

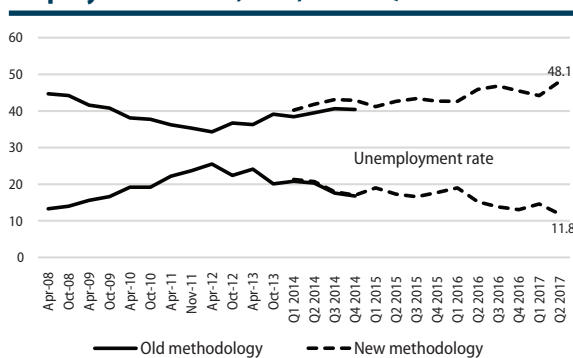
3. Labour Market

Labour Force Survey data indicate continued improvements on the labour market, which significantly surpass the growth of economy and imply a high decline in productivity and an increase in unit labour cost. Unemployment rate in the second quarter of 2017 reached the lowest value since 2008 and was 11.8%, while the employment rate reached its highest value of 48.1%. In Q2 2017, the number of unemployed persons according to the LFS data was 384 thousand, which compared to 2014 (since comparable data has been available) is a reduction of as much as 36.8%. In Q2 2017, total employment and formal employment continued their growth trend, which was significantly faster than the growth of GDP. Year-on-year growth of employment in Q2 2017 was 4.3%, while formal employment increased by impressive 5.1%. In H1 2017 (first half of the year), the total employment increased by 3.8% compared to the same period of the previous year, and formal employment increased by 5.0%. On the other hand, the data of the Central Registry of Compulsory Social Insurance (CRCSI) indicate a more moderate year-on-year growth of formal employment of 2.5% in Q2, i.e. 2.2% y-o-y in H1. The rate of informal employment was 22.1%. Year-on-year growth of informal employment was moderate and was 1.8% and 2.6% in agriculture. In the second quarter of 2017, compared to the same period of the previous year, the average net wages nominally increased by 4.6% and by 0.9% in real terms. Average net wages in euros were higher by 5.6% compared to the same quarter of the previous year, which was mostly the result of the strengthening of the dinar in June 2017. Employment trends and real Gross Value Added (GVA) indicate a decline in productivity. The decline is somewhat smaller if we use CRCSI data rather than LFS data. The productivity decline (according to the data on registered employment) and the growth of wages lead to the growth of unit labour cost of 1.9% and 1.1% (total and excluding agriculture, respectively) compared to the same quarter of the previous year. Faster growth of net wages in euros than the growth of GDP and the growth of unit labour cost indicate a weakening of Serbian economy's competitiveness.

Employment and Unemployment

Unemployment rate is 11.8%, employment rate is 48.1%...

Graph G3.1 Movements of Unemployment and Employment Rates, 15+, 2008-Q2 2017.



Note: Due to a change in methodology, the data for the periods before and after 2014 are not fully comparable.
Source: SORS, LFS

Considerable reduction of unemployment and growth of employment according to the data of the Labour Force Survey, with a modest growth of GDP...

According to LFS data, the number of unemployed persons in the second quarter of 2017 was 384 thousand. This implies a reduction of as much as 22.5% (111.4 thousand) compared to the same period of the previous year. Compared to the 2014 average, the number of the unemployed decreased by 224 thousand, i.e. 36.8%. On the other hand, the number of persons registered at the National Employment Service at the end of June was 639 thousand, which is by 61 thousand or by around 9% less than in the same month of the previous year. According to LFS, the num-

The basic labour market indicators show significant improvement in the second quarter of 2017 compared to the same quarter of the previous year, as well as compared to the previous quarter. Activity rate was 54.5% and was by 0.4 pp higher compared to the same quarter of the previous year. The unemployment rate reached a record low since LFS survey is being conducted, and was 11.8%. Compared to Q2 2016, it was lower by 3.4 pp. Employment rate reached its highest value and was 48.1%, which was by 2.2 pp higher compared to the same quarter of the previous year. Graph G3.1 shows the movements of unemployment and employment rates from 2008 to Q2 2017.

