342,966 | 2,407,930 | 2,475,135 | 2,459,048 | 2,494,346 | 102.7                        | 106.5             |  |
| Agriculture, forestry and fishing                     | 522,084      | 469,196   | 500,302   | 533,833   | 538,040   | 495,660   | 103.1                        | 105.6             |  |
| Mining  | 23,065       | 27,230    | 23,941    | 30,013    | 29,198    | 25,883    | 126.6                        | 95.1              |  |
| Manufacturing industry                                | 399,654      | 388,127   | 386,935   | 364,053   | 385,369   | 398,323   | 96.4                         | 102.6             |  |
| Supply of electricity, gas and steam                  | 37,206       | 31,266    | 40,114    | 42,265    | 37,386    | 26,816    | 100.5                        | 85.8              |  |
| Water supply and wastewater management                | 36,866       | 37,139    | 42,579    | 34,799    | 35,548    | 37,760    | 96.4                         | 101.7             |  |
| Construction  | 126,620      | 96,744    | 99,763    | 113,033   | 120,476   | 107,618   | 95.1                         | 111.2             |  |
| Wholesale and retail trade, repair of motor vehicles  | 288,606      | 300,020   | 304,649   | 309,293   | 305,493   | 357,183   | 105.9                        | 119.1             |  |
| Transportation and warehousing                        | 130,882      | 141,317   | 132,088   | 127,928   | 121,550   | 124,578   | 92.9                         | 88.2              |  |
| Accommodation and food services                       | 61,973       | 62,153    | 59,826    | 61,707    | 55,442    | 83,339    | 89.5                         | 134.1             |  |
| Information and communication                         | 50,140       | 56,796    | 61,045    | 51,779    | 49,253    | 56,018    | 98.2                         | 98.6              |  |
| Financial activities and insurance activities         | 44,566       | 44,616    | 39,275    | 43,357    | 40,839    | 48,654    | 91.6                         | 109.1             |  |
| Real estate   | 2,028        | 2,255     | 3,835     | 2,595     | 2,467     | 4,877     | 121.6                        | 216.3             |  |
| Professional, scientific and innovation activities    | 63,185       | 68,359    | 73,251    | 64,795    | 61,701    | 57,116    | 97.7                         | 83.6              |  |
| Administrative and support service activities         | 49,175       | 47,585    | 46,846    | 53,186    | 56,725    | 56,866    | 115.4                        | 119.5             |  |
| Public administration and compulsory social insurance | 132,950      | 135,750   | 138,316   | 153,739   | 138,827   | 144,684   | 104.4                        | 106.6             |  |
| Education   | 156,867      | 149,005   | 150,117   | 163,450   | 164,215   | 158,833   | 104.7                        | 106.6             |  |
| Health and social care                                | 136,455      | 140,776   | 146,563   | 141,630   | 141,713   | 154,575   | 103.9                        | 109.8             |  |
| Arts, entertainment and recreation                    | 44,823       | 49,158    | 40,040    | 39,780    | 45,794    | 50,740    | 102.2                        | 103.2             |  |
| Other service activities                              | 86,860       | 95,475    | 118,443   | 143,900   | 129,014   | 104,825   | 48.6                         | 148.5             |  |

#### Table T3-2. Employed people aged 15+ by sector, October 2013-Q1 2015.

## Informal employment rate drops.

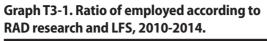
Structure of informal employment according to professional status has changed significantly. The big growth in the number of people employed has also been recorded in the construction, wholesale and retail sectors, motor vehicle repair, accommodation and food services and administrative and auxiliary services. We are expressing doubts about there really being a rise in the number of employees, but that the growth is the consequence of the effects of the suppressing of the gray economy, especially in the construction industry, trade and restaurants, hotels, cafes where the gray economy is most pronounced. That effect is shown in the next table (Table T37-3), where you can note that formal employment figures are rising while informal employment figures have risen by just 0.8%.

