

## 2. Economic Activity

Economic activity will record a slight increase of about 0.8% in 2015. This is the lowest growth in the region, but it should be kept in mind that: 1) the initial forecasts, from a year ago, were that Serbia will have another year of recession in 2015; 2) in 2015 agricultural production fell short significantly due to a drought; but also 3) the economic growth was achieved in a period of a strong fiscal adjustment of over 2 percentage points of GDP. Therefore, the result the economy recorded in 2015 is undoubtedly favourable. In Q3 there was a delay in the recovery of the GDP, which was somewhat expected, and which is probably temporary. The delay in the recovery can also be seen in the data which show that the seasonally adjusted GDP had recorded, not so small, drop of 0.4% compared to the previous quarter. However, despite somewhat unfavourable indicators of the overall economic recovery in Q3, it is encouraging that the investment growth continues to lead in relation to other components of GDP, which is a good basis for a somewhat stronger economic growth in the coming years. GDP growth in 2016 could amount to about 2%, which is in line with the projections of the Government and the IMF (1.75%). This, however, does not represent a significant acceleration of growth compared to 2015, because only the recovery of agricultural season from the drought will contribute to the growth of GDP in 2016 by about 0.7 percentage points, and the trend rate of growth of economic activity would amount to just over 1% (compared to the trend growth of about 0.5% from 2015). If positive trends initiated in 2015 (primarily investment trends) continue and intensify, it is possible that the economic growth in 2016 will be somewhat higher than the current estimate, but, for now, we still did not include this option in the forecasts.

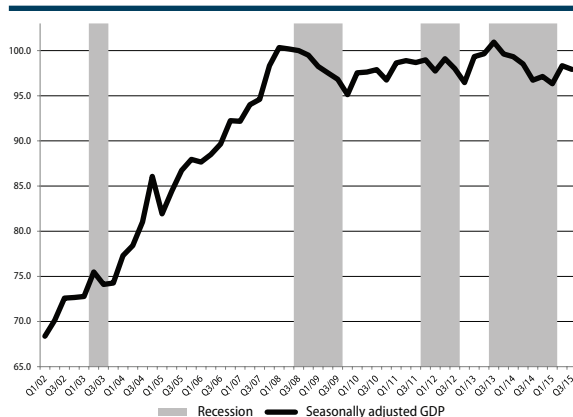
### Gross Domestic Product

*Real GDP growth in Q3, of 2.2%, is lower than expected*

According to the SORS estimates, real year-on-year growth of GDP in Q3 amounted to 2.2%. Although at first sight it seems that GDP growth accelerated in Q3, because the y-o-y growth in Q2 was only 0.9%, the real reason for the higher rate of growth in Q3 is the effect of a very low base from the previous year, and the achieved result of economic activity in Q3 was in fact even slightly worse than in Q2 and our expectations. Namely, in Q3 2014 a deep decline in GDP was recorded (y-o-y for 4.5%), so even with a growth rate of 2.2% in Q3 2015 the level of economic activity from Q3 2013 has not been reached, not even close (more than 2 percentage points of GDP is missing for that). Therefore the y-o-y growth of 2.2%, although a highest since the beginning of the year, cannot be assessed as an acceleration of the economic growth. On the contrary, we expected for Q3 GDP growth to be around 3%.

*Seasonally adjusted GDP indicates a fall in Q3 compared to Q2*

**Graph T2-1. Serbia: Seasonally adjusted GDP growth, 2002-2015 (2008=100)**



Source: QM estimates based on SORS data

A slightly less favourable trend in economic activity in Q3, compared to Q2, is also indicated by the seasonally adjusted indices of GDP growth (Graph T2-1). Seasonally adjusted GDP in Q3 decreased compared to the previous quarter by 0.4%. Results from Q3 are somewhat less favourable than expected, but we consider them temporary and, still, not too dangerous. First of all, the decline in GDP in Q3 came after an extremely large increase in Q2 when the seasonally adjusted GDP rose by as much as 2% compared to Q1. These two quarters (Q2 and Q3) should be observed together because one part of the high growth of seasonally adjusted GDP in Q2 was caused by temporary factors that are

*Investments are growing faster than other GDP components in Q3*

acting in an opposite direction in Q2. For example, after the last drying of the flooded coal mines, electricity production was temporarily unusually high in May and June, even in relation to the period before the floods (about which we wrote in more detail in the previous issue of QM). Therefore, a seasonally adjusted GDP increased in Q2 slightly more than it was sustainable, and so in Q3 this effect was lost and caused a slight decline in a seasonally adjusted GDP. In Graph T2-1 periods in which the Serbian economy was in the recession are shaded (estimated based on the Bry-Boschan procedures). We believe that our assessment that the Serbian economy has emerged from the recession, which we presented in the previous issue of QM and which can be seen in the graph, is undeniable - and that slightly worse results in economic activity in Q3 are temporary and we do not evaluate them as some announcement of new recession.

