

# A guide to the UK National Accounts: March 2020

An update to the 2015 publication of "A Short Guide to the UK National Accounts". The purpose of this guide is to give the reader an introduction to the concepts and underlying principles of national accounting and additionally to describe the various publications available.

Contact:  
James Scruton  
gdp@ons.gov.uk  
+44 (0)1633 455284

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# 1 . Introduction

The purpose of this guide is to give the reader an introduction to the concepts and underlying principles of national accounting and additionally to describe the various publications available.

This is a highly complex and technical area and far more detailed guides and manuals are available in Chapter 16. This guide should enable the reader to understand the main statistics published within the UK National Accounts and the uses made of them.

## What are the national accounts?

The national accounts provide an integrated description of all economic activity within the economic territory of the UK, including activity involving both domestic units (that is, individuals and institutions resident in the UK) and external units (those resident in other countries). In addition to being comprehensive, the accounts are fully integrated and internally consistent.

The coverage of the core accounts is wide, encompassing production, consumption, the generation, distribution and redistribution of income, capital investment and the financing of the above (these terms will all be discussed more fully in later chapters). Additionally, accounts are produced for the regions, sub-regions and local areas of the UK, as are satellite accounts, which cover activities linked to the economy, but separate from the core accounts, most notably the environmental accounts. The majority of the core accounts deal with transactions between the various sectors of the economy, such as corporations, households and government, as well as transactions with the rest of the world.

Many of the most well-known economic statistics are produced within the national accounts, including gross domestic product, the household saving ratio, public sector net borrowing, the balance of trade, and household consumption.

## Who uses them?

Domestically, the national accounts are heavily used by policy-makers and analysts. They feed into the discussions of the Monetary Policy Committee of the Bank of England when setting interest rates, and are also used by the Office for Budget Responsibility in forecasting economic growth and public sector debt.

Components of the national accounts are used by decision-makers and advisers across the whole of society, including corporations, private individuals, and government. Furthermore, many of the national accounts statistics are provided to Eurostat (the statistical office of the European Union) and are used by institutions such as the European Central Bank. The largest proportion of the UK's contribution to the EU budget is determined by the level of gross national income. Conversely, EU payments to deprived regions of the union are determined by regional gross domestic product per head of the population.

## How are they produced?

The UK National Accounts must adhere to international standards, specifically the [European System of Accounts](#) (ESA) and [Balance of Payments Manual](#) (BPM), to ensure international comparability. These manuals are updated periodically to reflect economic and technological developments in domestic and global economies and changes in user needs.

The national accounts are drawn together using data from many different sources, which ensure that the national accounts are comprehensive and provide different perspectives on the economy, for example, sales by retailers and purchases by households. By comparing and contrasting these different sources, the national accounts produce a single picture of the economy, which is consistent, coherent and fully integrated.

# 2 . The principles of the national accounts framework

## **Institutional sectors**

In order to make the accounts more meaningful and to provide certain important analyses, the units making up the economy are grouped into a number of institutional sectors based on their activities as well as who owns and controls them. An institutional unit is defined as one that has autonomy of economic decision-making (for example, it can enter into contracts, own assets, and incur liabilities) and is able to keep a meaningful set of accounts. The characteristics of the various sectors are described in brief in this section. Most of the sectors have sub-sectors to enable more detailed analysis; the most important of these are also described.

### **Non-financial corporations (NFCs)**

NFCs produce goods and services for the market and do not, as a primary activity, deal in financial assets and liabilities. This sector includes, for example, retailers, manufacturers, utilities, business service providers (such as accountancy and law firms), caterers, haulage companies, airlines, construction companies, and farms.

The NFCs sector is broken down into two sub-sectors: public sector NFCs and private sector NFCs, dependent upon criteria such as the control of general corporate policy.

### **Financial corporations (FinCos)**

The FinCos sector consists of institutional units that are independent legal entities and market producers, and whose principal activity is the production of financial services. Some of the most important financial instruments include currency, loans, shares and bonds, although there are many others. Thus the main kinds of financial corporations are banks, building societies, securities dealers, insurance corporations and pension funds, although this list is not exhaustive. There are some public sector FinCos, most notably the nationalised banks.

The FinCos sector is broken down into three sub-sectors: monetary financial institutions (MFI), insurance corporations and pension funds (ICPF), and financial corporations except MFI and ICPF.

### **General government (GG)**

This sector is made up of those units providing services for collective or individual consumption that are not sold at market prices. These units are usually funded by compulsory payments from units in other sectors (that is, taxes) and may be involved in the redistribution of national income (for example, benefits and State Pension).

The sector includes government departments and agencies, local authorities, the devolved administrations in Northern Ireland, Scotland and Wales, the state education system, the National Health Service, the armed forces, and the police. Non-departmental public bodies are also included in the general government sector. In the UK, it is broken down into two sub-sectors: central government and local government.

### **Households (HH)**

The HH sector covers both consumers and producers. Households as consumers comprise groups of people sharing the same living accommodation who share some or all of their income and collectively consume certain types of goods and services, such as food, electricity or housing. This sector also includes the self-employed who are treated as producers. A smaller group of units within the household sector comprises those living permanently in institutions with little economic autonomy, such as prison populations and members of religious orders living in monasteries.

### **Non-profit institutions serving households (NPISHs)**

NPISHs are institutions that provide goods and services, either free or below the market price, which mainly derive their income from grants and donations and which are not controlled by government. In the UK, this sector includes most charities, trade unions, religious organisations, political parties and the majority of universities.

## Rest of the world (RoW)

The RoW sector in national accounts terms includes all those institutions or individuals not resident in the UK that have economic interactions with resident units. It can include overseas corporations, charities, governments or private individuals.

It should be noted that residence does not imply nationality. This is particularly true for private individuals where (other than for a small number of exceptions, such as students, diplomats and service personnel) residing in another country for more than one year is sufficient to be classed as a non-resident and thus part of the RoW sector, irrespective of citizenship or nationality.

