

# GDP by **Expenditure Approach**

Methodology









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#### **Overview**

The Gross Domestic Product (GDP) is the best way to measure economic performance, as it represents the total value of all that an economy produces during a given period of time. In other words, GDP represents the monetary (market) value of all end-user goods and services produced in an economy during a given period of time, usually a quarter or year. The gross domestic product is measured by income, production, or expenditure. The three methods are complementary, and not used as alternatives.

The GDP expenditure approach is concerned with measuring the various components of final spending, as it reflects private consumption expenditure, consumption of non-profit institutions that serve households, general government consumption expenditure, investments and exports, and does not include the economy's imports.

## **Importance**

This methodology was prepared by the Statistics Centre - Abu Dhabi with the aim of providing the GDP Indicator (Expenditure Approach) for the Emirate of Abu Dhabi. The components of expenditure statistics are one of the key statistical economic indicators that contribute to the process of economic development planning. It may be employed to monitor the consumption trends in the main and targeted sectors of the Emirate of Abu Dhabi, as one of the most important mainstays of the comprehensive sustainable planning and development process that supports decision-making in setting development plans and policies and knowing the current economic trends. This would also contribute to achieving the Emirate's directions, vision and future aspirations. It can be used, too, in economic analyses and comparison between the levels of economic performance in the Emirate and other countries.

## **Objectives**

- Provide estimates to support decision makers, policy makers, researchers and those interested in updated statistics and indicators.
- Provide revised data for the GDP by the expenditure approach for the previous estimated reference year.
- Measure and monitor consumption trends for sectors in the Emirate of Abu Dhabi to direct government policies.
- Contribute to developing a national statistical system in the United Arab Emirates by providing these indicators.

## **Concepts and Definitions**

- GDP at market prices (Expenditure Approach): is the sum of final expenditures at buyers' prices including exports, valued at FOB prices minus imports.
- Government Final Consumption Expenditure: is the value of what the general government spends to produce goods and services that it self-consumes. That is, it is equal to the value of the government's total production minus the sum of the value of marketed and non-market sales, considering that the total value of government production is equal to the sum of the value of intermediary consumption of goods and services, the value of employees' compensation, depreciation of fixed capital, and net indirect taxes.
- Household Final Consumption Expenditure: is the value of resident household spending on goods (durable and non-durable) and services minus their sales of used goods.
- Private Final Consumption Expenditure: The final consumption value of resident households and private non-profit organizations serving households.
- Gross Fixed Capital Formation: is the total value of the fixed asset acquisitions by producers, minus the value of the fixed assets that producers dispose of (additions exclusions) during the accounting period, plus the additions made to non-produced assets such as land reclamation, development and expansion of forests, farming, orchards... etc., which are used in production for more than one year. It includes livestock, including breeding animals, milk production... etc. It also includes the costs of transferring ownership in connection with the purchase and sale of lands, mines, forests ... etc.
- Change in Stock: The market value of the change that occurs during the accounting period in
  the stock of raw materials, products in process, finished products, animals intended for slaughter,
  and goods purchased for sale. It constitutes the difference between the stock value at the
  beginning and end of the period.
- Gross Capital Formation: It is the value of fixed capital formation plus the change in inventory.
- Fixed Assets: are productive assets that are used repeatedly or continuously in production
  operations for a period of more than a year. Fixed assets do not include only machinery and
  equipment, but also various assets, such as: trees and animals that are used frequently or
  continuously to produce other products, such as fruits or dairy products. They also include
  intangible assets, such as computer software and original artwork used in production.
- Fixed Capital Depreciation: It is the decrease in the value of the fixed assets used in production
  during the accounting period as a result of physical deterioration, obsolescence or normal
  damage. Such depreciation can be deducted from the total fixed capital formation to obtain the
  net fixed capital formation.
- Indirect Taxes: are taxes imposed on producers in connection with the production, sale and purchase or use of goods and services. They are usually charged on production costs and include customs duties.