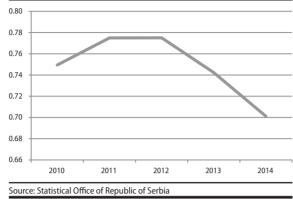
# Table T3-3. Formally employed people and structure of informally employed according to professional status, 2014-Q1 2015.

|   |           |           |           |           |           | Inde:<br>01 2015 |
|---|-----------|-----------|-----------|-----------|-----------|------------------|
|   | Q1 2014   | Q2 2014   | Q3 2014   | Q4 2014   | Q1 2015   | Q1 2014          |
| Number of employed (total)                    | 2,342,966 | 2,407,930 | 2,475,136 | 2,459,048 | 2,494,346 | 106.5            |
| Formal employment                             | 1,863,236 | 1,896,355 | 1,895,472 | 1,864,450 | 2,010,551 | 107.9            |
| Informal employment                           | 479,730   | 511,575   | 579,664   | 594,598   | 483,795   | 100.8            |
| Informal employment by<br>professional status |           |           |           |           |           |                  |
| Employed                                      | 62,352    | 71,723    | 118,522   | 123,737   | 108,179   | 173.5            |
| Self-employed with employees                  | *         | *         | 4.352**   | *         | *         | *                |
| Self-employed without employees               | 227,955   | 229,427   | 226,723   | 239,872   | 170,853   | 75.0             |
| Helping households' members                   | 187,056   | 209,509   | 230,068   | 226,875   | 202,258   | 108.1            |
| Informal employment rate                      | 20.5      | 21.2      | 23.4      | 24.2      | 19.4      |                  |

Source: Statistical Office of Republic of Serbia

The growth of the overall number of people employed (6.5%, that is 151,000) is owed mainly to the growth of formal employment which showed a rise of 7.9% (147,000) in Q1 2015 compared to the same quarter of the previous year. We are recalling that the GDP dropped in the first quarter by 1.8% and that taxes and SSC dropped almost equally to wages in real terms. The question that remains is why the growth of legal employment of 150,000 with approximately unchanged wages in real terms, had no effect on the growth of income from taxes and SSC on wages? We see that there have been changes in the professional status of informally employed people. In the first quarter of 2014, the share of the employed in informal employment stood at 13% and in the first quarter of 2015 it stood at 22%. It is evident that the number of self-employed





has dropped while the greatest share among the informally employed is recorded by the helping households' members.

The rate of informal employment dropped by 1.1 percentage point in the first quarter of 2015 compared to the same quarter of the previous year.

Graph T3-1 shows an evident drop in the ratio of the number of people employed according to RAD research (formally employed people) and according to the LFS (formal and informal employment figures). That ratio stood at 0.7 in 2014.

The overall number of people employed, according to the RAD research, dropped in 2013 and 2014 compared to the previous years (2012 and 2013 respectively) while the number of formally employed, according to the LFS, rose in 2013 and 2014 which caused a reduction of their ratio as seen on Graph T3-1. That indicates the growth of informal employment in 2013 and 2014. The rate of informal employment rose in 2014 (Table T3-3).

We expect an additional reduction in the number of people employed in the public sector considering the announced lay offs in the public sector' employment in 2015 and 2016. It is not realistic to assume that the private sector will employ the entire surplus in the public sector in 2015 at least not in terms of formal employment. Will the private sector increase the overall employment over the next few years depends primarily on investments and economic growth – chances are in general slim that overall employment will rise if the economy does not grow at a rate of 3-4% a year.

### Wages

Average gross wages in real terms have dropped over the past two quarters. Average montly gross wages dropped nominally by 0.4% in Q1 2015 compared to the same quarter of the previous year while wages in real terms dropped by 1.3%. When we observe the 2012-2014 period we see that wages grew nominally over that entire period (Table T3-4). Following three years of the growth of nominal wages, we have for the first time a drop in nominal wages even though that drop is not significant and stands at less than half a percent. On the other hand, wages in real terms in the observed period mainly recorded a drop and it was spread widely across economic activities. Of the total of 19 sectors, 11 sectors recorded drops in real net wages in Q1 2015, compared to the same quarter of 2014. Considering that wages in the public sector were reduced as of December 2014 (wages for November), the full effects of the reduction were seen in the first quarter of 2015.

