## 3. Employment and Wages

According to the data from the Labour Force Survey (LFS), basic labour market indicators improved significantly in Q2 2015. Unemployment rate dropped compared to the previous quarter and to the same quarter of the previous year. Year-on-year growth in the number of the employed was 158 thousand persons (6.6%), while the growth of the employed compared to the previous quarter was 72 thousand (2.9%). Trends in the total and formal employment are not in line with the trends of GDP, consumer spending, and income from taxes and social security contributions (SSC). Certain sectors recorded an extreme growth in the number of the employed, such as, for example, accommodation and food services, financial and insurance activities and administrative and support services activities. According to LFS employment is currently also rising in sectors that are predominantly public sectors, which is contrary to the Ministry's data on the number of employees and labour costs. Average monthly gross wages recorded a year-on-year decline, both in nominal and real terms. As many as 12 sectors recorded a growth in average net wages in real terms, so the total decline of wages is primarily the result of the reduction of salaries in the public sector. Trends in wages and employment in certain sectors are not in line with the trends in economic activity in those sectors. Thus, for example, in Q2 2015, financial and insurance services recorded an increase in the number of the employed of 34% compared to the same quarter last year, and growth of real net earnings of 3%, in the same period when the real growth rate<sup>2</sup> of gross value added (GVA) in this sector was a modest 0.1%. According to LFS, formal employment is growing significantly while informal employment is declining, although data on labour tax and SSC's collection questions whether these changes are so intensive. As a result of wage freeze in the public sector and growth of wages in the private sector, the ratio of average wages in the public and private sectors continued to decline and was 1.08 in Q2 2015.

## **Employment**

According to LFS, in Q2 basic labour market indicators significantly improved...which is not in line with GDP trends, consumer spending and labour tax and SSC. According to LFS data, improvement trend of labour market indicators continued in Q2 2015 compared to the previous quarter and the same quarter of the previous year. Table T3-1 shows a decline in the unemployment rate compared to the same quarter of the previous year by almost 3 pp. There was a significant year-on-year growth of activity rate and employment rate in Q2 2015, which was 0.8 pp and 2.4 pp, respectively. These kinds of labour market trends deviate from other macroeconomic trends (such as, for example, GDP, consumer spending, labour taxes and SSC). Discrepancy between labour market trends and other macroeconomic aggregates in Serbia can also be seen by comparing them to EU countries. EU countries realised a year-on-year decline in the unemployment rate of 0.7 pp, while estimated GDP growth rate was 1.8%. For example, the Czech Republic recorded a decline in the unemployment rate of 1.1 pp, and its real GDP growth rate in Q2 2015, compared to the same period last year, was as high as 4.4%. Latvia recorded a decline in unemployment rate by 0.9 pp in the period when it realised a GDP growth of 2.7%. Luxembourg, at a GDP growth rate of 1.4% recorded a decline in the unemployment rate of only 0.3 pp. EU countries, in conditions of higher growth rates of economic activity, are recording a relatively small decline in unemployment rate compared to Serbia. Total employment (formal and informal) grew by 6.6% in Q2 2015 compared to the same quarter of the previous year, while GDP grew by only 1%. Change in the unemployment rate in Serbia is significantly higher than the real growth rate of GDP, which is not the case in EU countries. In general, we estimate that certain improvements on the labour market are present, but they are probably smaller than indicated in the LFS.

<sup>2</sup> Change compared to the same period of the previous year

Table T3-1. Trends in the rate of activity, employment, unemployment and inactivity (15-64), Q1 2014-Q2 2015

|                           | Q1 2014 | Q2 2014 | Q3 2014 | Q4 2014 | Q1 2015 | Q2 2015 | Change in pp<br>Q2 2015/Q2 2014 |
|---------------------------|---------|---------|---------|---------|---------|---------|---------------------------------|
| Activity rate (15-64)     | 61.2    | 62.5    | 62.2    | 61.2    | 62.3    | 63.3    | 0.8                             |
| Employment rate (15-64)   | 48.0    | 49.3    | 50.8    | 50.4    | 49.9    | 51.7    | 2.4                             |
| Unemployment rate (15-64) | 21.6    | 21.2    | 18.4    | 17.6    | 19.9    | 18.4    | -2.8                            |
| Inactivity rate (15-64)   | 38.8    | 37.5    | 37.8    | 38.8    | 37.7    | 36.7    | -0.8                            |
| ource: SORS               |         |         |         |         |         |         |                                 |

According to LFS the number of the employed is significantly rising in sectors dominated by the state, which is rather strange.