Table T2-2 shows the structure of the y-o-y GDP growth in Q3 by expenditure method. As we have repeatedly pointed out, sustainable growth of the Serbian economy in the medium term can only be based on the growth of investment and exports, as the share of private and government consumption in GDP will need to be significantly reduced over the medium term. Investment growth is certainly crucial for an acceleration of the economic growth, because it not only directly increases GDP, but also creates the capacity for future increase in output and exports. Precisely the growth of investments marked the 2015 and we consider that to be the most positive trend of economic activity in that year and to their analysis we gave more attention. In Q3 investments remained the fastest growth compared to all the other components of GDP (Graph T2-2). Among other expenditure components of GDP, solid year growth of nearly 9% was recorded by exports, but the growth of net exports was practically absent, because the imports grew by over 5%. Private consumption is still in the real y-o-y decline, which in Q3 stood at 0.5%, and the growth of government consumption by 0.9% is somewhat surprising, because in the process of fiscal consolidation public sector wages have been reduced by 10% compared to the last year. The growth of government consumption in Q3 was in fact driven by a slightly higher growth of expenditures for procurement of goods and services. Government consumption will have to be reduced in the medium term, therefore its positive y-o-y growth in Q3 is apparently only temporary fluctuation in this trend.

**Table T2-3. Serbia: GDP by expenditure method, 2009-2015**

	Y-o-y indices													
	2009	2010	2011	2012	2013	2014	2014				2015			Učešće 2014
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	
	Međugodišnji indeksi													
GDP	96.9	100.6	101.4	99.0	102.6	98.2	100.4	99.0	95.5	98.0	98.2	100.9	102.2	100.0
Private consumption	99.4	99.4	100.9	98.2	99.4	98.7	98.1	98.9	98.6	99.0	99.7	98.7	99.4	74.9
State consumption	100.6	100.8	101.1	102.4	98.9	99.4	98.6	99.4	97.8	101.6	96.2	97.2	100.8	18.6
Investment	77.5	93.5	104.6	113.2	88.9	96.4	95.2	100.2	91.8	98.6	103.9	108.7	110.1	18.6
Export	93.1	115.0	105.0	100.8	121.3	105.7	119.9	111.3	95.6	100.8	108.7	108.4	108.8	43.4
Import	80.4	104.4	107.9	101.4	105.0	105.6	108.4	108.5	104.0	102.2	111.4	102.0	105.4	56.2

Source: SORS

*Investments growth is accelerating and we consider it sustainable*

Investments in 2013 and 2014 had a deep decline and were by far a single fastest declining component of GDP (Table T2-2). In 2015, however, and especially since the middle of the year, this trend was reversed. Investment growth in 2015 is widespread by activities and includes both domestic and foreign investments, and is seen in the construction industry but also in the purchase of equipment - and is probably permanent in nature. Foreign direct investments (FDI) have been, until May, very low, lower even than the unsatisfactory level of 2014. However, after May FDI strongly accelerated, and as of September 2015 not only did they caught up with their level from January-September of the last year, but they exceeded it by about 30% (or about 300 million euros). Newly approved loans to the economy from the domestic banking system for investment activities were also on the rise from the middle of the year. Construction activity, after a weak first quarter, achieved a high annual growth of about 15% in the second and third quarter (Table T2-3). Production of capital goods is increasing in 2015 by about 5% compared to 2014, while the imports of capital goods has been increased, compared to the previous year, for around 2%. Growth of total investments in 2015 is a result of the growth of private investment, since the state this year almost did not increase the low efficiency in the execution of public investments.

If public investments were executed as planned in 2015, growth of total investments would be even higher.

Although it is still early to talk about the causes of the increase in private investment in Q3, and throughout 2015, it is possible that it was affected by the improvement of the business environment in the past year. Namely, some reform laws have been adopted, such as the amendment of the Labour Law, the Law on planning and construction, there has been a global decline in interest rates, credit expansion of the ECB, the economic recovery of the EU and the neighbouring countries, and other. Perhaps the crucial change in 2015, which, we believe, could have affected the initiation of the growing trend of investment in this year is the fiscal consolidation - because it is very difficult to expect an increase in investment in the country where there is a danger of the outbreak of a public debt crisis.