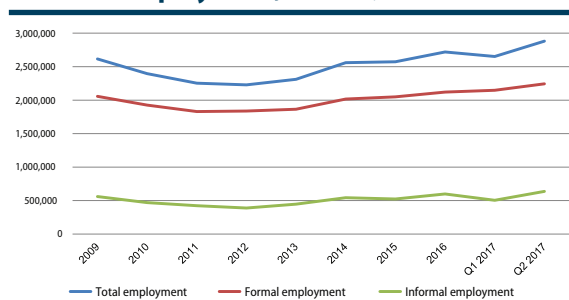
ber of employed persons in Q2 increased by 4.3% year-on-year, which significantly surpasses the modest 1.2% growth of GDP.

Considerable growth of total and formal employment

Informal employment moderately increasing

The total number of the employed in Q2 2017 was 2.881 million. Compared to the second quarter of 2016, the number of the employed increased by 4.3% (119.5 thousand), while the real GVA in the same period increased by 1.2%. In H1 2017, compared to the same period of the previous year, total employment increased by 3.8%. While the reduction of the number of the unemployed could be partly explained by demographic factors (emigration), the significantly faster growth of employment than the growth of GDP in the longer term cannot be explained neither by demographic nor economic factors. Moreover, if the growth of employment were real, and not a result of statistical errors, it would have had quite worrisome consequences as it would imply a higher decline in productivity and a growth in unit labour cost, which would mean that the international competitiveness of Serbian economy had significantly declined. However, the strong growth of exports in the previous years, as well as the growth of real wages on the liberalised labour market indicate that the stated decline in competitiveness never happened, which brings into question the accuracy of LFS employment data.

Graph G3.2 Trend of Total, Formal and Informal Employment, 2009-Q2 2017.



Note: Due to a change in methodology, the data for the periods before and after 2014 are not fully comparable.
Source: SORS, LFS

According to LFS data, formal employment since the second quarter of the previous to the second quarter of current year increased by 108 thousand, while informal employment increased by 11 thousand. Measured in percentages, year-on-year growth of formal and informal employment in Q2 was 5.1% and 1.8%, respectively. In H1 2017, compared to the same period of the previous year, formal employment increased by 5.0%, while informal employment, on the other hand, decreased by 0.6%. The rate of informal employment was 22.1% and was slightly lower compared to the same quarter of the previous year (-0.6 pp).

The table shows trends in employment (LFS and CRCSI) and GVA overall and by sectors (agriculture, industry, construction, and services). While formal employment, according to the Labour Force Survey, increased year-on-year by a significant 5.1%, the registered employment according to CRCSI increased by 2.5%. During 2016 and in the first two quarters of 2017, we saw that the growth of formal employment was always higher according to LFS than the registered employment according to CRCSI. Since these two surveys measure the same phenomenon by applying different methodologies, it is expected that any discrepancy between them is accidental, but over the last year and a half, it has been systematic – employment according to LFS is always rising faster than according to CRCSI. Also, it can be observed that the growth of total employment according to LFS is significantly higher than the growth of GVA in the last year. Employment in industry and services was also significantly higher than the growth of their GVA.

Industry, construction, and services realised a higher growth of employment than the growth of real GVA. Employment in agriculture is falling, but less than the real GVA. The smaller decrease of employment in agriculture than the fall of GVA is in line with what is happening in other countries. When activities of GDP in one of the sectors are declining, employment also falls, but with a delay and at a somewhat lower rate. However, the problem is that over the last few years, during the periods of production growth in agriculture, the employment grew even faster – which is contrary to what is happening in other countries.

