



Developing national accounts revision policy in Armenia

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General overview

The publication of short-term indicators in the absence of complete statistical data leads to the need to revise them. National accounts data revision is mandatory component of the production process of macroeconomic statistics. In this regard, it is very important to find an acceptable balance between the timely presentation of primary national accounts data and their quality, that is the size of the subsequent revisions.

Until 2012, there were regular revisions in the national accounts of Armenia related to classifications, methodological changes, changes in balance of payments data, after the summary of census data.



General overview

Since 2012, the European Neighborhood and Partnership Instrument "Support to the Statistical Committee of Armenia" within the framework of the "Improving the integrity of the GDP" component C of the TWINING program has developed the revision policy and the revision schedule of the indicators of the national accounts of Armenia in accordance with the experience of the European Union.

Policy for revision of the SNA adopted by RA Resolution 40-A State Council dated December 25, 2012 published on the official website of Armstat <https://www.armstat.am/file/doc/99474138.pdf>.

This is the "mother" revision policy.

After the adoption of the National accounts revision policy some changes have been implemented by the Armstat related to data collection (timelines, periodicity, methodological and classification changes, data reduction in order to reduce respondent's reporting burden). An updated version is available at the following link <https://www.armstat.am/file/doc/99546523.pdf>.

Due to these circumstances, the National Accounts Revision policy is currently different from its original "mother" version.



SNA revision policy

The publication of short-term Armenian national accounts data is in high demand.

This is due to the fact that they characterize the development of the country's economy and are the basis for making the right decisions for macroeconomic policymakers. Here comes the main problem. Publishing timely short-term indicators reduces accuracy and requires further revisions.

The main reasons for the revision of national accounts:

- ❑ updating used information,
- ❑ integration of new (previously unavailable) data,
- ❑ changes in accepted classifications,
- ❑ error correction.

In addition, revisions could be carried out in case of significant methodological changes and changes/revisions in balance of payments data.

The Armenian National Accounts, in line with international practice, are being regularly revised. This process involves **regular/current revisions** and **major revisions**.



SNA revision policy

Regular or current revisions

Regular or current revisions are made on annual or quarterly basis. Those revisions are made via adjustments of data for each quarter. Generally, quarterly data for the current year may be reviewed during the next quarter, while all quarters of annual data are also subject to revision.

Major Revisions

Major revisions include the whole National Accounts statistical system for longer time series. Major revisions are made with the coordination (according to parallel agreements of the National Accounts Statistics (NAS), and main revisions of other macro statistics (MS), balance of payment, external debt, international investment position, government finance statistics).

For implementation of these revisions it is required to closely coordinate the work between the person responsible for compilation the National Accounts and Macro statistics.

The major revisions in the National Accounts of Armenia took place in connection with the implementation of the 2008 SNA, after summarizing the census data, as well as after the agricultural census.

The structure of Regular or Current Revisions

Name of the published indicator	Publication date	Publication of new data		Data Revision	Place and Name of publication
		Quarterly	Annual		
GDP by production method <i>by types of activities</i>	51/53 rd day 65/67 th day (t) year	Q4 _{t-1}	t-1	1. All previous quarters of year (t-1) (Q1t-1-Q3t-1) 2. All quarters of year (t-2) (Q1t-2-Q4t-2)	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	51/53 rd day 65/67 th day (t) year	Q4 _{t-1}	t-1	1. All previous quarters of year (t-1) (Q1t-1-Q3t-1) 2. All quarters of year (t-2) (Q1t-2-Q4t-2)	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by production method <i>by types of activities</i> , expenditure method (income use) <i>by expenditure components</i> , income generation method <i>by income components</i> (calculated based on the reporting data of the year t-2)	t year after Q 1 35/36 th day	-	t-2 t-1	All quarters of years t-1 and t-2 Based on reporting data for year t-2	„Databases” of Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by production method <i>by types of activities</i>	t year after Q 1 51/53 rd day 65/67 th day	Q1 _t	-	All quarters of year t-1	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	t year after Q 1 51/53 rd day 65/67 th day	Q1 _t	-	All quarters of year t-1	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports

