Metadata Report for Statistics of Flash Estimates of real GDP

<u>V-3.2</u>

Quality Management

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1. Contact

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2. Methodology and Quality Update

2.1.	Latest Update on Methodology and Quality	29/01/2025

3. Statistical Presentation

3.1.	Data description

Flash Estimates of real GDP are an estimation process of the GDP conducted shortly after the end of the reference quarter and before the publication of the actual quarterly data, during which the data related to the quarter are still incomplete. The report on quick estimates of real GDP includes real GDP growth rates by main economic activities (on an annual basis) and seasonally adjusted real GDP growth rates by main economic activities on a quarterly basis.

Flash estimates of GDP data are collected on key characteristics as follows:

- Flash estimates of quarterly GDP are based on two main sources:
  – Statistical surveys, carried out by the General Authority for Statistics.
  – Administrative records, from which data can be obtained on a quarterly basis.
- The Flash estimates of GDP report are released quarterly.
- The frame of reference for quarterly national accounts statistics is the Quarterly System of National Accounts (. (QNA
- The Flash estimates of quarterly real GDP are subject to international standards in data collection and classification. Some of the most important classifications on which the report's data rely are:
  – The National Classification for Economic Activities (ISIC.4).
  – The Government Finance Statistics Manual (GFS).

3.2.   Classification system

The following classifications are applied in Flash estimates of real GDP.

National Classification of Economic activities (ISIC 4):

It is a statistical classification based on the International Standard Industrial Classification of all economic activities, as the International Standard Industrial Classification of Economic Activities is the reference classification for productive activities. Economic activity is also defined as (all the works or services that an establishment practices or provides that generate a financial return for it, and sometimes the establishment does not reap a financial return from its work, as is the case with charitable organizations that rely on donation).

The Government Finance Statistics Manual (GFS):

The Government Finance Statistics Manual 2014 is a specialized macroeconomic statistical framework designed to support the analysis of public finances. This manual provides economic and statistical reporting principles for use in compiling statistics and describes guidelines for presenting large-scale statistics within an analytical framework that includes appropriate budget lines consistent with the guidelines of other macroeconomic statistics.

The classifications are available on the GASTAT's website: https://www.stats.gov.sa/

3.3.   Sector coverage

Flash estimates of real GDP cover the following major economic activities:

- Oil activities:

Includes crude oil, natural gas and refining activities.

- Government services activities:

Includes the activities of all government entities listed in the final account of the government and those providing non-market services controlled by the government.

- Non-oil activities:

Includes all other economic activities except oil and government services activities.

3.4.   Statistical concepts and definitions

Terms and concepts related to Flash estimates of real GDP:

- Gross domestic product (GDP):

It is the monetary (market) value of all final goods and services produced in an economy during a given period, usually a year.

- Real GDP growth rates on an annual basis (%):

The rate of change by increase or decrease in GDP in a period compared to the same period of the previous year and through which the extent of the growth or contraction of the economy is measured annually.

- Real GDP growth rates on a quarterly basis (%):

It is the rate of increase or decrease in the seasonally adjusted Gross Domestic Product (GDP) in a period compared to the previous period, through which the extent of economic growth or contraction is measured on a quarterly basis.

- Seasonal adjustments:

It is the process of estimating and removing seasonal and calendar effects from data. Seasonally adjusted data means that it does not include seasonal effects caused by climatic conditions, social customs, or calendar events such as the Eid al-Fitr and Eid al-Adha holidays, the National Day, Foundation Day, or changes in weekend structures.

3.5. Statistical unit
Not applicable.
3.6. Statistical population
Not applicable.
3.7. Reference area
Flash estimates of real GDP cover the following major economic activities in the Kingdom of Saudi Arabia.
3.8. Time coverage
Data are available from the first quarter of 2020 to the current quarter.
3.9. Base period
The base year used to calculate Flash estimates of real GDP indicators is 2023.

4. Unit of measure

- Growth rate on an annual basis (%).

The growth rate is calculated by dividing the quarter of the current year by the corresponding quarter of the previous year.

- Growth rate on a quarterly basis (%).

The growth rate is calculated by dividing the quarter of the current year by the previous quarter of the same year.

5. Reference period

The report data is based on the first day of the quarter to the last day of the reference quarter.

6. Confidentiality

6.1.   Confidentiality - policy

According to the Royal Decree No. 23 dated 07-12-1397, data must always be kept confidential and must be used by GASTAT only for statistical purposes.

Therefore, the data are protected in the data servers of the Authority.

6.2.   Confidentiality - data treatment

Data were displayed in appropriate tables to facilitate its summarization, comprehension, and results extraction. Also, to compare data with other data and extract statistical meanings for the study community. It is also easier to check tables without the need to see any sensitive or confidential data, which violates data confidentiality of statistical data.