Table T3-2 shows the trend of total employment, as well as the trend in the number of the employed by activities. Activities dominated by the public sector recorded a significant increase in the number of employees. Public administration and defence, mandatory social insurance recorded an increase of 9.5% in the number of employees. Year-on-year growth in the number of employees in education was 6.6% in Q1 2015 and 16% in Q2 2015. The number of employees in the education sector increased by 24,000 persons in Q2 2015 compared to the same quarter of the previous year. Year-on-year growth in the number of employees in healthcare was slightly above 15,000. If we consider the fact that there is currently a ban on public sector employment<sup>3</sup>, the entire growth in the number of the employed in the mentioned sectors should be in the private sector, which is highly unlikely, as it would require hundreds of private schools, hospitals and doctor's offices being opened in the last year4. Aside from that, it remains unclear how such an increase in the number of the employed is possible if GVA in public administration and mandatory social insurance, education and activities in healthcare and social protection recorded a year-on-year decline of 2.9%.

It is hard to explain extreme growth of employment in parts of private sector

Extremely high growth of 53.9% in the number of employees was recorded in the accommodation and food services sector, 34.4% in the financial and insurance services, and 27.2% in the administrative and support services. Growth in the number of employees in the financial and insurance services significantly deviates from the trends in GVA which recorded a moderate increase of 0.1%. We should take into account the fact that some of these sectors, such as financial services, do not operate in grey economy, so this increase in employment cannot be explained by the influence of legalisation and reduction of grey economy.

Table T3-2. Employed persons, age 15+, by sectors, Q1 2014-Q2 2015

|   | Q1 2014   | Q2 2014   | Q3 2014   | Q4 2014   | Q1 2015   | Q2 2015   | Index<br>Q1 2015/<br>Q1 2014 | Index<br>Q2 2015/<br>Q2 2014 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|------------------------------|------------------------------|
| Total   | 2,342,966 | 2,407,930 | 2,475,135 | 2,459,048 | 2,494,346 | 2,565,712 | 106.5                        | 106.6                        |
| Agriculture, forestry and fishing                     | 469,196   | 500,302   | 533,833   | 538,040   | 495,660   | 479,253   | 105.6                        | 95.8                         |
| Mining  | 27,230    | 23,941    | 30,013    | 29,198    | 25,883    | 27,428    | 95.1                         | 114.6                        |
| Manufacturing industry                                | 388,127   | 386,935   | 364,053   | 385,369   | 398,323   | 411,832   | 102.6                        | 106.4                        |
| Supply of electricity, gas and steam                  | 31,266    | 40,114    | 42,265    | 37,386    | 26,816    | 27,112    | 85.8                         | 67.6                         |
| Water supply and wastewater management                | 37,139    | 42,579    | 34,799    | 35,548    | 37,760    | 37,390    | 101.7                        | 87.8                         |
| Construction  | 96,744    | 99,763    | 113,033   | 120,476   | 107,618   | 110,849   | 111.2                        | 111.1                        |
| Wholesale and retail trade, repair of motor vehicles  | 300,020   | 304,649   | 309,293   | 305,493   | 357,183   | 352,087   | 119.1                        | 115.6                        |
| Transportation and warehousing                        | 141,317   | 132,088   | 127,928   | 121,550   | 124,578   | 132,041   | 88.2                         | 100.0                        |
| Accommodation and food services                       | 62,153    | 59,826    | 61,707    | 55,442    | 83,339    | 92,050    | 134.1                        | 153.9                        |
| Information and communication                         | 56,796    | 61,045    | 51,779    | 49,253    | 56,018    | 64,365    | 98.6                         | 105.4                        |
| Financial activities and insurance activities         | 44,616    | 39,275    | 43,357    | 40,839    | 48,654    | 52,795    | 109.1                        | 134.4                        |
| Real estate   | 2,255     | 3,835     | 2,595     | 2,467     | 4,877     | 3,841     | 216.3                        | 100.2                        |
| Professional, scientific and innovation activities    | 68,359    | 73,251    | 64,795    | 61,701    | 57,116    | 77,623    | 83.6                         | 106.0                        |
| Administrative and support service activities         | 47,585    | 46,846    | 53,186    | 56,725    | 56,866    | 59,592    | 119.5                        | 127.2                        |
| Public administration and compulsory social insurance | 135,750   | 138,316   | 153,739   | 138,827   | 144,684   | 151,452   | 106.6                        | 109.5                        |
| Education   | 149,005   | 150,117   | 163,450   | 164,215   | 158,833   | 174,097   | 106.6                        | 116.0                        |
| Health and social care                                | 140,776   | 146,563   | 141,630   | 141,713   | 154,575   | 161,790   | 109.8                        | 110.4                        |
| Arts, entertainment and recreation                    | 49,158    | 40,040    | 39,780    | 45,794    | 50,740    | 42,544    | 103.2                        | 106.3                        |
| Other service activities                              | 95,475    | 118,443   | 143,900   | 129,014   | 104,825   | 107,571   | 148.5                        | 90.8                         |