- Productive Subsidies: They include grants payable by the government on the current account
  of the private sector and the public sector, and subsidies paid by public authorities to government
  projects to offset the loss resulting from the government's policy of keeping the price at a certain
  level. They can also be calculated as the difference between the target price and the actual
  market price paid by the buyer.
- Net Indirect Taxes: They are the value of indirect taxes minus the value of production subsidies.
- Consumer Goods and Services: The System of National Accounts defines consumer goods
  and services as goods and services that are used by households, governmental units or nonprofit institutions that serve households, with the aim of satisfying individual wants or needs or
  satisfying the collective needs of members of society.
- Marketed Goods and Services: The value of goods and services sold in the market or prepared
  primarily for sale in the market at a price aimed at covering the cost of production. It includes all
  goods and services produced locally or imported, except for direct purchases from abroad by the
  government and households.
- Non-Marketed Goods and Services: The value of other goods and services that are provided
  at a price that usually does not cover the cost of their production (for free or at a nominal price).
   They mostly consist of the production of government service producers and private non-profit
  organizations that serve households.
- Imported Goods and Services: The value of goods whose ownership has been transferred from non-residents to residents in the country, as well as the services provided by non-resident producers to residents of the UAE. They include goods and commodities that cross the borders for the purposes of processing; those goods that are processed in foreign ports and transported by local carriers, and non-monetary gold. Services include transportation, tourism, communications, insurance and construction services, financial services, franchises, licensing fees, personal and cultural services, and government services that are not classified elsewhere.
- Exported goods and services: the value of goods and services for which ownership is transferred from residents of the country to non-residents. They include exports of goods for processing, commodities purchased in local ports by non-resident carriers and non-monetary gold. Exported services include all services provided to non-residents, such as services of transportation, tourism, telecommunications, insurance, financial services, franchises, business services, personal, cultural and recreational services, and government services.
- Trade Margin: is the difference between the actual price paid or calculated by the buyer for a
  purchased commodity for resale (wholesale or retail) and the price that the distributor must pay
  for this commodity at the time it was sold or used. The outputs of wholesale and retail trade are
  measured by the sum of the values of the trade margins realized on goods purchased for the
  purpose of resale.
- CIF Cost, Insurance and Freight: This is paid by an importer to receive the commodity at the
  borders of his country, before paying any import duties or any other taxes imposed on the
  borders. The CIF price includes insurance and shipping costs up to the point of the importing
  country. It is the price of the service delivered to a resident, before paying any import duties or
  other taxes on imports or the margins of trade and transport within the country.

- FOB –Free on Board: It is a special type of buyer's price applied to export flows. It can be viewed as the buyer's price paid by an importer who receives goods at the border of the source country after they are loaded onto the means of transport and after any export taxes have been paid or any tax deductions have been received. The FOB price is equal to the CIF price minus the transportation and insurance costs between the customs borders of the importing country.
- **Base Price:** is the price that the producer receives from the buyer for a unit of a good or service produced as an output, minus any taxes paid and plus any subsidies received by the producer on that unit as a result of its production or sale. It does not include any transportation costs (which the producer charges on invoice separately).
- Buyer Price: is the price paid by the buyer to receive a good or service at the time and place he
  determines. It does not include any value-added tax or other tax withholdings. The buyer's price
  includes any transportation costs paid by the buyer separately to receive the goods at the place
  and time he determines.
- Product Price: It is the price that the producer receives from the buyer for a unit of a good or service produced as an output, deducting value-added tax or any other tax withholdings placed on the invoice. It does not include any transportation costs charged by the producer on an invoice separately.
- AED: the currency of the United Arab Emirates (Arab Emirates Dirham).

## **Geographical Coverage**

The Emirate of Abu Dhabi, including its regions (Abu Dhabi region - Al Dhafrah region - and Al Ain region).

# Frequency

Annual

#### **Classifications**

Classification is defined as an ordered set of related categories used to group data according to similarity. Classification constitutes the basis for data collection and dissemination in various statistical fields such as: (economic activity, products, expenditures, occupations, health ... etc.). The classification of data and information allows placing them in meaningful categories in order to produce useful statistics. Data collection requires careful and systematic arrangement according to their common characteristics in order for the statistics to be reliable and comparable. National accounts statistics are subject to international standards in collecting and classifying their data.

Key classifications on which the national accounts statistics depend include the following:

- The International Standard Industrial Classification of Economic Activities- Rev. 4 (ISIC 4): is a statistical classification based on the International Standard Industrial Classification of all economic activities. The International Standard Industrial Classification of Economic Activities (ISIC) is the reference classification for productive activities. The economic activity is defined as (all the works or services performed or provided by the facility, and which achieve a financial return, and sometimes the facility does not reap a financial return from its work, as is the case in charities that depend on donations).
- Central Product Classification CPC 2.1: the Central Product Classification is a complete classification of products that includes goods and services. This classification aims to be an international standard for the compilation and tabulation of all kinds of data that require details about the product, including industrial production; national accounts and service industries; domestic and foreign trade in commodities; international trade in services; balance of payments; consumption; and price statistics. Other essential purposes are to provide a framework for international comparison and to encourage coordination between different types of statistics relating to goods and services.
- Classification of Individual Consumption by Purpose (COICOP): is a classification used to define both individual consumption and expenditure on the one hand, and individual consumption on the other.
- Classification of the Functions of Government (COFOG): COFOG is compatible with the
  System of National Accounts issued by the United Nations in cooperation with the Organization
  for Economic Cooperation and Development (OECD) and represents one of the core pillars of
  the Government Finance Statistics Guide. It classifies "government expenditures" according to
  their functional nature to measure how far government expenditures achieve their general
  objectives. This helps analysts and inspectors of the performance of government entities to
  evaluate the effectiveness of government spending.
- Balance of Payments Guide Rev. 6: The Balance of Payments Guide "Rev. 6" (BPM6) prepared
  by the International Monetary Fund is one of the key statistical systems that have been
  coordinated with the System of National Accounts 2008. The rest of the world sector accounts in
  the System of National Accounts link the two systems, which are similar in many
  recommendations, both in terms of displaying accounts and recording and evaluating
  transactions.
- Harmonized System (H.S): is a commodity description system that allows countries to classify traded products in an internationally standardized system of product names and symbols.
- The System of National Accounts: Focused work is underway on shifting from the 1993 system to the 2008 system, being the latest version. In general, the differences between the two systems are not essential within the scope of the GDP calculation. This guide focuses on the definition of production and production requirements in each economic activity; guides for price indices and government spending functional classification; household expenditures classification by purpose, and others. Some of them are applicable and others are challenging to implement.