**Construction growth acceleration continues, and the agriculture in decline due to a drought**

Observed by activity (Table T2-3) we see that the trends in Q3 are quite divergent. On the one hand, the largest annual increase of 18.3% was achieved by the construction activity, and a high growth of over 8% was recorded by the industrial production. The growth of construction activity is an encouraging trend which is consistent with the observed increase in investment. The high growth of industrial production was primarily affected by the recovery of electricity production and mining after the floods, but also a solid y-o-y growth has been recorded by the manufacturing industry, to which the floods had no significant impact. On the other hand, the sector of the economy with the biggest decline is the agriculture, which in Q3 recorded a y-o-y decline of 6.5% due to the impact of drought on the autumn crops<sup>1</sup>. Other sectors of GDP are mainly on a similar or somewhat higher level of production compared to Q3 of the last year.

**Table T2-3. Serbia: Gross Domestic Product by Activity, 2008-2015<sup>1</sup>**

	2009	2010	2011	2012	2013	2014	2014				2015			Share 2014
							Q1	Q2	Q3	Q4	Q1	Q2	Q3	
Total	96.9	100.6	101.4	99.0	102.6	98.2	100.4	99.0	95.5	98.0	98.2	100.9	102.2	100.0
Taxes minus subsidies	98.6	99.5	101.1	97.8	98.9	99.4	98.2	99.9	98.9	99.7	100.4	98.7	100.0	16.0
Value Added at basic prices	96.6	100.8	101.5	99.2	103.3	98.0	100.8	98.9	94.9	97.6	97.7	101.3	102.7	84.0
Non agricultural Value Added	96.7	100.2	101.5	101.1	101.6	97.5	100.6	98.5	94.2	97.2	98.3	102.5	103.9	89.8 <sup>2)</sup>
Agriculture	95.2	106.4	100.9	82.7	120.9	102.0	103.6	102.1	101.0	101.7	91.2	89.9	93.6	10.2 <sup>2)</sup>
Industry	96.8	100.8	103.2	105.6	106.0	92.4	99.9	94.2	86.0	90.0	96.1	108.0	108.3	23.9 <sup>2)</sup>
Construction	87.1	97.6	105.9	90.2	96.1	98.5	105.5	102.0	86.1	103.8	97.4	112.6	118.3	5.2 <sup>2)</sup>
Trade, transport and tourism	92.9	100.0	99.5	99.3	102.3	101.1	102.6	100.7	101.0	100.2	100.3	100.4	101.2	17.7 <sup>2)</sup>
Informations and communications	97.0	103.2	102.6	102.8	99.9	96.1	97.0	95.7	94.9	97.0	96.5	99.5	102.9	5.3 <sup>2)</sup>
Financial sector and insurance	102.6	101.9	98.4	92.0	90.5	97.2	97.8	102.2	91.4	97.0	101.6	98.7	105.0	3.2 <sup>2)</sup>
Other	99.7	99.8	100.9	101.8	100.2	99.9	99.9	100.2	99.3	100.3	98.4	98.4	100.0	34.6 <sup>2)</sup>

Source: SORS

1) In the previous year's prices

2) Share in GVA

**In 2015 we expect GDP growth of around 0.8%**

Although the results of the economy in Q3 were slightly worse than expected, we believe that this delay in the recovery of production was temporary and we keep our forecast of total GDP growth in 2015 of around 0.8%. This assumption implies that the annual GDP growth in Q4 will be over 1%, which only at first glance seems as easily attainable goal, but this is not yet completely certain. In fact, in Q4 2014 certain recovery of production began (Table T2-3), and so for the y-o-y GDP growth in Q4 2015 of more than 1%, the acceleration of the economic activity compared to Q3 is actually needed (although y-o-y growth in Q3 was significantly higher and amounted to 2.2%).

