

Highlight 3. The Impact of Unreliable Statistical Data on Creating Economic Policy in Serbia

Danko Brčerević¹, Milojko Arsić²

For a successful economic policy, as well as economic analyses (as the ones conducted in QM), reliable and timely statistical data is essential. It is our opinion, however, that SORS in some important cases does not provide such data. The latest revisions and newly published data by SORS related to the statistics of the national account and employment opened up numerous dilemmas in users of these data, which deserve a broader expert discussion due to their importance.

Revision of the national account for 2012, adjusted the real growth of investments for that year from -3.4% to 14.4%, i.e. almost 18 percentage points. Economic policy makers and economic analysts were therefore signalled a year ago that investments in Serbia are experiencing a considerable decline, but we now learned that investments in 2012 not only did not decline, but actually had a high growth (provided this new data is correct as well). Let us note here that revision of data is not uncommon in statistical systems and, as stated on SORS website, they are the result of improved methodologies, changes in calculating methods, corrections of errors in data, etc. So, there is no doubt that revision of data is necessary and common, and it achieves fine tuning of data, often quite important in more complex statistical research. However, when the revision changes one of the most important macroeconomic aggregates, investments, by 18 percentage points with one year delay, a question is raised whether SORS is giving us in real time even the most basic insight into main economic trends in Serbia?

After the last revision, GDP in 2012 had a 1.5% decline instead of the previously assessed decline of 1.7%, which presents a usual adjustment done all over the world. The huge adjustment in investments in 2012 was accompanied by other changes on national accounts, so its impact on GDP was mostly offset. The biggest change was in the share of imports and exports in GDP, so net imports' contribution to GDP growth in 2012 was reduced by around 3.5 percentage points (despite almost unchanged growth rates of imports and exports). Total GDP growth in 2012 therefore changed by only 0.2 percentage points upward, despite the extremely high changes of individual aggregates that comprise it.

At the end of December, SORS also published a new, official value of nominal GDP for 2012, which compared to the previous estimate was lower by 1.1%. That means that realised GDP in 2012 was by 320 million euros lower than we thought at the time. Let us remember that at the same time when nominal GDP was adjusted downward by 1.1%, the real GDP growth in 2012 was adjusted in the opposite direction – by 0.2 pp upward. It follows that the GDP deflator for 2012 was adjusted by as much as 1.3 percentage points. GDP deflator adjustment of 1.3 pp is considered high and unexpected, because its most important components – inflation and dinar exchange rate for 2012 – have long been known.

With the new 2012 GDP value, the values of all other indicators that are calculated in relation to GDP change as well. For example, the new value of share of public debt in GDP at the end of 2012 is now almost 62% of GDP.³ Since the value of nominal GDP for 2012 is at the same time the basis for calculating GDP for 2013, the nominal GDP in 2013 will be reduced and the share of public debt in GDP in 2013 will probably be close to 65% of GDP.

Another problem is the existing bias in preliminary estimates of GDP compared to its final value. Since 2009, each time the final nominal value of GDP was lower than the preliminary one by 1%-3%. If errors are accidental, their average should be zero, i.e. sometimes preliminary data would be higher than the final one, and other times it would be lower, but on average the preliminary data would be equal to the final one. However, in the case of nominal GDP of Serbia, the final data is almost always lower than the preliminary data, which indicates a systemic error rather than an accidental one. Preliminary estimates of nominal GDP are calculated based on preliminary estimates of the real GDP growth and deflator. Final GDP estimates could differ either due to changes in real GDP growth rates or due to changes in the deflator. Even in this case, we would expect sometimes deflators to change and other times real growth rates. In practice, however, in the past four years, after each final announcement of the nominal GDP (which is lower than the preliminary one), real growth rate of GDP for that year remained unchanged, while the deflator always decreased. It is our opinion that it is highly unlikely that there were errors four years in a row in calculating preliminary deflator, while the real GDP growth was always calculated correctly.

¹ FREN

² The Faculty of Economics and FREN

³ Based on the public debt value from 2012 published by the State Audit Institution

Highlights

Large reduction of unemployment indicated by October Labour Force Survey (LFS) is also questionable.⁴ According to LFS data, the number of employees in October 2013 compared to April of the same year increased by as much as 7.5% (from 2.23 million employees to 2.39 million), while the unemployment rate was reduced from 25% to 21%. According to LFS, high improvements on the labour market are also confirmed at the year-on-year level⁵. The highest growth of employment was recorded in the grey economy, in helping household members in agriculture and in the self-employed, which is basically difficult to verify, because there are no reliable statistics about these economic sectors. For example, the number of helping household members doubled from April to October 2013 (see the Section on Labour Market). Even though this cannot be directly verified, it is not difficult to show based on indirect indicators that such a growth of employment, even in the informal economy, is highly unlikely.

The significant increase in employment in 2013 was in line with the trends in other macroeconomic parameters. First of all, large improvements on the labour market require a strong economic recovery and vice versa, large improvements on the labour market should influence the growth of GDP, as was the case with Baltic countries in 2010. However, there was no such recovery in the second part of 2013, and we could even say that most of Serbia's economy was in recession in 2013.⁶ Low economic growth rate with a large increase in employment would also imply a significant decline in productivity, which is highly unlikely. The impact of 150,000 newly employed people, from April to October, would have to manifest in the increase in trade and population's standard of living, which based on the trends in private consumption published by SORS did not happen.

The inconsistency in employment growth in 2013 compared to other statistical indicators can be shown even more directly by analysing employment trends by sectors. According to LFS, the number of employees in construction increased by over 4% from October 2012 to October 2013. On the other hand, at the time of publishing LFS, SORS also published another piece of data – that construction in 2013 had around 20% decline. We used as an additional indicator for trends in con-

struction activities the production of cement. Cement production is easy to monitor and cement is used in all construction works. In this way, we wanted to include in the assessment of construction activities the part of construction that is perhaps out of sight of this sector's official statistics. However, cement production also confirmed that construction activities in 2013 suffered a large decline, which means that the data on the growth of employment in construction is probably wrong, even if we include informal employment in that growth.

According to our estimate, the latest data from the Labour Force Survey on the one hand sent wrong signals to decision makers about improvements on the labour market, while on the other they raised doubt about the reliability of statistical data in many investors and analysts who are monitoring economic trends in Serbia.

In all its analyses, QM mostly uses SORS data. That is why we support every improvement in the work of this institution and the adoption of improved methodologies, which is currently in progress.⁷ Still, it is hard to believe that the mere change in methodology could explain the 18 pp adjustment in investment growth, the discrepancy between the real GDP growth and its nominal value, as well as the strong growth of employment in conditions of slow economic recovery. That is why we feel that SORS would have to establish a practice with each bigger change (such as this investment one, for example) whereby it would provide an explanation why the change occurred, why the new value is so different from the previous one, and whether they expect similar adjustments to happen in the future.

⁴ Let us also recall that this is not the first time that highly unusual data was published in the Labour Force Survey about the changes in employment, which we wrote about in previous issues of QM. One of those very unlikely changes was the sudden drop in the number of employees in agricultural households during 2009.

⁵ We additionally verified this in order to exclude any seasonal influence on the growth of employment in October. Growth of employment really was slightly lower at the year-on-year level than at the last year's level, but both indicators imply large improvements on the labour market.

⁶ For more details, see section 2 "Economic activity" in this issue of QM.

⁷ On SORS website it is published that the process of harmonization with the methodology of ESA 2010 is currently in progress.