GDP by production method <i>by types of activities</i> , expenditure method (income use) <i>by expenditure components</i> based on the balance of payments' revised data of t-1 year and other revisions	t year after Q 2 51/53 rd day 65/67 th day	-	-	t year first (Q1t) and All quarters of year t-1 (Q1t-1-Q4 t-1)	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by production method <i>by types of activities</i>	t year after Q 2 51/53 rd day 65/67 th day	Q2 _t	-	Previous quarter of year t (Q1t) All quarters of year t-1 (Q1t-1-Q4 t-1)	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	t year after Q 2 51/53 rd day 65/67 th day	Q2 _t	-	Previous quarter of year t (Q1t) All quarters of year t-1 (Q1t-1-Q4 t-1)	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by production method <i>by types of activities</i>	t year after Q 3 51/53 rd day 65/67 th day	Q3 _t	-	Previous quarter of year t (Q1t-Q2t) All quarters of year t-1 (Q1t-1-Q4 t-1)	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	t year after Q 3 51/53 rd day 65/67 th day	Q3 _t	-	Previous quarter of year t (Q1t-Q2t) All quarters of year t-1 (Q1t-1-Q4 t-1)	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports

The structure of Major Revisions

	Major Revisions	
	Special revisions	Regulated (planned) revisions
Description	Due to methodological changes (for example, implementation of new NACE, SNA 2008, ESA 2010, BPM6, etc.)	As a result of change or update of data sources (once every 5-10 years) (as a result of surveys, censuses, or using other estimation methods).
Governance	The process should be regulated by working group with participants from ARMSTAT and responsible persons for administrative statistics based on the relevant time table.	The process should be regulated by a working group with participants from ATMSTAT and responsible persons for administrative statistics based on a concrete time table.
Depth	Possible recalculation of the time series	
Timing	Agreed time table applicable for all statistical systems.	Agreed time table applicable for all statistical systems. Revision years should end with 0 or 5. Implementation years should end with 4 or 9.
Scope	Annual and quarterly national accounts, annual and quarterly BoP, MFS, IIP, ED, GFS, etc.	



Data dissemination and timing

Release calendars for statistical publications (data) are included in the Annual Statistical Programs approved by the State Council on Statistics of the Republic of Armenia. The Annual Statistical Program is approved within one month after the approval of the state budget by the National Assembly of the Republic of Armenia. The Statistical Program for 2024 was approved by Resolution 67-N of the State Council on Statistics of the Republic of Armenia dated December 14, 2023. The Armenian version of the Statistical Program for 2024 is posted on the Armstat website, at the address: <https://www.arlis.am/DocumentView.aspx?docID=187401>

Calendar of Statistical Publications is posted to the home page of the Armstat's website: https://www.armstat.am/file/calendar/2024-i_Oracuyc_en.pdf

An advance release calendar which gives one quarter ahead notice of the precise release dates is also disseminated on the Internet on the IMF's Data Dissemination Bulletin Board: <https://armstat.am/nsdp/arc/>

Data are released simultaneously to the public through press releases and publications (The Socioeconomic Situation of the Republic of Armenia), and on the website of the page.



Data dissemination and timing

GDP data are disseminated:

On a quarterly basis: on the 51/53rd day and 65/67th day after the reference quarter.

On an annual basis:

- the first estimates: on the 51/53rd day and 65/67th day after the reference year;
- the second estimates: on the 35/36th day after the first quarter of the reference year;
- the third estimates: on the 35/36th day after the first quarter of the year following the reference year.

The National accounts revision timetable for 2024 is available at the following address: https://www.armstat.am/file/Timetable/Timetable_2024_en.pdf

GDP revision timetable for 2024

	Publication date	Publication of new data		Reviewed data	Place and Name of publication
		Quarterly	Annual		
GDP by production method <i>by types of activities</i>	February 20 2024 March 5	IV quarter of 2023	2023	All previous quarters of 2023 All quarters of 2022	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	February 20 2024 March 5	IV quarter of 2023	2023	All previous quarters of 2023 All quarters of 2022	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by production method <i>by types of activities</i> , expenditure method (income use) <i>by expenditure components</i> , income generation method <i>by income components</i> (calculated based on the reporting data of the year t-2)	May 6 2024	-	2022 2023	From I quarter of 2022 to IV quarter of 2023 based on the reporting data of 2022	„Databases” of Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by production method <i>by types of activities</i>	May 21, June 5 2024	I quarter of 2024	-	All quarters of 2023	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	May 21, June 5 2024	I quarter of 2024	-	All quarters of 2023	“Press Releases,, section, Databases” on the Armstat official web site “Socio-economic Situation of the Republic of Armenia” monthly informational reports ¹²