Table 3.1 Trends in the number of employees and real GVA by sectors, Q1 2016-Q2 2017, year-on-year change, %

	2016				2017	
	Q1	Q2	Q3	Q4	Q1	Q2
Total employment CRCSI	-0.3	1.2	1.3	2.1	2.3	2.5
Formal employment LFS	1.9	2.7	3.8	5.2	4.9	5.1
Total employment LFS	2.7	6.7	7.2	5.8	3.2	4.3
Total GVA	4.4	2.2	3.3	2.7	1.0	1.2
Employment- agriculture	-3.7	6.0	6.1	-3.4	-8.0	-1.6
GVA-agriculture	7.7	4.6	11.8	8.1	-2.2	-10.0
Employment-industry	4.2	7.8	7.9	7.6	9.3	8.4
GVA-industry	6.9	0.3	2.7	2.3	1.3	2.8
Employment-construction	4.7	6.8	8.2	9.1	5.7	4.6
GVA-construction	12.9	7.8	8.6	-0.6	-5.1	-2.8
Employment-services	4.7	6.8	8.2	9.1	5.7	4.6
GVA-services	2.6	2.1	1.7	2.4	1.6	2.3

Note: Source for employment is LFS, except for total employment which is stated both according to LFS and CRCSI.

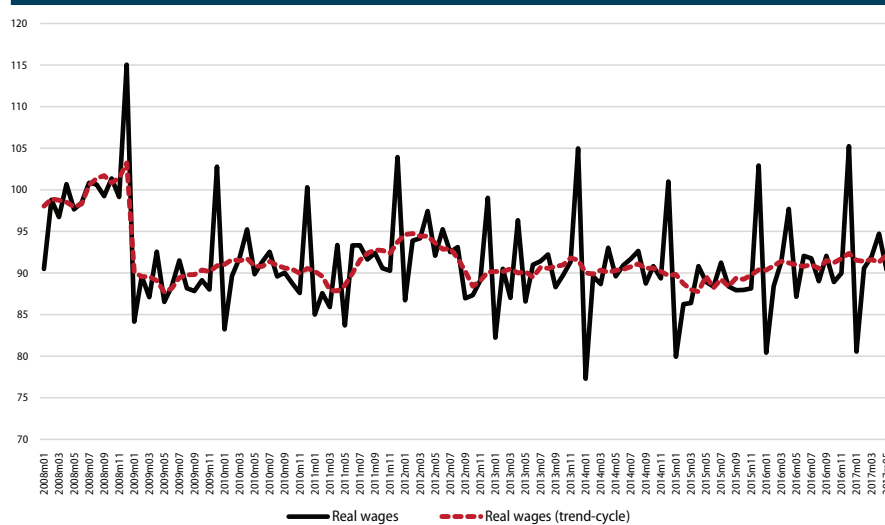
Source: SORS, LFS, CRCSI and SNA.

Wages

Wages were nominally higher by 4.6%, and by 0.9% higher in real terms in Q2 2017 compared to the same period of the previous year

Average nominal net wages were 48,670 RSD in Q2 2017. Compared to the same period of the previous year, average net wages in Q2 2017 were nominally higher by 4.6%, while the real growth was 0.9%. In the first half of 2017, the nominal growth was 4.4%, i.e. 1% in real terms, compared to the first half of 2016. Graph G3.3 shows the trend of real net wages, as well as the trend cycle since 2008. Even though monthly data have certain seasonal fluctuations, the trend is in line with economic activity, i.e. real wages stagnated in the last few years.

For international competitiveness, trend of wages in euros is important (Graph G3.4). Average net wages were 400 EUR, while cost to the employers was 648 EUR in Q2 2017. Compared to the same period of the previous year, a significant increase in wages in euros was recorded of almost 6%. This was mostly the result of the strengthening of the dinar against the euro¹ in June 2017. Growth of wages and of employer's cost in euros in H1 2017 compared to the same period in 2016 was 4.5% and 4.6%, respectively. While we express some reserve about the data on high decline in