**In 2016 GDP will probably record a growth of around 2%**

In order to better understand the expected trend of economic activity in 2016 we must „clean“ 2016 and 2015 from temporary factors. Thus, the economic activity in 2015 was affected by two one-off factors - the recovery of production of the energy system of Serbia after the floods of 2014 and dry agricultural season. Recovery from the floods temporarily increased economic growth in 2015 by around 1.1 percentage points, while the drought affected its temporary reduction by about 0.7 percentage points. Therefore, the “trend” of economic growth in 2015 (without one-off factors) was only slightly higher than 0%. Similarly, in 2016 the expected recovery of

<sup>1</sup> The practice of statistical agencies is to allocate the decrease (or increase) of agriculture to all quarters of the year, although these may occur in only one quarter. In this way, excessive shocks, or decline of agriculture in one quarter for 30-40%, is mitigated.

**Economic growth in 2016 may be slightly higher than 2%**

agriculture after drought (return on average agricultural season) will contribute to GDP growth by about 0.7 percentage points, so the forecasted growth rate of GDP of 1.5% in 2016 actually means economic growth (excluding agriculture) by about 1.3%. So, the estimated real acceleration of economic activity in 2016 compared to 2015 is not significant and amounts to only about 1 percentage point, which we think is a conservative assumption, which will be achievable and it would not be a surprise if the growth of the economy is somewhat higher than 1,5%.

The composition of the forecasted GDP growth of 2% in 2016 should look like this: a small real decline in public and private consumption (up to 0.5%), investment growth of about 8% and a slight contribution of net exports to GDP growth, which would not be less than 1 percentage point. The Government in its forecasts of GDP trends in 2016 raised the bar to 1.75%, and the difference compared to our projection is that the government expects a small real growth in private and government consumption already in 2016 - which we think is less likely to happen, but it predicted slightly lower growth of investment and net exports. If the existing trend of investment growth is strengthened and extended they could reach an increase of 10% in 2016, and net exports could also be a positive surprise - which would then jointly lead to GDP growth of over 2%, above the Government's current prediction. In this scenario not only would the government's forecast of total GDP growth be exceeded, but also the structure of this growth would be better than expected.

**The change in the methodology of the SORS currently prevents calculation of ULC**

In this issue of QM our regular review of the ULC trend will be left out, since the Statistical Office from Q3 changed the methodology for calculation of formal employment, which is not comparable with the previous data (and ceased to publish the data under the old methodology). It was announced that in early 2016 they will carry out a reconstruction of all previous data in accordance with the new methodology, which would enable us to follow this important indicator of the competitiveness of domestic economy again from the next issue of QM.

## Industrial production

**Industrial production records a high y-o-y growth in Q3**

Industrial production in Q3 recorded a high y-o-y output growth of over 13% (Table T2-4). Most of this year's growth is a result of a very high growth in mining of 31% and electricity production of 41%. The main reason for a high growth of mining and electricity production is the comparison with the same period of the last year in which the biggest drop in coal mining and electricity production occurred due to the floods. This huge increase in production of the energy sector in Q3 2015, however, is temporary, and from the next quarter (Q4) will start to gradually decline as the results from 2015 will be compared with the higher production of mining and electricity (which in Q4 2014 began to gradually recover as a result of the coal mines drying). Manufacturing, which was not under the major influence of floods, in Q3 had a relatively good results and has achieved annual growth of over 6%. This is a high y-o-y growth, however we expected it to be even higher. In fact, already in Q2 y-o-y growth of over 7% was achieved, and in Q3 manufacturing industry was compared to its long-term minimum from Q3 2014, and we expected the annual growth higher than 8%.

**Table T2-4. Serbia: Industrial Production Indices, 2009-2015**

	Y-o-y indices												Share 2013	
	2009	2010	2011	2012	2013	2014	2014				2015			
							Q1	Q2	Q3	Q4	Q1	Q2		Q3
Total	87.4	102.5	102.2	97.1	105.5	93.5	102.1	95.7	85.8	90.5	98.0	111.1	113.2	100.0
Mining and quarrying	96.2	105.8	110.4	97.8	105.3	83.3	99.7	87.3	71.6	76.2	84.0	115.8	130.9	8.5
Manufacturing	83.9	103.9	99.6	98.2	104.8	98.6	104.2	98.7	94.0	97.2	104.2	107.3	106.4	73.9
Electricity, gas, and water supply	100.8	95.6	109.7	92.9	108.1	79.9	99.3	86.2	61.3	72.6	87.0	129.0	141.0	17.6

Source: SORS

Somewhat more detailed analysis reveals that, observed by individual sectors of manufacturing industry, the vast majority of sectors is increasing their y-o-y growth in Q3 compared to Q2 (as