Drop in real net wages in public sector in Q1 2015.

Graph T3-2 shows the y.o.y. indexes of real net wages over the past year by selected sectors. The graph on the left shows that sectors with recorded growth of real net wages in Q1 2015 and those are: agriculture, the processing industry, construction industry and retail and wholesale trade, repair of motor vehicles. The graph on the right shows selected sectors with the highest y.o.y. drop in real net wages in Q1 2015. The greatest y.o.y. drop of 7.2% was recorded in the financial operations and insurance sectors as well as in other services. Interestingly, the comparison of wages trends in activities dominated by the state showed that real net wages dropped more in the education sector than in health care with the difference standing at 3.4 percentage points. The smaller drop in real wages in health care is probably the consequence of the fact that this activity relies to a greater extent on own income than was the case with education. The nominal reduction of wages in the public sector means that real wages recorded a drop in all activities which are completely or dominantly in the public sector in the first quarter.

22

|        |  | Average Mo  | Average Gross<br>Monthly Wage<br>Index |                       |         |       |
|--------|--|-------------|--|-----------------------|---------|-------|
|        | Total<br>labour<br>costs <sup>1)</sup><br>in dinai | , in dimove | Total<br>labour<br>costs,<br>in euros  | Net wage,<br>in euros | nominal | real  |
|        | 12   |             |  |                       |         |       |
| Q1     | 63,840   | 5 39,068    | 591                                    | 362                   | 111.0   | 106.0 |
| Q2     | 68,140   | 0 41,664    | 600                                    | 367                   | 109.6   | 105.3 |
| Q3     | 67,45  | 7 41,187    | 577                                    | 352                   | 106.4   | 98.4  |
| Q4     | 71,452   | 2 43,625    | 630                                    | 384                   | 108.7   | 96.8  |
| Decemb | er 76,830  | 0 46,923    | 677                                    | 413                   | 106.6   | 95.1  |
| 20     | 13   |             |  |                       |         |       |
| Q1     | 67,704   | 4 41,419    | 606                                    | 371                   | 106.0   | 94.6  |
| Q2     | 72,14  | 3 44,248    | 644                                    | 395                   | 105.9   | 95.9  |
| Q3     | 71,469   | 9 43,939    | 626                                    | 385                   | 105.9   | 99.1  |
| Q4     | 75,089   | 9 46,185    | 648                                    | 399                   | 105.1   | 103.0 |
|        | 14   |             |  |                       |         |       |
| Q1     | 68,01  | 5 41,825    | 588                                    | 361                   | 100.5   | 97.8  |
| Q2     | 73,14  | 7 44,971    | 633                                    | 389                   | 101.4   | 99.6  |
| Q3     | 73,16  |             | 623                                    | 383                   | 102.4   | 100.5 |
| Q4     | 75,332   |             | 626                                    | 386                   | 100.3   | 98.4  |
|        | 15   |             |  |                       |         |       |
| Q1     | 67,73  | 0 41,718    | 557                                    | 343                   | 99.6    | 98.7  |

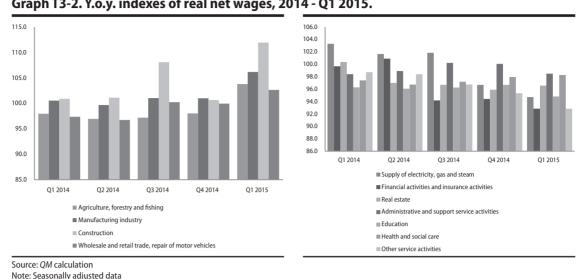
Source: SORS

1) Total labor costs (TLCs) comprise employer's total average expense per worker, including all taxes and social security contributions. TLCs stand at around 164.5% of the net wage. Gross wage growth indices are equal to total labor cost indices, because the average TLC is greater than the average gross wage by a fixed 17.9% of employer based social security contributions.

