
WHY IS GROSS DOMESTIC PRODUCT REVISED?!

ERJOLA GJIKA, INSTITUTE OF STATISTICS
ekarpuzi@instat.gov.al

ERJOLA ISMALAJ, INSTITUTE OF STATISTICS
eismalaj@instat.gov.al

ENI CELO, INSTITUTE OF STATISTICS
ecelo@instat.gov.al

MARINELA NUSHI, INSTITUTE OF STATISTICS
mnushi@instat.gov.al

Introduction

INSTAT's vision is to produce reliable statistics. The purpose is transparency regarding the methods used in compilation of statistics and the use of all available information at a given time. In order to produce the best estimation, the statisticians have to trade off between accuracy and timelines. Deadlines set for publication dictate the need for the review of statistics.

These revisions aim the improvement in the quality of previously published data. They are important because the information made available after the first publication suggests another picture of the reality which needs to be taken into consideration. Users do not always welcome small statistical changes after a long period of publication. For this reason, it is necessary for revisions to be based on what is known as "Revision policy" which provides a set of guidelines and principles, which promote transparency of processes and ensure trust and effective communication with users. This article analyzes the effects of the regular revisions of GDP by focusing on the compilation of GDP by Expenditure Approach.

1. CONCEPTS IN NATIONAL ACCOUNTS

National Accounts in Albania are built on a series of surveys and administrative resources that measure activity in the economy in different ways. Gross Domestic Product (GDP) in our country is measured in two ways according to:

- The production approach
- The expenditure approach

2.1 PRODUCTION APPROACH

The main indicators of the production method are output, intermediate consumption and value added. Production shows the value of goods and services produced in the economy over a year, while intermediate consumption is the value of products or services transformed or fully consumed during the production process. By subtracting intermediate consumption from production, we reach what is known as Gross Value Added (GVA).

Gross Domestic Product by production method is equal to gross value added by adding taxes and subtracting subsidies on products.

2.2 EXPENDITURE APPROACH

The expenditure approach brings the inverse panorama, estimating GDP according to the final internal uses of products and services. According to this method, the Gross Domestic Product is estimated as the value of final expenditures by consumers, non-profit institutions and the government, adding the gross capital formation and exports of goods and services, and subtracting imports of goods and services.

Regular revision of GDP on an annual basis is the result of updating and fulfilling the existing data sources with the latest information for a given year.

2. REVISION PERIODS

As in developed countries, where the GDP estimation is revised several times, in Albania this estimation is done in two phases:

- a) The first stage includes semi-final evaluations of the year "t" which are performed in the period $t + 15$ months
- b) The second phase includes the final estimates of GDP of the year (t). At this stage, the data of year (t), are revised once more when the data set for year $(t + 1)$ becomes available. This is done in order to include any changes made to the year (t) and ensure consistency between two consecutive years.

These revisions are intended to describe more accurately the country's economy. It is useful to keep in mind the frameworks and timelines for the publication of continually improved estimations.

3. REASONS FOR REVISION

The public wants accurate data as soon as possible. To meet this need, INSTAT publishes semi-final estimations. Although these data are incomplete, they provide an accurate overall picture of economic activity. They give direction and trends of various components of the economy, providing valuable information to businesses and policymakers.

Changes in the semi-final and final estimations of GDP come as a result of:

- Addition of the number of financial statements of the year (t) integrated into the databases after closing the semi-final estimate
- A higher number of businesses that present the financial statements of year $t + 1$, reporting also the previous year
- Revision of foreign trade data such as imports and exports of goods
- Updating data from balance of payments
- Revision of data from the Agriculture Directorate

4. EFFECTS OF GDP REVISION

The following article shows the effect of the revision in GDP, in terms of key indicators of the expenditure method. For this purpose, the relevant values in the semi-final assessment of 2015, versus the final one, have been analyzed.

As a result of the revaluation, PPB at current prices changed from 1,427,799 million ALL on the semi-final estimate to 1,434,307 million ALL on the final one. Following the revision of the results, the real growth rate decreased by 0.01 percentage point.

Contribution of relevant components to real GDP growth has changed from the semi-final to the final one of 2015. In the semi-final estimation, HFCE contributed by 0.80% to GDP growth and GFCF with 0.97%. Meanwhile, in the final estimation, HFCE contributed with 0.73% and GFCF with 0.85%.

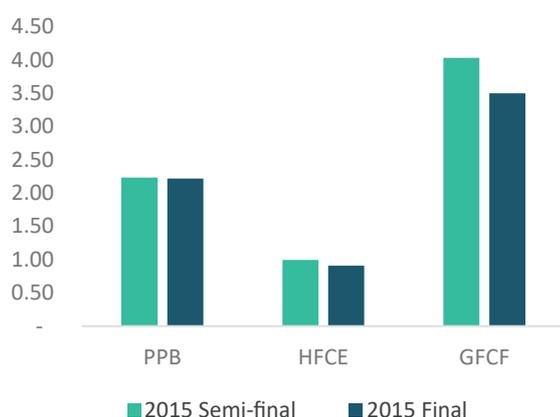
Household Final Consumption Expenditure (HFCE) consists of the expenditure incurred by households on individual consumption of goods and services, including those sold at prices that are not economically significant. It also includes various kinds of imputed expenditure of which the imputed rent is generally the most important one. Household final consumption expenditure account 79.9% of

gross domestic product in 2015 (according to the final estimation). In the semi-final estimation of 2015, the group of “Hotels, cafes and restaurants” has the highest growth rate in real terms, by 12.09%. In the final estimation, this group continues to have the highest growth, by 13.02% in real terms.