Also within the RoW sector are international organisations, irrespective of their geographical location. For example, in the German National Accounts, the European Central Bank would be classified in the rest of the world, even though it is physically located in Frankfurt-am- Main. The sector also includes foreign embassies and consulates on UK soil.

## Classification decisions

In the UK, the Office for National Statistics (ONS) is responsible for decisions on the sector classification of any unit. These decisions are taken by the Economic Statistics Classification Committee (ESCC). More information on the work of the ESCC and the latest version of the Sector Classification Guide can be found in [economic statistics classifications](#).

## Industries

Another way in which the units making up the economy can be grouped is by their industrial classification. Broadly, the main industrial groups are agriculture, production, construction, and services.

The classification of units to industries in the UK is based on the [Standard Industrial Classification \(SIC\)](#). This is consistent with the European NACE (Nomenclature statistique des Activités économiques dans la Communauté Européenne) classification and is updated periodically to take account of changes in economic structures and the impact of new industries. In October 2011, the latest version of the classification, SIC 2007, was implemented in the national accounts, ensuring that the accounts more accurately reflect the current structure of the UK economy.

## Agriculture

This industry includes traditional agriculture, horticulture, hunting, forestry and fishing, as well as activities such as fish farming.

## Production

The production industries are those involved in extraction (including oil, gas, coal, iron and other metal ores, and stone for construction), manufacturing (including food processing, publishing and basic metal products), the supply of electricity, gas and water, and the treatment of sewerage.

## Construction

The construction industry includes civil engineering projects, house building, demolition, road building and the installation of electrical wiring, plumbing and so forth. It also includes the renting of construction equipment.

## Services

By far the largest and most diverse grouping of industries, the services industries include retailers, wholesalers, motor traders, hotels, pubs and restaurants, the transport industry, postal services, telecommunications, banks, stockbrokers, insurance companies, pension funds, real estate, professional services such as lawyers, architects and recruitment consultants, local and central government (including the armed forces and the police), healthcare, education, libraries, museums, broadcasters, funeral directors, charities, sporting activities, bookmakers and hairdressers. This is not by any means an exhaustive list, but it does give some idea of the broad spectrum of activities included.

Table 1: Industry groups' respective contributions to the UK economy, 2016

<b>Industry</b>	<b>Percent of the economy, 2016</b>
Agriculture, forestry and fishing	0.7
Production	13.6
Construction	6.1
Services	79.6

Source: Office for National Statistics – GDP monthly estimate

## Transactions, assets and liabilities

The national accounts describe the interactions between the various sectors by means of a variety of transactions. A transaction is defined as being an economic interaction between two willing participants.

Please note that in some special cases, such as subsistence farming and government services, the producer and consumer are the same institution or individual. Also, consent can be implicit, such as in the case of penalty fares on the railways. It is important to recognise that legality is not a criterion for deciding whether an interaction is a transaction. If it were then it would be impossible to carry out international comparisons, as laws are different in different countries or comparisons over time, as laws change.

There are three main types of transactions: transactions in products, distributive transactions and financial transactions. These are described in more detail in this section.

### Transactions in products

Transactions in products are related to goods and services. They include output, intermediate and final consumption, gross capital formation, exports and imports (these terms are described in Chapter 3 GDP).

### Distributive transactions

Distributive transactions transfer income or wealth between units of the economy. They include property income, taxes and subsidies, social contributions and benefits, and other current or capital transfers.

### Financial transactions

Financial transactions differ from distributive transactions in that they relate to transactions in financial claims, whereas distributive transactions are unrequited.

The main categories in the classification of financial instruments are monetary gold and special drawing rights; currency and deposits; debt securities; loans; equity and investment fund shares/units; insurance, pension and standardised guarantee schemes; financial derivatives and employee stock options; and other accounts receivable /payable.

## Assets and liabilities

The national accounts identify two types of asset within the economy. The first of these is non-financial assets and includes fixed assets (such as buildings and vehicles), valuables, inventories, and non-produced assets (such as land). The second type is financial assets; these include currency holdings, bank deposits, ownership of shares and loans (from the point of view of the lender).

Every financial asset has an equal and opposite liability – in the examples above, the central bank is liable for currency, the bank where the deposits are held, the share issuer and, in the case of a loan, the borrower

## 3 . Gross domestic product (GDP)

Arguably the best-known national accounts statistic, GDP is the primary indicator of economic activity within the UK. When external commentators describe the growth or decline of the economy, it is the change in GDP to which they refer. One of the most commonly used definitions of a recession (not an official term) is two successive calendar quarters of negative real GDP growth. GDP can be estimated in real terms (adjusted to remove the effects of inflation) or nominal terms (unadjusted). Real and nominal data will be discussed further in Chapter 7.

GDP can be estimated in three ways:

- the sum of all goods and services produced within the economy (the production approach), as estimated using gross value added (GVA)
- the sum of all final expenditures of goods and services within the economy (the expenditure approach)
- the sum of all income generated by the sales of production within the economy (the income approach), again, as estimated using GVA

It should be noted that there are not three different versions of GDP, just three different ways of estimating the same thing. The three approaches will be discussed more in the next three sub-sections. The published headline figure of GDP is an average of the three approaches. While all three approaches are theoretically equal, not all data are available before publication is due. This means that in the latest years and quarters, an average figure must be used until all three estimates of GDP are balanced.

GDP can often be described as a measure of wealth, welfare, or well-being. It is none of these and has not been designed to be an all-encompassing indicator for these concepts. GDP is a measure of economic activity and, whilst there may be a link between this and wealth and welfare, such a link is complex.

For example, there may be a huge amount of economic activity in a country, but this may be because of foreign companies building factories in a poorer country to make use of liberal tax, environmental and employment regimes, and then repatriating the profits back to parent companies in richer countries. This repatriation of profits has no effect on GDP, but the fact that it happens, along with low wages in the factory, will mean that the growth in GDP may well not be reflected in domestic wealth and social welfare.