The processing and construction industries recorded a constant growth of real net wages over the past year. The effects of legalization of buildings made without permits are becoming slowly visible in the construction industry. A big rise in real net wages was recorded in the construction industry in the first quarter of 2015 by almost 12% compared to the same quarter of the previous year. Also, we noted that real net wages in the construction industry rose constantly since the fourth quarter of 2013. On the other hand the Gross Value Added in the construction industry recorded greater oscillations during 2014 with y.o.y. real growth rates standing at -4.9%, 5.6%, -2.4% and 5.9% in Q1, Q2, Q3 and Q4, respectivelly. The third quarter saw a rise in wages of 8.1% while the Gross Value Added dropped by 2.4%. The growth of real wages is much higher than the value added growth in the first quarter of 2015. The real growth rate of the Gross Value Added stood at 1.2% compared to Q1 2014. The rise in wages is greater than the rise of Gross Value Added by almost 11 percentage points in Q1 2015. It is important to note that from mid-2014, labor inspection in the construction industry sector was stepped up which contributed to the registering of employees who mainly worked as informally employed in the construction industry. We believe that the noted growth of wages is owed mainly to the formalization of wages which were previously paid out informally (in cash) and we express doubts that there was such a large-scale actual growth of the average net salary in the construction industry.

The processing industry has recorded a significant growth in real net wages of 6% in Q1 2015. The processing industry has recorded a production growth of 3.4% in April 2015 compared to the average in 2014 (seasonally adjusted data) while the non-seasonally adjusted y.o.y. growth stood at 1.6% in April 2015. We see that there was a growth of real wages in the processing industry which was higher compared to the growth of production and with employment rising by 2.6% which indicates a modest growth of productivity of 0.8%. A significantly higher growth of wages than of productivity could be at least in part explained with the suppressing of the gray economy. Those salary and productivity trends increase the real unit labor costs in the processing industry which will have a negative effect on the labor market in the long term.

Besides the sectors which are dominant or are completely in the public sector, the sectors which recorded a drop in wages in Q1 2015 are the following: accommodation and food services;

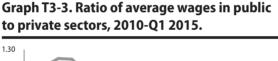


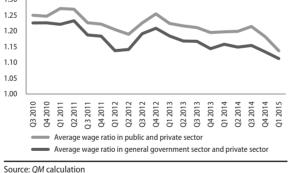


information and communication; financial operations and insurance; real estate and administrative and other service activities.

The differences in wages in the public and private sectors are growing smaller.

The reduction of wages in the public sector contributed to reducing the differences in average wages in the public and private sectors. Graph T3-3 shows the ratio of the average real net wages in the public (overall state and public companies) to private sectors<sup>2</sup>, as well as the ratio of the average wages in the overall state sector<sup>3</sup> (state administration, defense and mandatory social security, education, health care and social security) to the private sector. We compared weighted wages in the private and public sectors with the number of employees used as the weights.<sup>4</sup> This comparison does not take into account the characteristics of the employed such as level of edu-





cation, years of experience, productivity etc. The relevant comparison should take into consideration the differences in characteristics of employees which are not analyzed in this issue of the Quarterly Monitor. We primarily have to take into account the fact that the percentage of employees with university degreeis higher in the public than in the private sector which, as expected, contributed to the higher average salary in the public compared to the private sector.

The ratio of average wages in the public to private sectors and the ratio of average wages in the state to private sector dropped to 1.14

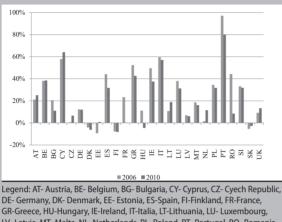
and 1.11 respectively in the first quarter of 2015 which is the lowest value in the observed period (2010-2014). In the first three quarters of 2014, wages in the public sector were on average 20% higher compared to wages in the private sector and were 14% higher in the first quarter of 2015. The weighted real net salary in the private sector stood at 23,722 RSD and in the public sector at 26,983 RSD in the first quarter of 2015. If we compare wages in the overall state sector (public sector without public companies), the difference is even smaller and it stands at just over 10%.