On the other hand, the highest decrease, according to the semi-final estimation, is found in the “Entertainment and culture” group by 12.39% in real terms. In the final estimation, this group has again the highest decrease by 11.53% in real terms.

In addition, the effect of the Gross Fixed Capital Formation (GFCF) is shown, which consists of the costs incurred for new capital or other specific expenditures carried out by the producer on the items or services in order to maintain at the same level, increase or expand their production capacities, or create new processing conditions in the future. As one of the main components of GDP in the expenditure method, gross fixed capital formation has a weight of 24.4% in GDP (according to the final estimate of 2015). Thus, the highest growth in GFCF, in the semi-final estimation of 2015, is in the group “machinery and equipment” with 15.85% in real terms. Also in the final estimation of this year, the highest increase in GFCF is in the same group, but at lower levels, by 15.81% in real terms. “Construction” also grew less, according to the final estimation compared to the semi-final, moving from 6.03% to 5.68% increase in real terms.

Figure 1: Real growth after revisions



5. RESULTS OF REGULAR REVISIONS

Changes between final and semi-final evaluations were observed, but are relatively small:

- Real GDP growth after revisions decreased by 0.01 percentage point.
- HFCE contribution to real GDP growth decreased by 0.07 percentage point.
- After the revision of data, the growth rate of the group “Hotels, cafes and restaurants” increased by 0.93 percentage point.
- The decrease rate of the group “Entertainment and culture” was softened, increasing by 0.86 percentage point as a result of the routine revision.
- GFCF contribution to real GDP growth decreased by 0.12 percentage point.
- The largest change resulting from the revision to GFCF, was at “Construction” group by 0.35 percentage point decrease in real terms, followed by “Machinery and Equipment” also falling by 0.04 percentage point in real terms.

Although revisions of GDP estimates are being made, as more complete data is provided, studies show that the overall picture of the economy does not change.

Measuring GDP is a work that is always in progress. It often takes months, or even years, to provide more complete and accurate information. Our semi-finals estimate has a good balance between accuracy and time, given the available data at that time. Successive revisions reflect the commitment of INSTAT to include the most complete resource when they become available and to improve methods for measuring a constantly changing economy.

6. PRACTICE OF OTHER COUNTRIES

Even in other countries, the main objective of revising statistical data is to improve the quality of information previously provided. There are various reasons for conducting common statistical reviews, where the main is to include new data related to the past, which could not be included at the time of compiling and publishing the first version.

The case of Germany

In order to be able to publish as early as possible the most recent data on “economic growth”, the results are calculated first on the basis of incomplete and partially evaluated data. These preliminary gross domestic product results will be updated continuously in future releases when new statistical data become available. Preliminary results adjustments over time follow a well-known and published revision cycle. Including this new information is particularly necessary if there are breaks in time series. This is necessary for comparing data with the previous year. Once a year, a major national account review is carried out with a comprehensive review of previous years, which includes the last four years. These results are always published in August. In particular, this revision takes into account data from tax return statistics and structural business survey. Structural business survey is based, in particular, on the annual financial statements of enterprises and above all provides information on their costs. By contrast, preliminary calculations are based only on current output indicators.

One of the key challenges for achieving early economic growth estimations are turning points in the economy. GDP revisions have greater impacts on these cases, as the preliminary results of many initial statistics fail to catch these moments of change. In addition, there are special effects such as VAT increases or extreme weather conditions, the impact of which is difficult to evaluate. In this context, it is obvious that revisions may be more frequent and larger in a dynamic economy.

BIBLIOGRAPHY

“Revisions and the Income and Expenditure Accounts”, Catalogue no. 13-604-M — no. 068, Statistics Canada

“Volkswirtschaftliche Gesamtrechnungen”, Revisionsbedarf des Bruttoinlandsprodukts, Statistisches Bundesamt

Ahmad, Nadim, Sophie Bournot and Francette Koechlin. 2004. “Revisions to quarterly GDP estimates: A comparative analysis for seven large OECD country” OECD

Fixler, Dennis J. and Bruce T. Grimm. 2003. “Revisions, Rationality, and Turning Points in GDP”. U.S. Bureau of Economic Analysis.

Graeme Walker, Andrew Walton and Tiffany Georghiades, “Why is GDP revised?”, Office for National Statistics, UK

<http://www.instat.gov.al/al/temat/ekonomi-dhe-financë/llogaritë-kombëtare-gdp/publikimet/2018/produkti-i-brendshëm-bruto-finale-2015-dhe-gjysmë-finale-2016/>

McKenzie Richard, Elena Tosetto (OECD) and Dennis Fixler (United States Bureau of Economic Analysis) 2008. “Assessing the efficiency of early release estimates of economic statistics”. OECD.

Peter van de Ven and George van Leeuwen, “Discussion”, Vol. 20, No. 4, 2004, pp. 607–614, Journal of Official Statistics

Smith, Philip. 1977. “An Analysis of the Revisions to the Canadian National Accounts” Statistics Canada Working Paper STC4370E.