Note: The sectors which fall completely or dominantly into the public sector have been shaded. Source: Republic Statistics Office

<sup>3</sup> Ministry's data on expenses for wages and on the number of employees indicate that the ban is mostly respected, as well as that the total number of employees has been reduced due to retirement and exiting public sector after wage reductions.

<sup>4</sup> Increase in the total number of employees in the stated sectors cannot be explained by registering workers who had previously worked without official registration, as they were included in the overall employment. This type of worker registration only changes the structure of the employed, but not their overall number.

Growth of employment in processing industry is in line with the growth of production

Growth in the number of employees in the processing industry of 6.4% and mining of 14.6% is accompanied by GVA growth of 7.8%<sup>5</sup>. Wholesale and retail trade, repair of motor vehicles and motorcycles recorded an increase in the number of employees of 15.6%. Employment growth in the sectors of wholesale and retail trade, repair of motor vehicles, transport and storage, accommodation and food services is significantly higher than the growth of GVA, having y-o-y real growth of 2.1%. Growth of employment in these sectors can partly be explained by reduction of the grey economy. Employment grows in the sectors of professional, scientific, innovative and technical activities (6%) and administrative and support services (27.2%), while GVA dropped by 1%. Increase in the number of employees in the construction sector is in line with the GVA trends, which increased in construction by 12.6% year-on-year.

Four sectors recorded a decline in the number of employees: agriculture, forestry and fisheries, power, gas and steam supply, air-conditioning, water supply, wastewater management, waste disposal process control, and similar activities and other services.

LFS data indicate intensive registration of workers who had previously worked unregistered

According to LFS data, total employment grew due to the growth of formal employment by 10%, while informal employment declined by 7% in Q2 2015 compared to the same quarter of the previous year. Informal employment rate dropped in Q2 2015 compared to the same quarter of the previous year, but also compared to the previous quarter. Adoption of the Labour Law in the middle of last year and increased control of Labour Inspection and Tax Authority probably caused part of the workers to be registered. However, it is highly unlikely that the number of the formally employed increased by as much as 10.2% (i.e. by 194 thousand), as it would have to reflect on a significant increase of income of labour taxes and SSC, which didn't happen (see the section on Fiscal Policy).

Table T3-3. Formally employed persons and the structure of informally employed persons according to their professional status, Q1 2014-Q2 2015.

|  | Q1 2014   | Q2 2014   | Q3 2014   | Q4 2014   | Q1 2015   | Q2 2015   | Index<br>Q2 2015/<br>Q2 2014 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|------------------------------|
| Number of employed (total)                 | 2,342,966 | 2,407,930 | 2,475,136 | 2,459,048 | 2,494,346 | 2,565,712 | 106.6                        |
| Formal employment                          | 1,863,236 | 1,896,355 | 1,895,472 | 1,864,450 | 2,010,551 | 2,089,996 | 110.2                        |
| Informal employment                        | 479,730   | 511,575   | 579,664   | 594,598   | 483,795   | 475,716   | 93.0                         |
| Informal employment by professional status |           |           |           |           |           |           |                              |
| Employed                                   | 62,352    | 71,723    | 118,522   | 123,737   | 108,179   | 127,950   | 178.4                        |
| Self-employed with employees               | *         | *         | 4.352**   | *         | *         | *         | *                            |
| Self-employed without employees            | 227,955   | 229,427   | 226,723   | 239,872   | 170,853   | 143,452   | 62.5                         |
| Helping households' members                | 187,056   | 209,509   | 230,068   | 226,875   | 202,258   | 202,216   | 96.5                         |
| Informal employment rate                   | 20.5      | 21.2      | 23.4      | 24.2      | 19.4      | 18.5      |                              |
|  |           |           |           |           |           |           |                              |