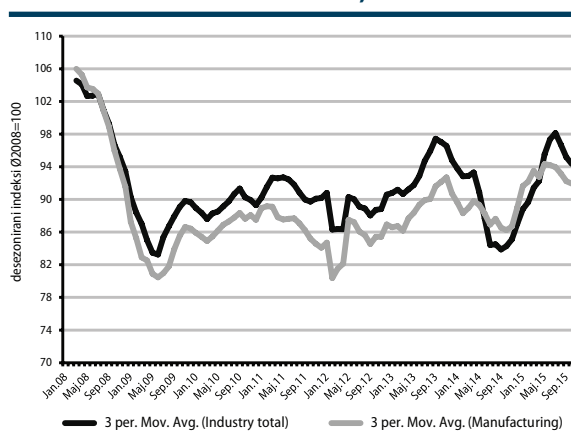
**Downward trend of the food industry**

expected). However, two sectors of industrial production sharply changed their trends downward. First, and to some extent expected, was the production of machinery and equipment. This sector in the first half of the year had a growth index of over 200 (production was twice higher than in the first half of 2014). We expected this growth to stop at some point, but we did not know when and at what level. Actually, the question we asked is whether this twice higher level of production of machinery and equipment is its new permanent level, or is it a temporary boom, and the production will return to its prior (before this temporary increase) level? Data from Q3 point to this second option, but we will monitor what is happening in this area in the future. Another area that has reversed its rising trend is the food industry, which after a growth of about 5% in the first half of the year, by September entered a relatively deep y-o-y decline, which then continued in October. Likely explanation for this trend is a dry 2015 and we find it hard to believe the explanation that (just) this sector was affected by the closure of the border with Croatian (which could be heard in public).

**Seasonally adjusted indices reverses their trend – we hope temporary**

Graph T2-5 shows seasonally adjusted index of total industry production and particularly manufacturing industry with the last available data for October 2015. The graph immediately indicates a strong reversal in the rising trajectory of industrial production, which we announced in the previous issue of QM. First, expected, reason for this is that the achieved high growth in the seasonally adjusted production in Q2 was temporary because of abnormally high production of electricity and coal. Electricity production and mining in Q2 were 10 to 15% higher than their usual levels for this time of year. In fact, in Q2, after the end of the heating season, overhauls of production facilities are being carried out as a rule, and production temporarily seasonally decreases. This year that scenario didn't happen, and production took place at full capacity, which led to a temporary increase in the overall industrial production, which was already in the next quarter diminished<sup>2</sup>. Second reason for the reversal of the trend of seasonally adjusted industrial production growth was abovementioned trend of certain areas of manufacturing. Graph T2-5 shows that for the reduction of the overall industrial production in Q3 cannot be responsible

**Graph T2-5. Serbia: Seasonally Adjusted Industrial Production Indices, 2008-2015**



Source: SORS

only electricity production and mining, because manufacturing also had reversal of the trend (lighter line on the chart) independently from electricity production and mining. This shift in manufacturing is much milder than in the case of total industrial production and we believe that it is primarily affected by the production trends in the food industry and the production of machinery and equipment. Since our analysis shows that the seasonally adjusted decline in Q3 was limited to a small number of sectors of industrial production and that was largely exhausted by the beginning of Q4, the decline in the seasonally adjusted industrial production is assessed as temporary.

**We lower our forecast of industrial production in 2015 from around 9% to around 7.5%**

Although we believe that the seasonally adjusted fall of industrial production in Q3 was temporary, it still influenced us to lower our forecast of industrial production in 2015 from around 9% to around 7.5%. This growth seems high at first sight, but it is mainly a consequence of the recovery of production of the energy system of Serbia after the floods. When we take into account that in 2014 industrial production fell by 6.5%, we get somewhat more realistic context of the relatively high growth of the industrial production in 2015.

Observed by use (Table T2-6), we notice that in Q3 energy production maintained (and increased) high y-o-y indices of production, that the production of investment goods entered the

<sup>2</sup> It is possible that the reason why the regular overhauls were not carried out this time in EPS is the fact that the plants for producing electricity worked with significantly reduced capacity in the past 12 months, but perhaps there are some other reasons.