In 2014, the Office for National Statistics (ONS) began publishing [economic well-being](#). Since February 2019, this quarterly release is part of a new series on “people and prosperity”, which brings together personal and economic well-being for the first time.

## The production approach

The production approach, or GDP(P) as it is often known, is primarily concerned with the generation of gross value added (GVA). In other words, the value of all goods and services produced within the economy. There are two main types of output: that produced for the market (mainly by corporations) and services not for market sale (mainly by government and non-profit institutions serving households).

$$\text{GDP (P)} = \text{Output} - \left. \begin{array}{l} \text{Intermediate} \\ \text{Consumption} \end{array} \right\} \text{GVA} + \text{Taxes on Products} - \begin{array}{l} \text{Subsidies} \\ \text{on Products} \end{array}$$

where:

- output: goods and services that are produced within a sector that are available for purchase outside of that sector; in the context of GDP, it refers to the sum of all outputs less intermediate consumption plus taxes less subsidies
- market output: the total sales plus changes in inventories (as the amount produced will not necessarily be the amount sold and the former is what is required for GDP)
- non-market output: valued as the sum of the costs of production; specifically, it is valued as labour costs plus intermediate consumption plus depreciation of fixed assets (this measure provides the best available approximation)
- intermediate consumption: value of goods and services purchased to be used up in the production of goods and services, for example, raw materials such as flour in bread-making, ink in printing; specifically excludes staff costs and capital investment, which are handled elsewhere in the accounts
- taxes: compulsory, unrequited payments, in cash or in kind, made by institutional units to government; may be used to provide goods or services to other units, either individually or collectively, or to the community as a whole
- subsidies: current unrequited payments that government units make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services, which they produce, sell or import

## The expenditure approach

The expenditure approach, or GDP(E), is the sum of all final expenditures within the economy, that is, all expenditure on goods and services, which are not used up or transformed in a productive process.

$$\text{GDP (E)} = \begin{array}{l} \text{Household Final} \\ \text{Consumption} \\ \text{Expenditure} \end{array} + \begin{array}{l} \text{NPISH Final} \\ \text{Consumption} \\ \text{Expenditure} \end{array} + \begin{array}{l} \text{General Government} \\ \text{Final Consumption} \\ \text{Expenditure} \end{array} + \begin{array}{l} \text{Gross Capital} \\ \text{Formation} \end{array} + \text{Exports} - \text{Imports}$$

where:



- household final consumption expenditure: all consumption by the household sector, including food, alcohol, clothing, cars, rental on houses and holidays among others (excludes purchase of houses, or payments of interest on loans, which are considered expenditure on assets and property income respectively)
- NPISH final consumption expenditure: all consumption by institutions that provide goods and services; either free or below the market price
- general government final consumption expenditure: includes local authorities and central government and covers pay of employees, procurement of goods and services, and capital consumption
- gross capital formation (GCF): can be thought of as investment; it is made up of gross fixed capital formation, changes in inventories, and valuables
- gross fixed capital formation: this is the largest component of GCF and relates to spending on fixed assets, such as land, buildings, plant, software, transport equipment and machinery used in the production process for more than a year
- changes in inventories: value or volume changes in stocks less price increases, which can include materials and fuel, work in progress and unsold finished goods
- acquisitions less disposals of valuables: defined as goods that do not contribute to a process of production but are a store of value for the owners and includes jewellery, precious metals, works of art and antiques
- exports: goods or services sold to agents in other countries; the opposite of imports
- imports: purchases of goods and services from abroad; the opposite of exports – the total of exports minus imports is known as the net trade balance

## The income approach

The income approach, GDP(I), sums all income generated by production activity, also known as factor incomes.

$$\text{GDP(I)} = \frac{\text{Compensation of Employees}}{\text{Employees}} + \frac{\text{Gross Operating Surplus}}{\text{Surplus}} + \frac{\text{Mixed Income}}{\text{Income}} + \frac{\text{Taxes on Production and Products}}{\text{and Products}} - \frac{\text{Subsidies on Production and Products}}{\text{and Products}}$$

where:

- compensation of employees (CoE): sum of all employment income and not only includes wages and salaries, but also pensions and social security contributions made by employers, bonuses, and benefits in kind
- gross operating surplus (GOS): profits of all companies and public corporations, and excluding profit on rental of buildings and stock appreciation; it is officially defined as the balance between GVA and labour costs paid by producers
- mixed income: income from self-employment, recognising that the income of the self-employed is a combination of wages (CoE) and profits (GOS), but it is not realistic or appropriate to split it into these two components
- taxes: compulsory, unrequited payments, in cash or in kind, made by institutional units to government; may be used to provide goods or services to other units, either individually or collectively, or to the community as a whole
- subsidies: current unrequited payments that government units make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services, which they produce, sell or import

## 4 . Gross national income (GNI)

GNI is calculated by adding net property income from abroad to gross domestic product (GDP). Net property income from abroad equates to earnings arising from overseas investment and the ownership of other types of foreign financial assets. It comprises the net flow (receipts less payments) from the rest of the world (RoW) of: compensation of employees; property income; entrepreneurial income; and taxes on production and imports less subsidies.

$$\text{GNI} = \text{GDP} + \begin{array}{l} \text{Net property} \\ \text{income from abroad} \end{array}$$

The transition of GDP to GNI is obtained by adding compensation of employees to or from the RoW plus net property and entrepreneurial income less net taxes (that is, adjusted for subsidies received from the RoW). Net property income from abroad equates to earnings arising from overseas investment and the ownership of other types of foreign financial assets.

Property income is not (as might be suggested by the name) the income generated by the ownership of buildings (rental). It is in fact, made up of interest, the distributed income of corporations (dividends, repatriated profits and so on) and rent on land. This means that countries can have very high levels of GDP, but GNI would be significantly lower if, for example, many of the production units were owned by multi-national corporations with their headquarters in other countries.