Note: \* A small number of occurrences – assessment not published, \*\* less precise assessment – use with caution Source: Republic Statistics Office

If we look at the structure of the informally employed, we see that even though an extremely high growth of the formally employed has been recorded, who are partly working unregistered - as much as 78% (y-o-y in Q2 2015), the total number of the informally employed is dropping. The reason lies in the fact that the decline in the informal employment in the self-employed without employees (37.5%) and helping household members (3.5%) has a higher weight in the structure of total informal employment – 30% and 43%, respectively.

## Wages

Average monthly gross wages are dropping, both in nominal and real terms Average monthly gross wages have nominally decreased by 1%, while in real terms they declined by 2.3% in Q2 2015 compared to the same quarter of the previous year. The declining trend of nominal and real wages from the first quarter continued in the second quarter as well (Table T3-4).

<sup>5</sup> GVA is tracked collectively for the sectors of: mining, processing industry, power, gas and steam supply, wastewater supply and management

Table T3-4. Serbia: Average monthly wages and y-o-y indices, 2012-Q2 2015.

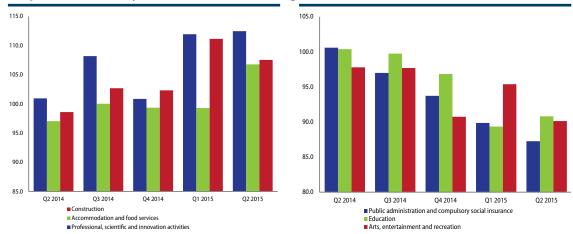
|          | Aver  | age Monthly \          | Wage                                  | Average Gross Monthly<br>Wage Index |         |       |  |  |
|----------|---|------------------------|---------------------------------------|-------------------------------------|---------|-------|--|--|
|          | Total<br>labour<br>costs <sup>1)</sup> ,<br>in dinars | Net wage,<br>in dinars | Total<br>labour<br>costs,<br>in euros | Net wage,<br>in euros               | Nominal | Real  |  |  |
| 2012     |   |                        |                                       |                                     |         |       |  |  |
| Q1       | 63,846  | 39,068                 | 591                                   | 362                                 | 111.0   | 106.0 |  |  |
| Q2       | 68,140  | 41,664                 | 600                                   | 367                                 | 109.6   | 105.3 |  |  |
| Q3       | 67,457  | 41,187                 | 577                                   | 352                                 | 106.4   | 98.4  |  |  |
| Q4       | 71,452  | 43,625                 | 630                                   | 384                                 | 108.7   | 96.8  |  |  |
| Decembar | 76,830  | 46,923                 | 677                                   | 413                                 | 106.6   | 95.1  |  |  |
| 2013     |   |                        |                                       |                                     |         |       |  |  |
| Q1       | 67,704  | 41,419                 | 606                                   | 371                                 | 106.0   | 94.6  |  |  |
| Q2       | 72,143  | 44,248                 | 644                                   | 395                                 | 105.9   | 95.9  |  |  |
| Q3       | 71,469  | 43,939                 | 626                                   | 385                                 | 105.9   | 99.1  |  |  |
| Q4       | 75,089  | 46,185                 | 648                                   | 399                                 | 105.1   | 103.0 |  |  |
| 2014     |   |                        |                                       |                                     |         |       |  |  |
| Q1       | 68,015  | 41,825                 | 588                                   | 361                                 | 100.5   | 97.8  |  |  |
| Q2       | 73,147  | 44,971                 | 633                                   | 389                                 | 101.4   | 99.6  |  |  |
| Q3       | 73,167  | 44,934                 | 623                                   | 383                                 | 102.4   | 100.5 |  |  |
| Q4       | 75,332  | 46,371                 | 626                                   | 386                                 | 100.3   | 98.4  |  |  |
| 2015     |   |                        |                                       |                                     |         |       |  |  |
| Q1       | 67,730  | 41,718                 | 557                                   | 343                                 | 99.6    | 98.7  |  |  |
| Q2       | 72,438  | 44,717                 | 602                                   | 371                                 | 99.0    | 97.7  |  |  |
| <b></b>  | , 9   | ,                      |                                       |                                     |         |       |  |  |

Source: Republic Statistics Office

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."