#### **Main Data Sources**

Different data sources are used in the production of the GDP indicator by the Expenditure Approach. They combine data of the economic surveys conducted by the Statistics Centre - Abu Dhabi, and administrative data. The data sources include consumer price indices, government finance data, and administrative data from other departments in the Centre and government and non-governmental entities, as well as other survey data.

The following table shows the sources that are currently used, and it must be taken into account that data sources change over time as more data sources are created and improved:

Source	Nature of Data
Economic surveys data	Change in inventory
Administrative sources in the National Accounts (Data of the Department of Finance and the Ministry of Finance)	General government data (government spending)
Income and Prices	Index numbers for prices and inflation
Income and Prices	Household income and expenditure survey data
Foreign Trade	Foreign Trade Statistics (Exports, Imports and Re-Exports)
National Accounts	Fixed Capital Formation

#### **Questionnaires**

There are no specific forms of data collection as it is collected both directly and indirectly:

- Electronic official correspondence to collect administrative data.
- · Government entities integration systems

### **Data Collection**

- Administrative sources
- Economic survey data

## **Data Editing**

In general, the data is audited through:

- Logical data audit: This is done in the analysis phase to ensure the consistency of the data for the time series.
- Quality of GDP Estimates: It is difficult to give an absolute judgment on the results of any statistical work. However, international recommendations indicate the need to apply some standards regarding the quality of statistical data in a way that ensures that these data represent reality with a high degree of credibility. Thus, to ensure the quality of GDP data, the IMF developed the Data Quality Assessment Framework (DQAF) for National Accounts Statistics. SCAD is keen to implement the basic conditions for quality and its aspects. There are five dimensions of quality, namely:
- 1) Guarantees of Objectivity: This dimension focuses mainly on professional competence and transparency. In this context, the Statistics Centre Abu Dhabi focuses on using highly experienced and qualified persons in the field of national accounts, preparing employees with training programs in this subject, and allowing them to learn from the experiences of others through external participations.
- 2) Methodological Soundness: This dimension focuses on the implementation of international methodologies and sound practices. SCAD undoubtedly focuses on keeping up with the latest developments and committing to the compatibility of the methodologies used in its work with international recommendations and global standards in this field.
- 3) Accuracy and Reliability: This dimension focuses on the fact that the results should reflect the reality of the economy. It should be noted here that SCAD focuses on collecting data from all large establishments and the government in a detailed manner to ensure the highest level of accuracy.
- 4) Serviceability: This dimension focuses on periodicity and data consistency. In this context, SCAD issues annual GDP data in a fixed periodicity and makes improvement during the period between the reference year and the release of results. As for consistency, the Centre reviews the internal consistency of the data, and compares the GDP data according to economic activities with secondary sources.
- 5) **Accessibility**: After completing the calculation of the gross domestic product (GDP) and other economic variables and conducting consistency and review processes, the Centre seeks to provide data to decision-makers and publish it by all means of publication to make it available to all users in accordance with the publishing policy approved by the Centre.

#### **Indicators Calculation**

#### Summary of the indicators that are produced:

- Annual GDP at current prices for each component of the GDP Expenditure approach.
- Annual growth rate of GDP for each component of expenditure on GDP at current prices
- The relative importance of each component of expenditure on GDP at current prices.

#### The general outputs of GDP by the expenditure approach are as follows:

- Final consumption expenditure of households (consumption expenditure of the household sector). It is estimated if it is not available based on the percentage of population change in addition to other indicators.
- Investment expenditure (total capital formation).
- Final consumption expenditure of the general government.
- Net foreign transactions (exports minus imports).

#### **Timelines**

Annual estimates for the most recent year maximally four months (120 days) after the end of the reference year.

#### Dissemination

Gross Domestic Product (GDP) Statistics (Expenditure Approach) are considered non-publishable data that are provided to government entities.

The Statistics Centre – Abu Dhabi publishes its statistics through various channels: Either a report, a bulletin, statistical tables, visualization tools or graphic charts, or in the form of a press release, which is released through multiple channels represented in the following to ensure that it reaches all users of statistics:

- The official website of the Statistics Centre Abu Dhabi at the link: http://www.scad.gov.ae
- Customer happiness portal.
- Electronic linkage systems with government entities.
- Press releases.
- Statistics Centre Abu Dhabi's social media
- Official letters



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