

Measuring 'The Economy'

Measuring the economy provides useful economic statistics for a number of different parties. Government departments, such as HM Treasury, use the data when making and monitoring short and medium term policy decisions relating to the budget, expenditure plans and taxation. The UK financial sector is another major user of statistics for forecasting the future and carrying out research. What follows is a brief summary of how these figures are compiled, according to the Office of National Statistics (ONS).

There is no set definition of the economy although there are several suggestions, including "The production, distribution and exchange of goods and services. Participants in the economy are grouped into four institutions:

1. **Households** – those who consume goods and services, work, get paid, and pay taxes.
2. **Corporations** – any body or organisation that produces a good or service for sale.
3. **Government** – the business of public administration.
4. **The rest of the world** – anyone not resident in the UK.

Transactions occur between these institutions and are based on the criteria that there are two participants, and there is mutual consent. There are three defined types of transactions:

1. **Transactions in products** – relating to the origin and use of goods and services, e.g. domestic output – what is produced in the UK.
2. **Distributive transactions** – transactions by which the income generated by production is distributed.
3. **Financial transactions** – acquiring financial assets or incurring a financial liability, e.g. buying a foreign currency.

The national accounts provide a framework for measuring these transactions which make up the economy.

Key Definitions

- **Gross value added** – the difference between output (the value of goods and services produced) and intermediate consumption (the cost of raw materials and other inputs which are used up in production).
- **Gross domestic product** – a measure of total economic activity – the sum of gross value added of all those involved in production.
- **Gross national income** – a measure of income coming to the UK from production wherever in the world it occurs.
- **Current prices** – the prices actually charged for goods and services
- **Constant prices** – prices expressed to enable comparisons to be made across a period of years.

Measuring GDP

GDP is an integral part of the national accounts and provides the most widely used indicator of the state of the economy. There are three theoretical approaches to measuring GDP:

1. **The output (or production) approach** – look at all those who produce goods and services and measure their individual value added and sum them together to get GDP.

2. **The income approach** – some value added has to be distributed, either in the form of compensation of employees or it can be operating surplus (or profit) to the producer. The income approach measures GDP by the distributed value added from all producers.
3. **The expenditure approach** – When goods or services are sold for the last time, their price reflects the value added at each stage of production. Summing together all spending of the final buyers and removing imports gives the expenditure approach of measuring GDP.

All three approaches are used in the estimation of one GDP estimate.

The Inter-Departmental Business Register (IDBR)

This is the ONS list of businesses in the UK – a framework into which data can be placed, and a recognised way to describe the economy. It is based on inputs from three administrative sources:

1. Traders registered for VAT purposes
2. Employers operating a Pay As You Earn (PAYE) scheme registered with the Inland Revenue
3. Incorporated businesses registered at Companies House

The IDBR covers businesses in all parts of the economy, other than some very small businesses (self-employed and those without employees and low turnover) and some non-profit making organisations. It provides more than 99% coverage of UK economic activity. Information held for each business includes name, address, classification (industrial/economic activity), employment, employees, turnover, legal status (company/sole proprietor/partnership etc.), Enterprise Group links, country of ownership, Enterprise Zone markers, company number, and value of goods traded with EU member states from Intrastat.

The Government uses it for statistical purposes, providing a sampling frame for surveys of businesses carried out by the ONS and by other government departments. It is a key data source for analyses of business activity and can be used for some administrative purposes.

Prices and measures of inflation

- **The Retail Prices Index (RPI)** – measures the average change from month to month in the prices of goods and services bought by most households in the United Kingdom. The index is compiled using a large and representative selection of more than 600 separate goods and services. Price movements of 500 of these goods and services are regularly measured in 11 regions throughout the country, with 100 items collected centrally. Until recently the RPI was the main domestic measure of UK inflation.
- **The Consumer Price Index (CPI)** – became the Bank of England's target measure of inflation at the beginning of 200. It has been developed to provide a comparable measure of inflation for Member States of the European Union, and is also known as the Harmonised Index of Consumer Prices (HICP). The coverage and methodology of the CPI is similar to the RPI with one or two major differences.
- **Producer Price Indices (PPIs)** – a series of monthly indicators that measure the change in the price of goods bought and sold by UK manufacturers. Again they work on the 'basket of goods concept'. Input PPIs measure changes in the prices of materials and fuel bought by manufacturers for

processing. Output PPIs indicate changes in the prices manufacturers charge for goods as they leave the factory gate.

- **Service Producer Price Indices (SPPIs)** – Indices are being developed to cover the prices of services sold by businesses to business and other non-private customers (including customers in government).

Regional Accounts

Data for gross domestic product and personal incomes is available from the late 1960s onwards. The regional accounts are currently responsible for the production and publication of the estimates for gross value added (GVA), gross disposable household income (GDHI), gross fixed capital formation (GFCF) and individual consumption expenditure (ICE).

Regional Accounts sits in the National Accounts Group and is part of the National Accounts Coordination Division. All regional accounts outputs are closely linked to national accounts aggregates through the Blue Book. Regional GVA is the main basis for objective 1 structural funding.

The main measure of the UK economy is GDP, but the main measure of regional economies is GVA at current basic prices. Regional GVA is defined as 'the value generated by any unit engaged in production, and the contribution of individual sectors or industries to gross domestic product. It is measured at basic prices, excluding taxes less subsidies on products. It is currently produced on an income approach, that is the addition of all income earned by resident individuals or corporations in the production of goods and services. It is made up of a number of components.

GDHI, also known as Household Income or Household accounts, is the amount of money that households have available for spending or saving, hence 'disposable income'. This is the money left after expenditure associated with income, e.g. taxes and social contributions, property ownership and provision for future pension income. Like GVA it is produced and published at current basic prices and is made up of a number of components.

GFCF is defined as the total value of additions to fixed assets by resident producer enterprises, less disposals of fixed assets during the quarter or year, plus additions to the value of non-produced assets (such as discoveries of mineral deposits, or land improvements). It is currently suspended due to major quality issues surrounding the indicator datasets.

Ian Jepson
October 2007.