**Production of most special purpose groups is slowing down**

y-o-y decline, and that the remaining product groups maintained similar trends as in Q2. It is interesting to note that the production of energy, in spite of a very high growth of over 40% in Q3, is actually in seasonally adjusted decline compared to Q2, which can be intuitively seen by comparison with the level of production of this product group in 2013. Namely, in Q2 2014, a 10% decrease in production of this product was recorded, while in Q2 2015 there was a growth of about 25% - which means that in Q2 2015 about 10% more energy was produced than the same period in 2013 (Table T2-6). Similarly, in Q3 2014 production of this product group recorded a decrease of 35%, so even with a high y-o-y growth of over 40% in Q3 2015, it didn't actually reach even its level from Q3 2013. Production of capital goods entered the y-o-y decline due to a sharp turnaround in the trend of production of machinery and equipment. For now we are not concerned about the impact of this data on the movement of total investment, as construction continues with a dynamic growth, and also import of equipment is increasing (however we think that imported equipment is generally a better indicator of investment trends than domestic production).

**Table T2-6. Serbia: Components of Industrial Production by use, 2009-2015**

	Y-o-y indices												
	2009	2010	2011	2012	2013	2014	2014				2015		
							Q1	Q2	Q3	Q4	Q1	Q2	Q3
Total	87.4	102.5	102.1	97.1	105.5	93.5	102.5	95.7	85.8	90.5	98.0	111.1	113.2
Energy	98.8	97.7	106.2	93.6	113.2	82.6	101.1	89.3	65.1	75.9	88.5	124.1	141.7
Investment goods	79.3	93.6	103.2	103.8	127.6	95.9	107.4	97.5	89.5	88.6	112.1	109.1	94.5
Intermediate goods	78.4	109.2	102.2	91.2	99.0	96.8	105.7	95.4	94.2	91.4	99.3	107.8	104.8
Consumer goods	86.8	102.1	95.4	103.2	100.7	100.7	100.2	99.6	97.5	105.6	99.4	105.6	106.9

Source: SORS

## Construction

**High growth of construction continues in Q3**

In Q3 construction achieved high y-o-y growth which we estimate to be between 10-15%. The indicators that describe the construction trend were not completely consistent, and so an unambiguous assessment of the trend of this sector of the economy cannot be given, but it is evident that the construction in Q3, as throughout the whole construction season, recorded a high growth.

**Table T2-7. Serbia: Cement Production, 2001-2015**

	Y-o-y indices				
	Q1	Q2	Q3	Q4	Total
2001	89.5	103.5	126.9	148.1	114.2
2002	83.6	107.9	115.6	81.6	99.1
2003	51.1	94.4	92.7	94.4	86.6
2004	118.8	107.4	98.5	120.1	108.0
2005	66.1	105.0	105.8	107.4	101.6
2006	136.0	102.7	112.2	120.2	112.7
2007	193.8	108.9	93.1	85.0	104.4
2008	100.1	103.7	108.1	110.1	105.9
2009	34.1	81.4	86.0	75.3	74.4
2010	160.7	96.9	96.0	97.4	101.1
2011	97.7	101.3	96.2	97.7	98.3
2012	107.9	88.3	58.2	84.9	79.6
2013	83.5	78.7	127.6	93.5	94.9
2014	136.2	90.3	96.2	104.7	101.5
2015	77.9	112.4	104.5	-	-

Source: SORS

The SORS estimate is that the added value of construction in Q2 increased by 18% compared to the same period of the last year, while the index of completed construction works increased y-o-y by as much as 30% in constant prices. In addition, the measurement of the number of employees in the construction industry indicates a growth of the total number of employees in this sector by about 5%.<sup>3</sup> Finally, an independent indicator that QM uses as additional and probably the most reliable indicator of rough trends in construction activity - the cement production index - in Q3 recorded a growth of 4,5% compared to the same period of the last year (Table T2-7). The cement production index shows that some indicators (especially the value of completed construction

<sup>3</sup> These are only data on formal employment, since the Labour Force Survey does not publish data on employment at the level of individual sectors

works) probably overestimates the growth in construction activity in Q3, but even this index is not sufficiently reliable in the short term. Based on all of these indicators, we conclude that the construction activity in Q3 most probably achieved high annual growth of between 10-15%.

The analysis of the movement of construction is very important bearing in mind that the movement of construction activity is a good indication of the movement of investments (construction accounts for about 50% of total investments), and we consider the growth of investments to be critical for the sustainable economic growth of Serbia in the medium term. We believe that the noticed positive trends in construction are sustainable, and that they were influenced by the changes to the Law on planning and construction, improved credit conditions (including low interest rates on housing loans), the fall in prices of construction materials and energy, and other. It would be good if the State would, in the coming period, increase efficiency in the execution of public investments, which would be an additional and necessary stimulus to this important sector of the economy.