The size of GNI is, for member states of the EU, the largest determinant of national contributions to the EU budget, this is known as “Own resource”.

In 2018, the net UK contribution to the EU budget was £11.0 billion, this is explained in [The contribution to the EU budget](#).

## 5 . The institutional sector accounts

For each of the institutional sectors identified in Chapter 3, the Office for National Statistics (ONS) compiles a set of quarterly and annual accounts, which detail transactions with other sectors. Sectors can own goods and assets, incur liabilities and engage in economic activities and transactions with other units. The format of these transactions between sectors is presented as a sequence of accounts; the main ones are listed in this section.

The sequence of accounts can be thought of as similar to a corporation’s accounts, which will have a profit and loss account, cash flow statement and balance sheet. Each account is made up of resources (which can be thought of as income) and uses (expenditure), with balancing items making up the difference between the two. The balancing item from each account is carried down to the next account as a resource.

Although in theory the net lending (+) and net borrowing (-) from the financial account and the net lending and borrowing from the capital account for each sector should be equal, in practice they are not, because of the timeliness of the publication. The difference between the two balances is known as the statistical adjustment item; these are published in Table C in the Blue Book.

### The accounts

#### Production account

The production account displays the transactions involved in the generation of income by the production of goods and services. For non-financial corporations (NFCs), financial corporations (FinCos), general government (GG), households (HH) and non-profit institutions serving households (NPISH), the balancing item, gross value added (GVA), is shown as output less intermediate consumption.

## **Distribution and use of income accounts**

These accounts describe the distribution and redistribution of income and its use in the form of final consumption. They are analysed in four stages, each of which is presented as a separate account.

The generation of income account shows which sectors and industries are the sources of income and details how value added is distributed in the form of labour costs (CoE) and taxes minus subsidies on production. The balance is gross operating surplus (GOS) (plus mixed income in the HH sector), which is the surplus or deficit on production activities before interest, rent and income taxes (GOS is therefore the income that is generated from use of production).

The allocation of primary income account shows the resident units and institutional sectors as recipients rather than producers of primary income. It demonstrates the extent to which operating surpluses are distributed (for example, by dividends) to the owners of the units.

Also recorded in this account is the property income received by an owner of a financial asset in return for providing funds to, or putting a tangible non-produced asset at the disposal of, another unit. The receipt by government of taxes on production less subsidies is shown in resources. The resources side of this account includes the components of gross domestic product income approach (GDP(I)), as well as property income recorded as resources for receipts and uses for payments.

Finally, the balance is the gross balance of primary income for each sector. If the gross balance of primary income is aggregated across all sectors of the UK economy (this includes rest of the world (RoW)), the result is gross national income (GNI).

The secondary distribution of income account describes how the balance of primary income for each institutional sector is allocated by redistribution through transfers such as taxes on income, wealth, social contributions and benefits, and other current transfers (excluding social transfers in kind). The balancing item of this account is gross disposable income, which reflects current transactions and explicitly excludes capital transfers, real holding gains and losses, and the consequences of events such as natural disasters.

The use of disposable income account illustrates how disposable income is split between final consumption expenditure and saving. When recording economic accounts, only the GG, HH and NPISH sectors have final consumption. In addition, for households and pension funds, there is an adjustment item in the account, which reflects the way that transactions between the two are recorded. The balancing item for this account, as well as for the whole group of distribution and use of income accounts, is gross saving. It is only in the case of NFCs (public and private) that undistributed income and saving are equivalent.

## **Capital account**

The capital account is presented in two parts.

The first part shows that saving (the balance between national disposable income and final consumption expenditure from the previous two accounts), is reduced or increased by the balance of capital transfers to provide an amount available for financing investment (in both non-financial and financial assets).

The second part shows total investment in non-financial assets. This is the sum of gross fixed capital formation (GFCF), changes in inventories, acquisitions less disposals of valuables, and acquisitions less disposals of non-financial non-produced assets.

The balance on the capital account is known as net lending or borrowing. If actual investment is lower than the amount available for investment, the balance will be positive – representing net lending. Similarly, when the balance is negative, borrowing is represented. Where the capital accounts relate to the individual institutional sectors, the net lending or borrowing of a particular sector represents the amounts available for lending or borrowing to other sectors.

## **Financial account**

The financial account shows the acquisition and disposal of financial assets and liabilities such as bank deposits (assets of the depositors and liabilities of the banks), unit trust units (assets of the holders and liabilities of unit trusts), and Treasury Bills (assets of the holders and a liability of central government). The balance of all transactions is net lending or borrowing.

## Financial balance

A financial balance sheet for each sector is compiled using the same financial instrument classification as that used for financial transactions. The changes in the end period levels in the financial balance sheets do not equal the financial transactions because of holding gains or losses and reclassifications of units between sectors.

## Flow of funds

The financial crisis exposed a significant lack of data about the financial sector, which is considered essential for identifying the build-up of risks in the sector as well as understanding financial connections amongst institutional sectors and sub-sectors. The “flow of funds” has been developed to measure the financial flows across sectors of the economy, tracking funds as they move from those that serve as sources of capital, through intermediaries (such as banks), to sectors that use the capital to acquire physical and financial assets.

Flow of funds is based upon the principle that the movement of all funds must be accounted for. Therefore, in the economy, total sources of funds must equal total uses of funds and, financial asset transactions must equal transactions in liabilities. It is presented in Chapter 14 of the Blue Book.