<sup>2</sup> Public sector includes the following sectors: B - Mining, D - Supplying electricity, gas, steam and air conditioning, E - Supplying water; managing waste waters, controlling the process of removing waste and similar activities, O - State administration and defense; mandatory social security, P - Educatio, Q - Health care and social security, R - Art; entertainment and recreation. The private sector covers all other sectors.

<sup>3</sup> The overall state sector is viewed separately in order to observe those sectors which mainly do not have any commercial activities and do not have income from market activities.

<sup>4</sup> S - Other services cover sectors T - Activities of households as employers; activities of households producing goods and services for their own needs and U - Activities by extraterritorial organizations and bodies.

Graph T3-4. Difference in average wages in public and private sectors in % of wage per hour in private sector, EU, 2006 and 2010.



Ber Greece, HU-Hungary, IE-Ireland, IT-Italia, LT-Lithuania, LU-Luxembourg, LV-Latvia, MT-Malta, NL- Netherlands, PL- Poland, PT- Portugal, RO- Romania, SI- Slovenia, SK- Slovakia, UK- Great Britain Source: De Castro, F., Salto, M. and H. Steiner, (2013), The gap between public

and private wages: new evidence for the EU, European Commission, European Economy, Economic Papers 508

Wages are higher on average in the public sector than in the private sector in most European Union countries. De Castro et al., (2013), used data from the European Structure of Wages Survey (SES) – survey conducted by Eurostat, to analyze in detail the gap in wages in the public and private sectors of the EU member states in 2006 and 2010.

Higher wages in the private sector have been recorded in Denmark, Finland, Hungary and Slovakia in 2010. Differences in wages were reduced significantly in Bulgaria, Spain, Greece, Ireland, Portugal and Romania. Somewhat smaller reductions were noted in Italy, Luxembourg, Malta, Poland and Slovenia. Reduction of those differences is mainly the consequence of lowering the wages in the overall state sector in order to reduce deficits and public debts.

The graph shows that in 2010 Portugal and Cyprus had the greatest gaps in wages, around 80% and 60%, respectively. Greece and Italy are in the second group of countries by gap size: 40-60%. The difference in average wages is somewhat lower in Austria, Belgium, Spain, Ireland, Poland, Slovakia and Luxembourg and stands at 40-60% of the wage per hour in the private sector. In other countries the difference in wages falls within the 0-20% interval of wages per hour in the private sector.

If we compare Serbia to the EU member states according to differences in wages between the public and private sector, Serbia is within the group of countries in which that gap stands at 0-20% of the average wage in the private sector, but with the reservation that the data is not directly comparable because of methodology differences.

1 Source: De Castro, F., Salto, M. and H. Steiner, (2013), The gap between public and private wages: new evidence for the EU, European Commission, European Economy, Economic Papers 508

That shows that the reduction of wages by 10%, and their subsequent freezing and the restrictive approval of bonuses (work overtime and etc.) removed a significant part of the difference between wages in the public and private sectors. When making these comparisons we have to bear in mind that this difference is probably somewhat lower because part of the wages in the private sector are paid out in cash (informally). Considering the salary freeze in the public sector, we expect this relationship to be narrowed further in the 2015-2017 period. The reduction of the differences between wages in the public and private sectors is justified not just because of fiscal consolidation but also for promoting competition on the labor market. Still, an excessive reduction of wages in the public sector could be counter-productive because it would lead to the departure of the best personnel from the public sector (doctors, teachers and others) which would bring a drop in the quality of public services. Also, the reduction of wages in the public sector could cause an increase in corruption which means that the private expenses of the population would increase when using public services and would affect the quality of services provided by the public sector.