7. Release policy

7.1.   Release calendar

Flash estimates of real GDP are included in the statistical calendar.

7.2.   Release calendar access

The release calendar is available at: https://www.stats.gov.sa/statistical-calendar-releases

7.3.	User access

One of GASTAT's objectives is to better meet its clients' needs, so it immediately provides them with the results of the flash estimates of real GDP once the report is published

It also receives questions and inquiries of the clients about the Publication and its results through various communication channels, such as:

- GASTAT official website: www.stats.gov.sa
- GASTAT official e-mail address: info@stats.gov.sa
- Client support e-mail: info@stats.gov.sa
- Official visits to GASTAT's official head office in Riyadh or one of its branches in Saudi Arabia.
- Official letters.
- Statistical phone (199009).

8. Frequency of dissemination

Quarterly.

9. Accessibility and clarity

9.1.	News release

The announcements of each publication are available on release calendar as mentioned in 7.2. Release calendar access. The news release can be viewed on the website of GASTAT through the following link:

https://stats.gov.sa/news

9.2. Publications

GASTAT issues reports and publications of the Flash Estimates of real GDP on a regular basis within a pre-prepared dissemination plan which is published on GASTAT's website. GASTAT is keen to publish its publications in a way that serves all users of different types, including publications in different formats that contain (publication tables, data graphs, indicators, and metadata) in both English and Arabic.

Results of Flash estimates of real GDP are available at:

GDP and indicators of National Accounts | General Authority for Statistics (stats.gov.sa)

9.3. On-line database

Not available.

9.4. Micro-data access

Not available.

9.5. Other

Not available.

9.6. Documentation on methodology

The framework for Flash estimates of real GDP is the Quarterly System of National Accounts (QNA), and the concepts, definitions and classifications are based on international standards.

(QNA)Quarterly System of National Accounts

The quarterly SNA adopts the same principles, definitions and structure of annual national accounts in principle. The quarterly national accounts cover the full sequence of accounts and balance sheet in the 2008 SNA (2008 SNA) in practice and since quarterly national accounts are usually less complete than the two annual national accounts.(Reference)

9.7. Quality documentation
Quality documentation covers documentation on methods and standards for assessing, measuring, and monitoring the quality of statistical process and output. It is based on standard quality criteria such as relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, comparability, and coherence.

10. Quality management

10.1. Quality assurance
GASTAT declares that it considers the following principles: impartiality, user orientated, quality of processes and output, effectiveness of statistical processes, reducing the workload for respondents. Quality controls and validation of data are actions carried out throughout the process in different stages such as the data input and data collection and other final controls.
10.2. Quality assessment
GASTAT performs all statistical activities according to a national model (Generic Statistical Business Process Model – GSBPM). According to the GSBPM, the final phase of statistical activities is overall evaluation using information gathered in each phase or sub-process. This information is used to prepare the evaluation report which outlines all the quality issues related to the specific statistical activity and serves as input for improvement actions.

11. Relevance

11.1. User needs
External users and major beneficiaries for National accounts statistics data, include: • Government entities. • private sector

- Regional and international organizations.
- Academic and research institutions.
- International investors.

The disseminated key variables that external users benefit from include:

- Flash estimates of real GDP cover the following major economic activities.
- Flash estimates of real GDP with seasonal adjustments by major economic activities.

11.2. User satisfaction

Not available.

11.3. Completeness

The data is complete.

12. Accuracy and reliability

12.1. Overall accuracy

The data is compared with previous quarters to identify any significant changes, and the internal consistency of the data is verified before finalizing it. The links between variables are checked and coherence between different data series is confirmed.

13. Timeliness and punctuality

13.1. Timeliness

GASTAT uses the Special Data Dissemination Standard (SDDS) issued by the International Monetary Fund. According to this standard, all statistical agencies are required to publish data on a quarterly basis, with a time lag not exceeding 90 days after the end of the reference period. If the data comes from different source data, it may be published at a different pace.

13.2. Punctuality

The publication is carried out according to the published statistical calendar of Flash estimates of real GDP on the web page of the General Authority for Statistics.

The data are available at the expected time, as scheduled in the statistical release calendar, If the publication is delayed, reasons shall be provided.

14. Coherence and comparability

14.1. Comparability - geographical

The Department of National Accounts shall prepare statistics in accordance with internationally established standards and methodologies, with a focus on meeting the current and future statistical requirements of users, taking into account the highest degree of accuracy and efficiency in estimates, with easy access to and interpretation of data, and comparability regionally and internationally. this is in addition to taking into account the appropriate period between the information readiness and the reference period described by this information.