## 6 . Supply and use tables and input-output

The input-output (I-O) framework brings together components of gross value added (GVA), industry inputs and outputs, product supply and demand, and the composition of uses and resources across institutional sectors for the economy. This framework breaks the economy down to display transactions of all goods and services between industries and final consumers for a single period (for example, a quarter or a year). Information can be presented in two main products:

- supply and use tables
- symmetric input-output tables

However, it is worth noting that input-output represents a family of associated products, such as:

- supply and use tables
- symmetric input-output tables (also known as analytical tables, I-O tables or derived tables)
- extended input-output tables (and their applications)
- monetary input-output tables
- physical input-output tables
- range of satellite systems and links to extended parts of the national accounting framework including regional accounts, environmental accounts and social accounting matrices

This chapter will concentrate on the supply and use tables and symmetric input-output tables. More detail on these and the other input-output related products can be found in the [Eurostat Manual of Supply, Use and Input-Output Tables](#).

## Supply and use tables (SUTs)

SUTs show the whole economy by industry (for example, motor vehicles industry) and products (for example, sports goods). The tables show links between components of /GVA, industry inputs and outputs, product supply and demand. The SUTs link different sectors of the economy (for example, public corporations) together with detail of imports and exports of goods and services, government expenditure, household expenditure and capital expenditure.

Producing SUTs allows an examination of consistency and coherency of national accounts components within a single detailed framework and, by incorporating the components of the three approaches to measuring gross domestic product (GDP), enabling a single estimate of GDP to be determined, both in current prices and in chained volume terms (see Chapter 7).

The SUTs also provide the key in linking the components of three accounts, these being the:

- goods and services account
- production account (by industry and by institutional sector)
- generation of income account (by industry and by institutional sector)

A [visual representation \(XLSX, 11KB\)](#) of the tables is also available.

## Symmetric input-output tables

Symmetric input-output tables are derived from the data in the SUTs and other additional sources to form the theoretical basis for subsequent analyses.

These tables contain symmetric (product by product or industry by industry) tables, and other analyses such as output multipliers. These tables show separately the consumption of domestically produced and imported goods and services, providing a theoretical framework for further structural analysis of the economy, the composition and the effect of changes in final demand on the economy.

## 7 . Price and volume measures

Whilst many of the transactions and concepts mentioned in previous chapters are estimated in cash terms, for some of these (particularly gross domestic product (GDP) and its components) it is often more helpful to look at the movements in the data after removing the effects of inflation, as price movements can mask the underlying changes in the volumes produced or consumed. This section introduces some of the main terminology used, more detailed descriptions of price and volume measures are given in the references in Chapter 15.

### Current prices (CP)

Current price series (also known as nominal, cash, or value series) are expressed in terms of the prices of the time period being estimated. In other words, they describe the actual price charged or paid for the goods or services at time of production or consumption.

### Constant prices (KP)

Constant price series have the effects of inflation removed by fixing the prices of goods and services in one period (the base year), so that only the volumes change. In practice, the most common method for doing this is to divide the CP series through by an appropriate price index. The base year would normally be updated every five years or so to ensure that the product and industry mix of the economy is accurately represented. The UK National Accounts published real terms series on this basis until 2003 when, in line with international regulation, they were replaced by annual chained volume measures.

## Chained volume measures (CVM)

Chained volume measures (also known as real terms) are an alternative set of volume measures to constant price series. As with KP, CVMs are adjusted for the effect of inflation but the base year is updated annually, and the volume change measures are linked together in a chain of short series (known as chain-linking) to give a full real terms time series.

CVMs are more responsive to major structural changes in the economy and, given the fact that the industry and product mixes of the economy are changing more rapidly now than in the past, they provide a more accurate picture of change in the economy than KP series rebased every five years. More detail of [chain-linking used in the national accounts](#) is available.

All expenditure components of GDP are published on both CP and CVM bases; all output components are published on a CVM basis (low level annual and quarterly estimates of output gross value added (GVA) are also available on a CP basis).

Income components are only published in current price terms, as there is no meaningful means of producing gross operating surplus on a real terms basis. This is because, whereas for most transactions (for example, purchases from a shop), there is a price element and a quantity element, this is not true in the case of profits for which there are no price or volume components. Within the sector accounts, the only data series published in real terms is real household disposable income (RHDI); everything else is in nominal terms.

## 8 . Balance of payments

The balance of payments summarises the economic transactions of the UK with the rest of the world. It is closely linked to and consistent with the rest of the world sector account, although viewed from the opposite perspective (the UK's side rather than the rest of the world's side). It is broken into four main parts: the current, capital and financial accounts and the international investment position.

### Current account

The current account includes trade in goods and services with the rest of the world, employment income paid to cross-border workers, income from investments abroad (such as dividends from shares in overseas corporations, repatriated profits from subsidiaries to foreign parent companies, and interest payments on loans and deposits abroad) and current transfers. There is also a published breakdown of payments to and receipts from the institutions of the EU. The best-known statistic in this area is the current account balance.

### Capital account

The capital account deals mainly in capital transfers to and from the rest of the world. The capital account balance is less commonly discussed than the current account balance.

### Financial account

The financial account records transactions that involve the change of ownership of financial assets and liabilities between UK residents and non-residents.

The financial account presents the net acquisition of financial assets, net incurrence of financial liabilities and net transactions. The overall balance on the financial account is called the net lending/net borrowing. Net lending means that an economy supplies funds to the rest of the world while net borrowing is the opposite.

The transactions are classified according to the instrument and functional categories:

- direct investment – where an investor holds at least 10% of the voting rights
- portfolio investment – equities (less than 10% of voting rights) and debt securities
- other investment – mainly deposits and loans
- financial derivatives
- reserve assets

## International investment position (IIP)

The IIP brings together the available estimates of the levels of identified UK external assets (foreign assets owned by UK residents) and identified UK external liabilities (UK assets owned by foreign residents) at the end of each calendar period. The difference between an economy's external financial assets and liabilities is the economy's net IIP. This can be positive (when an economy holds more assets than liabilities) or negative (when an economy holds more liabilities than assets). The IIP is the equivalent of the financial balance sheet in the sector accounts.