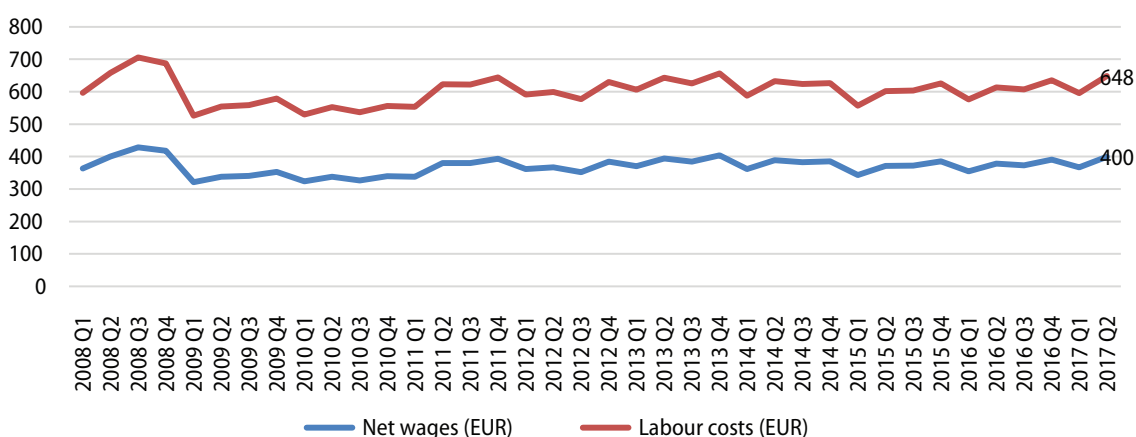
Graph G3.3 Average Real Net Wages Index (2008=100)

Source: Author's calculations using SORS data

productivity, due to dubious employment data, we estimate that the deterioration in competitiveness due to growth of wages in euros is real. If the growth of real value of dinar would sustain and deepen, it would have a negative effect on Serbian economy's competitiveness, primarily through the increase of foreign deficit, and

¹ Significantly faster growth of wages in euros compared to the growth of wages expressed in dinars in constant prices indicates that the wages in euros increase mostly because of the strengthening of the dinar against the euro. Growth of wages in USD is even higher due to the strengthening of the dinar against the dollar, which could have negative effects on exports which is charged in USD (Russia, arspek countries, USA, etc.).

Graph G3.4 Trend of Average Net Wages and Cost of Labour in EUR, 2008-Q2 2017



Source: Author's calculations using NBS data.

Net wages and cost of labour in EUR was higher by 6% year-on-year

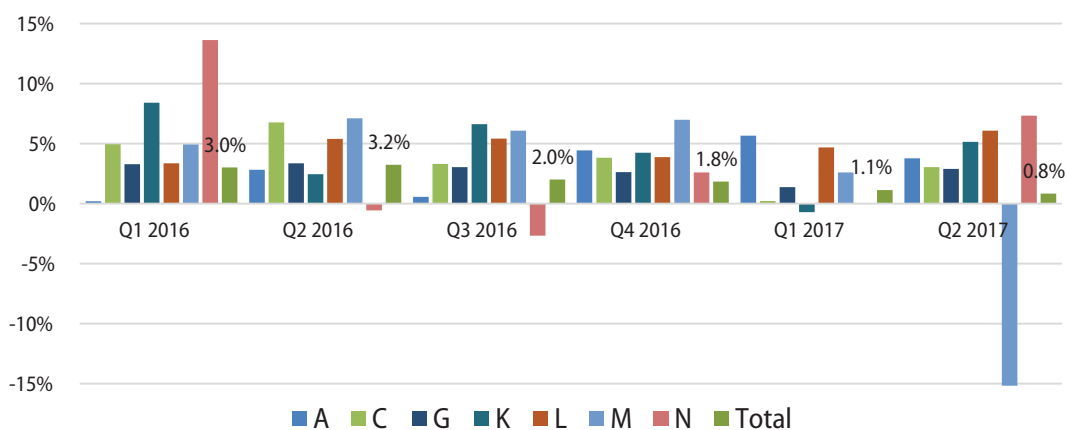
then through the slower growth of GDP and employment. High growth of imports and deteriorated deficit of the current balance of payments in the first half of the current year could be a signal of deteriorating price competitiveness of Serbian economy.