In most sectors, real wages grew in Q2 2015... sectors that recorded a decline are those which are mostly dominated by the state Most sectors recorded a year-on-year increase in real net wages. Sectors which are dominated by the state recorded a decline in real net wages, which is the result of the reduction of public sector wages by 10% at the end of last year (Graph T3-1). Significant decrease of real net wages in Q2 2015 of almost 13% was recorded in the public administration and defence, and mandatory social insurance. The smallest decline of real net wages was in the sector of power, gas and steam supply and air-conditioning and was 1%. Continuous declining trend in real net wages was also recorded in the real estate sector. Healthcare sector had a lower year-on-year decrease of real net wages compared to the education sector, although compared to Q1 2015 that difference was reduced by 0.5 pp.

Graph T3-1. Year-on-year indices of real net wages, Q2 2014- Q2 2015.



Note: Right graph – three sectors with the highest y-o-y decrease of wages in Q2 2015, left graph – three sectors with the highest y-o-y growth of wages in Q2 2015

Source: SORS

Real net wages in construction recorded a year-on-year growth of 12.5% in Q2, which was probably the result of this sector's recovery, but also registration of some of the workers who had previously worked unregistered. Year-on-year growth from the first quarter additionally increased in the second quarter.

The growth trend of wages continued in the processing industry, but it was slower than the growth of production, so productivity in this sector is growing. Processing industry sector recorded a year-on-year growth of production of 7.3% in Q2, while year-on-year growth of wages was 4.2% in Q2 2015.

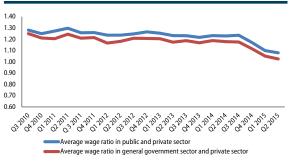
Higher growth of wages than value added adversely affect the real unit labour costs in these sectors, which has negative effects in the long term.

The trend of reducing the difference in wages in the public and private sectors continued in Q2 2015 as well.

The ratio of average wages in the public<sup>6</sup> and private sectors, as well as the ratio of average wages in the general government sector<sup>7</sup> and private sector continued to decline in Q2 2015 (Graph T3-2). The ratio of weighted average wages in the public and private sector was reduced to 1.08, while the same ratio in the general government sector and private sector was reduced by 1.03<sup>8</sup>. Growth of weighted wages in the private sector in Q2 2015 compared to the same quarter of 2014 was 2.9%, while the decline in the public sector and general government sector was significant, 10.6% and 11.9%, respectively. Decrease of wages in the public sector contributed to a significant reduction of differences between average wages in the private and public sectors.

It is difficult to predict the trend of these ratios in the coming period. Wage freeze in the public sector was announced for the period 2015-2017, which should additionally reduce the dif-

Graph T3-2. Ratio of average wages in the public and private sectors, 2010-Q2 2015.



Source: QM calculations

Note: For the weighting we used relative share of the number of employees in each sector compared to the total number of employees in the private sector, public sector and general state sector.

ference in average wages in the public and private sector. On the other hand, there are constant pressures to abolish this decision, but increase of wages, even if it is realised, will be minimal. Also, rationalisation of public sector was announced, i.e. significant lay-offs due to overstaffing. This will affect a change in weighting and a change in wage ratio as well. As a result of expected growth of wages in the private sector and freezing or minimal increase of wages in the public sector, it is our estimate that the wages in the public sector over the next year will be significantly reduced compared to the wages in the private sector.

<sup>6</sup> We included the following sectors in the public sector: B – Mining, D – Power, gas and steam supply, and air-conditioning, E – Water supply; Wastewater management, Waste disposal process control and similar activities, O – Public administration and defense; Mandatory social insurance, P – Education, Q – Healthcare and social protection, R – Art, entertainment and recreation. Private sector includes all other sectors.

 $<sup>7\,</sup>General\,state\,sector\,is\,stated\,separately\,in\,order\,to\,separately\,observe\,the\,sectors\,that\,mainly\,don't\,have\,any\,commercial\,activity\,and\,do\,not\,generate\,revenue\,from\,market\,activities.$ 

<sup>8</sup> We used seasonally adjusted wages except for sectors D and P, because wages in these sectors have no statistically significant seasonal component, which is why we prefer the use of original series to seasonally adjusted ones. In the previous issue of QM, we used seasonally adjusted data for all sectors.