GDP by production method <i>by types of activities</i> , expenditure method (income use) <i>by expenditure components</i> based on the balance of payments' revised data of t-1 year and other revisions	August 20, September 5 2024	-	-	I quarter of 2024 and all quarters of 2023 based on the balance of payments' revised data and other revisions	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by production method <i>by types of activities</i>	August 20, September 5 2024	II quarter of 2024	-	I quarter of 2024 All quarters of 2023	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	August 20, September 5 2024	II quarter of 2024	-	I quarter of 2024 All quarters of 2023	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by production method <i>by types of activities</i>	November 20, December 5 2024	III quarter of 2024	-	Previous quarters of 2024 All quarters of 2023	"Press Releases,, section, Databases" on the Armstt official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports
GDP by expenditure method (income use) <i>by expenditure components</i>	November 20, December 5 2024	III quarter of 2024	-	Previous quarters of 2024 All quarters of 2023	"Press Releases,, section, Databases" on the Armstat official web site "Socio-economic Situation of the Republic of Armenia" monthly informational reports



Quarterly-to-Annual Benchmarking

Since 2009 in Armenia quarterly GDP data are benchmarked with annual GDP estimates using the Denton method. Now it is practically done using EXCEL's XLPBM function.

Benchmarking addresses the problem of combining high-frequency series (e.g., quarterly data) with low-frequency series (e.g., annual data) for the same variable into a consistent time series. The higher- and lower-frequency data generally have similar trends but often show different levels and need to be made temporally consistent. Because low-frequency data are usually more comprehensive and accurate than high-frequency data, the high-frequency series is benchmarked to the low-frequency series.



Quarterly-to-Annual Benchmarking

Objectives of benchmarking:

The three main objectives of a standard in QNA are:

1. Evaluate quarterly data that is temporally consistent with an existing benchmark (usually ANA data); that is, to ensure that the sum (or average) of the quarterly data equals the benchmark.
2. Maintain short-term (quarterly or monthly) movements in the indicator as much as possible within the constraints provided by the benchmark (usually ANA data).
3. Ensure that the sum of the four quarters of the current year for the forward series is as close as possible to an unknown future benchmark (usually ANA data). The ideal benchmarking method for QNA should be able to meet all three objectives.

The main advantages of benchmarking are:

- Improvement in the information content of the high-frequency indicator by incorporating the lower-frequency benchmark information
- Removal of inconsistencies in the final results for different series (e.g., ANA and QNA estimates) that would cause confusion or inconvenience to data users
- Providing a process to assess how well an indicator is representing the target series, with a view to identifying any problems



Policy review and dissemination of IEA data

Following the recommendations of experts from IMF, EU (incl. Eurostat) the calculations of monthly GDP indicator on a cumulative basis was discontinued on January 1st, 2011. Instead, starting January 2011 the monthly indicator of economic activity (IEA) is calculated on a discrete basis.

The up to date information is published on the 25th day following the reference period. Monthly first publication is made on the 35/36 day following the reference period, while the annual data is published in the fourth quarter following.

Data are published according to the schedule of annual statistical programs publication and no delays from defined deadlines have been recorded.

The possible IEA data inaccuracy may be accounted for by inaccuracy of discrete data received from different sources.

On a quarterly basis the IEA tendencies are compared with the NA production indicator tendencies.



Policy review and dissemination of IEA data

The IEA data are reviewed once a year in accordance with the annual IEA schedule. The changes in the GDP indicator weights serve as a basis for the review.

First GDP estimates are available 51/53rd days after the end of the year, and starting 2013 65/67th days after the end of the year.

Taking this into account, the IEA for the months of January and February of the current year is calculated on the weighted data of the GDP (of the estimated reporting year). The specified months, as well as all months of the previous year, are subsequently revised based on the weight of the previous year's GDP calculated from the reported data.



Summary

The desire to publish data from national accounts as soon as possible after the end of the reporting period based on incomplete statistical information inevitably leads to the need subsequent adjustment of estimates. The publication of short-term indicators in the absence of complete statistical data leads to the need to revise them.

National accounts data revision is mandatory component of the production process macroeconomic statistics. In this regard, it is very important to find an acceptable balance between the timely presentation of primary national accounts data and their quality, that is the size of their subsequent revisions.

Minimization of differences in preliminary NA and BoP publications.

Users need to be informed about policy for publication and revision of national accounts, as well as the reasons and extent of the audit data.

It is important to explain to the public the essence methodological changes and their impact on revision of macroeconomic statistics indicators.



Statistical Committee of the Republic of Armenia

THANK YOU

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