The highest year-on-year growth of seasonally adjusted real net wages was realised in the Administrative and Support Services, as well as in Real-Estate

Seasonally adjusted real average net wages were 0.8% higher in Q2 2017 compared to the same period of the previous year. Graph G3.5 shows the trend of seasonally adjusted real net wages by selected sectors. Seasonally adjusted real net wages realised the highest growth in Administrative and Support Services (7.3% year-on-year). Significant growth was also realised in Real-Estate Business, 6.1%, which was considerably higher than the growth of GVA which was a modest 0.1% in the same period. In the last few quarters, a pronounced discord was recorded in the movement of wages in the real-estate sector and in the movement of GVA in that sector. Processing Industry realised a growth of wages of 3%, which was in line with the trends of Gross Value Added in Mining, Processing Industry, and Other Industry (2.8%), but also with the trends in Production and Processing Industry. In June 2017, compared to the same month of the previous year, production in the Processing Industry increased by 6%, while in the first half of 2017 it increased by 6.3% compared to the first half of 2016. Growth of production in the Processing Industry was significantly higher than the growth of real net wages. Extreme decline was realised in Expert, Science and Technical industry, 15.2% year-on-year. Education and Healthcare recorded a modest growth of wages (0.8% and 0.9%), while public administration, Defence and Compulsory Social Insurance realised a decrease in wages of 2.1%.

Education and Healthcare recorded a modest growth of wages, while public administration recorded a year-on-year decline in wages

Graph G3.5 Trend of Seasonally Adjusted Average Real Net Wages, Q1 2016-Q2 2017, | year-on-year changes, %



Source: Author's calculations using SORS data

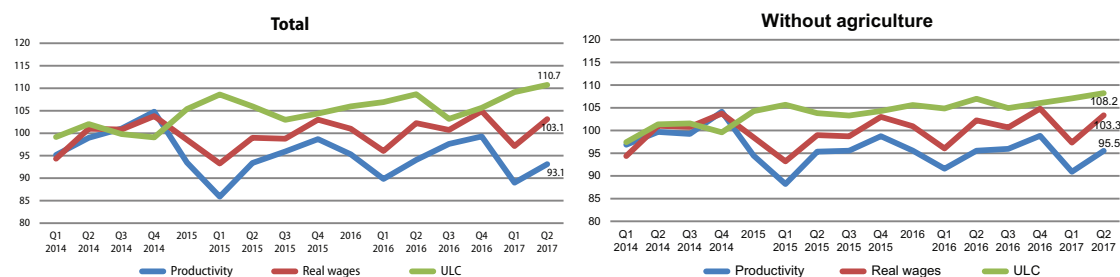
Legend: A – Agriculture, Forestry and Fishery; C – Processing Industry; G – Wholesale and Retail; Repair of Motor Vehicles and Motorcycles; K- Finance and Insurance; L – Real-Estate Business; M – Expert, Science and Technical Activities; N – Administrative and Support Services

Productivity

Productivity is falling, while unit labour cost is rising. Productivity decline and growth of unit labour cost is significantly higher if LFS data is used rather than CRCSI data

Graph G3.6 shows the movement of productivity, real wages and unit labour cost, total (left graph) and excluding agriculture (right graph). Year-on-year growth of employment in Q2 according to LFS of 4.3% with growth of GVA of 1.5% implies a decline in productivity of 2.7%. If we use CRCSI data instead, the decline in productivity is lower due to the lower growth of employment and is 1%. According to CRCSI data, productivity in non-agriculture activities remained unchanged, while according to LFS data, it declined by 3%. That further leads to the growth of total unit labour cost by 1.9%, i.e. by 4.2% excluding agriculture, according to CRCSI data.

Graph G3.6 Labour Productivity and Unit Labour Cost, Indices (2014=100), 2014-Q1 2017.



Source: Author's calculations using SORS data.

Note: CRCSI data was used for the number of the employed.

Compared to the 2014 base, productivity decreased by 6.9%, while unit labour cost increased by 10.7%.