## 9 . Monthly publications

The monthly publications, often described as the short-term indicators (although this term can also be applied to quarterly data) are a suite of rapid estimates of important parts of the economy, where large amounts of source data are available through monthly surveys.

### Retail Sales Index (RSI)

The [RSI](#) is published less than three weeks after the end of the month to which it refers. The RSI estimates the total volume and value of retail sales in Great Britain. It breaks down the sales by type of store (and non-store retailing) and details internet sales.

### Public sector finances (PSF)

The [PSF](#) presents the relationship between UK public sector income and expenditure and how this relationship leads to changes in borrowing and debt. It is published less than four weeks after the end of the period to which it refers.

### UK trade

Approximately six weeks after the end of the month, data on [UK trade](#) are published. The publication gives a breakdown of trade with EU member states and other countries, as well as the commodities being exported and imported. A country-by-country breakdown with some of the UK's main trading partners is also available. Provisional aggregate data for trade in services are also included.

### Index of Production (IoP)

Also published approximately six weeks after the end of the month, the [IoP](#) details the output of the production industries (mining and quarrying, manufacturing, electricity and gas, and water and waste) broken down into their main components.

### Index of Services (IoS)

Published approximately six weeks after the end of the month, the [IoS](#) is the direct equivalent of the IoP for the much larger services sector. It is broken down into 14 industrial sectors.

## Output in the construction industry

Published approximately six weeks after the end of the month, [Output in the construction industry](#) breaks down the activity of the construction industry by public and private sector, and by type of activity (housing, non-housing, infrastructure, repairs and maintenance). Additionally, it includes quarterly data on new orders in the construction industry every third month.

## Monthly GDP

With its first release in July 2018, the Office for National Statistics (ONS) produces estimates of [monthly GDP](#) on a rolling monthly and three-monthly basis, with estimates published around six weeks after the end of the month.

Monthly GDP uses solely the production approach to measuring GDP using output data, which includes output in the services, goods, construction and agriculture industry.

There are no expenditure or income data available for publishing at this stage. Monthly GDP is a replacement for the previous "Preliminary estimate of quarterly GDP", which was published three and half weeks after the quarter.

## Faster economic indicators

The [Faster indicators of UK economic activity project](#) aims to deliver new, [faster indicators of economic activity](#) constructed from innovative data sources. These indicators are available up to one month in advance of official estimates of gross domestic product (GDP).

The release includes indicators constructed from three datasets: HM Revenue and Customs (HMRC) Value Added Tax (VAT) returns, Shipping indicators from Automated Identification Systems (AIS) and Road traffic data from Highways England's TRIS dataset.

## 10 . Quarterly publications

Quarterly publications provide a much more detailed picture of the economy than the monthly indicators, covering all of gross domestic product (GDP), sector accounts, business investment, balance of payments, consumer trends, and profitability of UK companies.

### First quarterly estimate of GDP

Published approximately seven and a half weeks after the end of the quarter, the [first quarterly estimate](#) includes detailed GDP output data along with aggregated expenditure and income data. Usually in this release only the latest quarter is revised; with the exception of the fourth quarter release (February), when all estimates for all four quarters of the latest calendar year can be revised.

### Quarterly national accounts (QNA)

The [QNA](#) includes the second estimate of quarterly GDP and is published approximately 90 days after the end of the period. It contains significantly increased detail on all three approaches to measuring GDP. Revisions are usually permitted as far back as the first quarter of the previous calendar year. For example, the December 2019 QNA publication for Quarter 3 2019 includes revisions as far back as the first quarter of 2018.

### Business investment

Published alongside the QNA, [Business investment](#) includes estimates of gross fixed capital formation (GFCF), and its component business investment. Business investment includes investment in transport, information and communication technology (ICT) and other machinery and equipment, other buildings and structures, and intellectual property products. GFCF also includes these assets but, unlike business investment, also covers expenditure on dwellings, costs associated with the transfer of ownership of non-produced assets, and investment by local and central government. The Business investment release also includes other breakdowns of GFCF by assets and institutional sector. It follows the same revisions policy as the QNA.



## Balance of payments (BoP)

Published at the same time as the QNA, [BoP](#) includes detail on the UK's current, capital and financial accounts with the rest of the world, as well as transactions with the EU and the international investment position. It follows the same revisions policy as the QNA.

## Quarterly sector accounts (QSA)

Published at the same time as the QNA and BoP, [QSA](#) includes detail on the UK's institutional sectors' main economic indicators such as net lending and borrowing, households' saving ratio and real households' disposable income. It follows the same revisions policy as the QNA.

## UK Economic Accounts (UKEA)

The largest quarterly national accounts publication, [UKEA](#) is released simultaneously with QNA, QSA and BoP and contains much of the information in both of these releases, as well as significant amounts of data not elsewhere available. This extra content includes non- seasonally adjusted components of GDP, detailed quarterly sector accounts and detailed quarterly balance of payments data.

## Consumer trends (CT)

Also published at the same time as QNA, QSA, BoP and UKEA, [CT](#) contains very detailed analyses of household final consumption expenditure by product, consistent with the 12 broad product groupings available in the QNA. It follows the same revisions policy as the QNA.

## Profitability of UK companies

Available approximately three weeks after the QNA, the [profitability release](#) contains data on rates of return for UK corporations broken down by industry and component. The profitability of UK continental shelf companies is separately identified. It follows the same revisions policy as the QNA.

# 11 . Annual publications – the Blue Book and Pink Book

The Blue and Pink Books are the flagship annual publications for, respectively, the UK National Accounts and the UK Balance of Payments. They are usually published in July or October and include data consistent with the Quarterly national accounts (QNA) and Balance of payments (BoP) statistical bulletins from the previous month.

The [Blue Book](#) (BB) publication includes supply and use tables for all but the most recent year, annual versions of the main national accounts aggregates in the UK Economic Accounts (UKEA) and more detail, which is only available annually.