14.2. Comparability - over time

The possibility of comparing the Flash estimates of real GDP (on an annual basis) with the seasonally adjusted Flash estimates of real GDP (on a quarterly basis).

14.3. Coherence- cross domain

Not applicable.

14.3.1. Coherence - sub annual and annual statistics

Not applicable.

14.3.2. Coherence- National Accounts

Not applicable.

14.4. Coherence - internal
Flash estimates of real GDP for the reference period have complete internal consistency, as they are all based on the same set of accurate data and are calculated using the same estimation methods.

15. Data revision

15.1. Data revision - policy
Not applicable, only final results will be published.
15.2. data revision- practice
Not applicable, only final results will be published.

16. Statistical processing

16.1. Source data
Flash estimates of GDP are based on two main sources:
First source:
Statistical surveys, carried out by the General Authority for Statistics.
Second source:
Administrative records, from which data can be obtained on a quarterly basis such as: (Saudi Central Bank, Ministry of Energy, Zakat, Tax and Customs Authority, National Information Center).

16.2. Frequency of data collection

Quarterly.

16.3. Data collection

Data collection from administrative records:

In coordination with the General Directorate of Data Collection and Management, to obtain the registry data for the Flash estimates of real GDP report from the Saudi Central Bank, the Ministry of Energy, the Zakat, Tax and Customs Authority, and the National Information Center.

The data is stored in the authority's databases after undergoing auditing and review processes following approved statistical methods and recognized quality standards. If errors or discrepancies are discovered, the data is cross-referenced with the data source for correction or clarification.

16.4. Data validation

Data are reviewed and matched to ensure their accuracy and precision in a way that suits their nature with the aim of giving the presented statistics quality and accuracy.

The data of the current year publication are compared with the data of the previous year to ensure their integrity and consistency in preparation for processing data and extracting and reviewing results.

In addition to the data processing and tabulation to check their accuracy, all the outputs are stored and uploaded to the database after being calculated by GASTAT to be reviewed and processed by specialists in Health and Education Statistics through modern technologies and software designed for this purpose.

16.5. Data compilation

Data editing:

Specialists of National Accounts Statistics Department have processed and analyzed data in this stage, and this step was based on the following measures:

- Sorting and arranging data in groups or different categories in a serial order.
- Summarizing detailed data into key points or data.

- Combining many data segments and ensuring their interconnection.
- Processing incomplete or missing data.
- Processing illogical data.
- Converting data into statistically significant data.
- Arranging, presenting, and interpreting data.

Applied statistical estimation:

Update of the base year for GDP:

The base year refers to the starting point of the time series, and fixed-price series are typically published relative to specific base years, such as the base year 2010, to measure real growth in the volume of goods and services produced since that year. The selected base year reflects the structure of the economy and the value of production in various sectors and subcategories within those sectors. The System of National Accounts recommends reviewing and updating GDP to better capture structural changes in the economy, and the United Nations also recommends updating base years every five years.

The importance of updating the base year lies in the changing structure of the economy, the emergence and significant growth of new economic activities, Flash technological advancements in production techniques, changes in productivity, and the review and updating of GDP estimates.

The base year has several characteristics, including: The base year should be well-representative of all aspects of the economy, with comprehensive and integrated statistics, and free from any abnormal events such as droughts, floods, earthquakes, major economic recessions, and so on.

Methodology of Backcasting GDP Estimates:

The methodology corrects any gaps that may occur in the time series after updating the base year values for 2023, whether due to growth or decline. It works to correct these gaps as cumulative results over the years, aiming to produce a consistent time series that reflects accurate economic trends. After adjusting the total GDP in production, it is then balanced with the expenditure side.

- **The method of flash estimates for quarterly real GDP:**

The estimation process is the same as in quarterly national accounts but adopts simplified assumptions about extrapolation of certain indicators (monthly or quarterly). several indicators related to production, expenditure, income, prices and foreign trade are used to estimate the value added of non-oil activities by building a standard economic model that measures the growth rate of the gross salt product by estimating the remaining portion of

it after directly measuring the growth rate of both oil and government service activities [(reference).](#)

- **Method of Flash estimates of quarterly real GDP with seasonal adjustments:**

It is the process of estimating and removing seasonal and calendar effects from data. Seasonally adjusted data means that it does not include seasonal effects caused by climatic conditions, social customs, or calendar events such as the Eid al-Fitr and Eid al-Adha holidays, the National Day, Foundation Day, or changes in weekend structures.

Methodology used:

- The (JDemetra+) program is one of the programs used and applied by statistical offices and committees around the world when studying and analyzing time series to measure seasonally adjusted GDP. The (TRAMO-SEATS) method is used, relying on the ARIMA model, which is employed by many international organizations ([reference](#)).

16.6. Adjustment

Not applicable.

17. Comment