Graph G3.6 shows the basic productivity index and unit labour cost compared to the 2014 average using the CRCSI data on registered employment. Compared to the 2014 average, productivity of the overall economy in Q2 declined by 6.9% (in H1 2017 compared to the same period in 2014 -6.2%), while the decline in non-agriculture activities was 4.5% (in H1 2017 compared to the same period of 2014, -5.2%). In the same period, unit labour cost expressed in dinars increased in the overall economy by 10.7%, while in non-agriculture activities it increased by 8.2%.

Annex 1 Basic Labour Market Indicators According to LFS and CRCSI, 2014-Q2 2017

	2014				2015				2016				2017				
	Average	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Q1	Q2
Activity rate (%)	51.9	51.0	52.6	52.5	51.6	51.6	50.8	51.5	52.0	51.9	53.3	52.6	54.1	54.3	52.3	51.8	54.5
Employment rate (%)	42.0	40.2	41.8	43.1	42.9	42.5	41.2	42.6	43.4	42.7	45.2	42.6	45.9	46.8	45.5	44.2	48.1
Unemployment rate (%)	19.2	21.3	20.7	17.9	17.0	17.7	19.0	17.3	16.6	17.7	15.3	19.0	15.2	13.8	13.0	14.6	11.8
Informal employment rate (%)		19.7	20.4	22.8	21.8	20.4	19.7	21.5	20.4	22.5	20.3	22.7	24.1	20.9	19.0	22.1	
Employment in 000, (LFS)	2,559	2,454	2,548	2,627	2,609	2,574	2,504	2,588	2,624	2,581	2,719	2,571	2,762	2,814	2,731	2,652	2,881
Employment, index, (2014=100), (LFS)		95.9	99.6	102.6	101.9	100.6	97.8	101.1	102.5	100.8	106.3	100.4	107.9	109.9	106.7	103.6	112.6
Formal employment in 000, (LFS)	2,017	1,969	2,030	2,028	2,041	2,050	2,011	2,078	2,059	2,054	2,137	2,049	2,135	2,137	2,161	2,148	2,243
Formal employment, index, (2014=100), (LFS)		97.6	100.6	100.5	101.2	101.7	99.7	103.0	102.1	101.8	105.9	101.6	105.9	105.9	107.1	106.5	111
Total employment in 000, (CRCSI)	1,845	1,836	1,845	1,850	1,851	1,989	1,983	1,985	1,998	1,989	2,008	1,978	2,008	2,023	2,030	2,024	2,059
Total employment, index, (2014=100), (CRCSI)		99.5	100.0	100.3	100.3	107.8	107.5	107.5	108.2	107.7	108.8	107.2	108.8	109.6	110.0	109.7	111.5

Note: Registered employment in 2017 does not include June data, as it was not available.

Source: SORS

Annex 2 Real Net Wages and Labour Productivity, 2014-Q2 2017

	2014				2015				2016				2017			
	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Average	Q1	Q2	Q3	Q4	Q1	Q2
Average real net wages, index, (2014=100)	94.3	101.0	100.8	103.8	98.5	93.3	99.0	98.8	103.0	101.0	96.1	102.2	100.7	104.9	97.2	103.1
Average net wages, total, (€)	361	389	383	386	368	343	371	372	386	374	355	378	373	391	367	399
Average net wages, industry, (€)	359	382	378	378	374	351	376	379	389	385	369	391	382	399	376	417
Labour cost, total (€)	588	633	623	626	597	557	601	603	626	608	576	613	607	635	596	648
Labour cost, industry (€)	582	622	617	615	607	570	611	617	632	627	599	635	623	649	611	677
Productivity, without agriculture, index, (2014=100)	96.9	99.7	99.3	104.2	94.5	88.2	95.3	95.6	98.7	95.6	91.6	95.5	96.0	98.7	90.9	95.5
Productivity, total, index, (2014=100)	95.2	99.0	101.0	104.8	93.5	85.9	93.4	95.9	98.7	95.3	89.8	94.1	97.6	99.2	89.0	93.1

Note: Industry includes activities B, C & D, weighted average wages. The exchange rate of the dinar against the euro, period average (NBS). Labour productivity is calculated using registered employment data.

Source: SORS and NBS