The [Pink Book](#) (PB) publication includes more detailed data on the balance of payments data available in UKEA, as well as detailed data only available annually. In particular, there are more detailed geographic breakdowns of the current account and international investment position.

The annual BB and PB process also provides the opportunity for major methodological or conceptual changes to be introduced. These could include new accounting frameworks (such as the introduction of European System of Accounts: ESA 2010 and Balance of Payments and International Investment Position Manual: BPM6 in BB and PB 2014); new industrial and product classifications (as in BB 2011 for Standard Industrial Classification: SIC 2007 and UK trade in goods by classification of product by activity: CPA08); major sectoral reclassifications (for example, the reclassification of Network Rail in BB 2015), or improvements to statistical methodology (such as the introduction of annual chain-linking in BB 2003). Such changes are usually announced in advance of the publications in [articles on the ONS website](#).

## 12 . Regional accounts

The regional accounts are versions of the national accounts covering smaller geographic areas. In practice only a subset of the national accounts is produced for regions, as some transactions, particularly financial transactions, are conceptually meaningless on a sub national basis. Other transactions, such as imports and exports, are very difficult to measure between regions, so these are also excluded.

The regional breakdown used is based on the European system known as NUTS ([Nomenclature of Units for Territorial Statistics](#)). This gives a relatively consistent population- based breakdown of the 28 member states of the EU for comparative and policy purposes.

The NUTS classification has several levels, with NUTS 1 comprising the largest areas and NUTS 2, NUTS 3 and so on, breaking these areas down into ever smaller sub-divisions.

In the UK we produce statistics for NUTS 1, NUTS 2 and NUTS 3-level areas. NUTS 1 comprises Wales, Scotland, Northern Ireland and the nine former Government Office Regions of England. At NUTS 2 level, these are broken down further into 41 sub-regions (although Northern Ireland is not broken down further at this level and thus appears in both levels of the classification). These sub-regions are then split into 179 NUTS 3 local areas (again there are three NUTS 2 sub-regions that are not broken down further at NUTS 3), mostly corresponding to single counties and unitary authority areas.

In recent years we have expanded our coverage of geographic areas in response to growing user demand fuelled by increased devolution of powers from central to local government. We now produce statistics for the 382 local authority districts (including London boroughs, Scottish council areas, metropolitan districts and so on) and from these building blocks we also construct estimates for combined authorities, city regions, growth deal areas, local enterprise partnerships and other economic regions of interest to users.

Where industry-specific statistics are produced, a different level of industry detail is provided at each geographic level, because of the need to combine industries that would be disclosive if they were to be published (that is, where there are three or fewer companies operating in the same area). At the NUTS 1 level we publish 81 industries. This reduces to 72 industries at the NUTS 2 level, 48 industries at the NUTS 3 level and 34 industries at the local authority level.

The NUTS classification also includes a category called Extra-Regio, which is for activity that cannot be assigned to a specific region. For the UK the Extra-Regio category covers activities carried out on the continental shelf (offshore oil and gas extraction), activities of UK embassies in foreign countries, and UK armed forces posted overseas.

There are currently three annual publications. In December we publish nominal and real gross domestic product (GDP) and gross value added (GVA) by industry, calculated using the income approach and the production approach, and [balanced \(PDF, 267KB\)](#) to provide a single estimate for each region. These statistics are used in the compilation of regional and sub-regional productivity estimates, usually published in February. They also provide a benchmark for the quarterly country and regional GDP estimates to keep them on trend over time.

In the spring we publish a partial household account comprising [gross disposable household income](#) (GDHI). This is followed during the summer by an experimental measure of [household final consumption expenditure](#) (HFCE), which completes the household account and provides estimates of the households' saving ratio. All data are constrained to ensure that the regional estimates sum to the corresponding national figures published in the latest UK National Accounts, the Blue Book.

## 13 . Satellite accounts

Broadly speaking, there are two types of satellite accounts. One type extends the production boundary of the national accounts framework and the other rearranges central classifications within the national accounts.

In the UK, the satellite accounts currently produced are the environmental accounts; the tourism satellite account and the household satellite account.

## Environmental accounts

The [environmental accounts](#) show how the environment contributes to the economy (for example, through the extraction of raw materials), the impacts that the economy has on the environment (for example, energy consumption and air emissions), and how society responds to environmental issues (for example, through taxation and expenditure on environmental protection).

They are compiled in accordance with the [System of Environmental-Economic Accounting](#) (SEEA), which closely follows the [UN System of National Accounts](#) (SNA). This means that they are comparable with economic indicators such as gross domestic product (GDP).

Environmental accounts are used nationally and internationally, primarily by governments, development organisations and researchers, to inform sustainable development policy, to evaluate the environmental impacts of different sectors of the economy, and to model impacts of fiscal or monetary measures.

The environmental accounts are divided into natural capital accounts (estimating the physical and monetary flows from a broad range of services delivered by the natural world), physical flow accounts (atmospheric emissions, material flows, water use), and monetary accounts (environmental taxes, environmental protection expenditure and environmental goods and services). The accounts are published annually and are also included in the Blue Book.

## Tourism satellite account (TSA)

The [TSA](#) is an annual publication that provides an overview of the supply and use of goods and services for the various types of tourism and reconciles the supply of these products with the demand for them, or consumption, by tourists. This reconciliation is crucial in both national accounts generally, and the TSA. It ensures there is no double-counting of activity, and headline indicators, such as value added and employment are then comparable with other industries.

The TSA identifies expenditure on tourism characteristic activities by UK residents and by foreign visitors separately. The expenditure by domestic tourists is also broken down by day-trippers and those on overnight stays.

## Household satellite account (HHSA)

The purpose of the [HHSA](#) is to account for economic production, which is otherwise omitted from the national accounts. The HHSA extends the production boundary of the core national accounts framework to include the non-market productive services such as unpaid care, voluntary work and anything else that people carry out for themselves but could otherwise have contracted out to a market service provider.

Beyond the more traditional forms of unpaid work is the more recent unpaid creation of online content such as blog posts, website content, reviews or instructional videos. This content may also be classed as household unpaid production as it is produced unpaid, then made public for others to consume, often displacing market alternatives and altering the core production boundary of the national accounts. This unpaid production then shifts the point where the market adds value over household producers.

Unpaid household production is also linked with well-being. For example, the vulnerable members of society (children and the elderly) are often dependent on the unpaid production of family, friends and volunteers for their welfare. For reasons such as this, international debate about the suitability of gross domestic product (GDP) as a measure of well-being has empowered the development of complementary measures, such as the HHSA, that account for aspects of the economy not readily observable in monetary terms.

Where economic welfare is a more relevant target for policy it often does not make sense to exclude productive activity just because it has not been paid for. An example of why this makes little sense can be taken from household cleaning. If household members cleaned their house themselves, this service would be unpaid and therefore excluded from GDP. However, if the household members paid somebody else to clean their house, this service would be included in GDP as it involves a market transaction. Therefore, an increase in GDP may not reflect the level of cleaning as it is an activity that occurs outside of the market.

The seven functions included within the UK HHSA are:

- housing and accommodation, and associated housing services
- meals and nutrition
- clothing and laundry services
- adult care
- childcare
- transport
- volunteer work

## 14 . Abbreviations

BB - Blue Book

BoP - Balance of Payments

BPM - Balance of Payments and International Investment Position Manual

CoE - Compensation of employees

CP - Current prices

CPA - Classification of product by activity

CT - Consumer Trends

CVM - Chained volume measures

ESA - European System of Accounts

ESCC - Economic Statistics Classification Committee

FinCO - Financial corporations

GCF - Gross capital formation

GDHI - Gross disposable household income

GDP - Gross domestic product

GFCF - Gross fixed capital formation

GG - General government

GNI - Gross national income

GNP - Gross national product

GOS - Gross operating surplus

GVA - Gross value added

HH - Households

HHSA - Household satellite account

ICPF - Insurance corporations and pension funds IIP International investment position

I-O - Input-output

IoP - Index of Production

IoS - Index of Services

KP - Constant prices

NACE - Nomenclature statistique des Activités économiques dans la Communauté Européene

NFC - Non-financial corporation

NPISH - Non-profit institution serving households

NUTS - Nomenclature of Units for Territorial Statistics

MFI - Monetary financial institution

PB - Pink Book

PSF - Public Sector Finances

QNA - Quarterly National Accounts

RHDI - Real household disposable income

RoW - Rest of the world

RSI - Retail Sales Index

SEEA - System of Environmental-Economic Accounting

SIC - Standard Industrial Classification

SNA - System of National Accounts

SUT - Supply and use table

TSA - Tourism satellite account

UKEA - United Kingdom Economic Accounts

## 15 . Glossary of National Accounts CDIDs

### GDP

Current Price (CP) - YBHA

Chain Volume Measure (CVM) - ABMI

Implied GDP Deflator - YBGB

### Output (CVM)

Agriculture - L2KL

Manufacturing - L2KX

Production - L2KQ

Construction - L2N8

Services - L2NC

GVA - CGCE

### Expenditure (CVM)

Households - ABJR

NPISH - HAYO

Government - NMRY

Gross Fixed Capital Formation - NPQT

Changes in Inventories - CAFU

Exports - IKBK

Imports - IKBL

### Expenditure (CP)

Households - ABJQ

NPISH - HAYE

Government - NMRP

Gross Fixed Capital Formation - NPQS

Changes in Inventories - CAEX

Exports - IKBH

Imports - IKBI

## **Income (CP)**

Wages & Salaries - DTWL  
Compensation of Employees - DTWM  
Private Non-Financial Corporations - CAER  
Financial Corporations - NHCZ  
Public Corporations - CAEQ  
Gross Operating Surplus - CGBZ  
Taxes on Products & Production Less Subsidies - CMVL

## **Sector and financial accounts**

### **Sectoral net lending (CP)**

Households - AA7T  
NPISH - AAA3  
Private Non-Financial Corporations - RQBV  
Public Non-Financial Corporations - RQBN  
Financial Corporations - RPYN  
Central Government - RPYH  
Local Government - RQAJ  
Rest of the World - RQCH

### **Households**

Households' Saving Ratio (CP) - DGD8  
Gross Household Disposable Income (CP) - RPHA  
Household Debt to Income (percent) - CVZI<sup>1</sup>

### **PNFCs**

PNFC Self-Investment Ratio - CW7V<sup>2</sup>

### **Financial balance sheet (CP)**

Households - NYOH  
NPISH - NYOO  
Private Non-Financial Corporations - NYOT  
Public Non-Financial Corporations - NYOP  
Financial Corporations - NYOE  
Central Government - NZDZ  
Local Government - NYOJ  
Rest of the World - NLFK

### **Public Sector Finances**

Public Sector Net Borrowing - J5II<sup>3</sup>  
Current Budget Deficit - JW2T  
Net Investment - JW2Z  
Public Sector Net Debt - HF6W  
Public Sector Net Debt as percentage of GDP - HF6X

## **Balance of payments**

### **Current account (CP)**

Trade - IKBJ  
Primary Income - HBOJ  
Secondary Income - IKBP  
Current Account - HBOP

## **Financial account (CP)**

UK Investment to RoW - HBNR  
Investment in the UK - HBNS  
Net Transactions - HBNT

## **Net international investment position (CP)**

Foreign Assets - HBQA  
Foreign Liabilities - HBQB  
Net International Investment Position - HBQC

## **Notes for: Glossary of National Accounts CDID's**

1. Household debt (NIWK) divided by the four-quarter rolling sum of gross disposable income (HABN).
2. PNFC gross saving (RPKZ) divided by their gross fixed capital formation (ROAW).
3. Excluding public sector banks.

## **16 . Further references**



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