

Compendium

# UK National Accounts, The Blue Book: 2020

National accounts statistics including national and sector accounts, industrial analyses and environmental accounts.

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# An introduction to the UK National Accounts

Chapter summary and general overview of the national and sector accounts.

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# 1 . Overview of the Blue Book

The Blue Book was first published in August 1952 and presents a full set of economic accounts (national accounts) for the UK. These accounts are compiled by the Office for National Statistics (ONS). They record and describe economic activity in the UK and are used to support the formulation and monitoring of economic and social policies.

The UK National Accounts: The Blue Book, 2020 is available as a PDF by request only. To request a copy, please email [blue.book.coordination@ons.gov.uk](mailto:blue.book.coordination@ons.gov.uk).

## Chapter 1

[Chapter 1](#) of the Blue Book provides a summary of the UK National Accounts, including explanations and tables covering the main national and domestic aggregates, for example:

- gross domestic product (GDP) at current market prices and chained volume measures
- GDP deflator
- gross value added (GVA) at basic prices
- gross national income (GNI)
- gross national disposable income (GNDI)
- population estimates
- employment estimates
- GDP per head
- the UK Summary Accounts (the goods and services account, production accounts, distribution and use of income accounts, and accumulation accounts)

Chapter 1 also includes details of revisions to data since the Blue Book 2019.

## Chapter 2

[Chapter 2](#) includes:

- input–output supply and use tables
- analyses of GVA at current market prices and chained volume measures
- capital formation
- workforce jobs by industry

## Chapters 3 to 7

Chapters [3](#), [4](#), [5](#), [6](#) and [7](#) provide:

- a description of the institutional sectors
- the sequence of the accounts and balance sheets
- an explanation of the statistical adjustment items needed to reconcile the accounts
- the fullest available set of accounts providing transactions by sectors and appropriate subsectors of the economy (including the rest of the world)

## Chapters 8 to 11

Chapters [8](#), [9](#), [10](#) and [11](#) cover additional analysis and include:

- supplementary tables for gross fixed capital formation (GFCF), national balance sheet and public sector
- statistics for EU purposes

## Chapter 12

[Chapter 12](#) covers the UK Environmental Accounts.

## Chapter 13

[Chapter 13](#) covers flow of funds.

## 2 . Overview of the UK National Accounts and sector accounts

In the UK, priority is given to the production of a single gross domestic product (GDP) estimate using income, production and expenditure data. Further analysis is available on:

- income analysis at current prices
- expenditure analysis at both current prices and chained volume measures
- value added analysis compiled on a quarterly basis in chained volume measures only

Income, capital and financial accounts are produced for non-financial corporations, financial corporations, general government, households and non-profit institutions serving households (NPISH).

The accounts are fully integrated but with a statistical discrepancy (known as the statistical adjustment), shown for each sector account. This reflects the difference between the sector net borrowing or lending from the capital account and the identified borrowing or lending in the financial accounts, which should theoretically be equal.

Financial transactions and balance sheets are produced for the rest of the world sector in respect of its dealings with the UK.

## **An introduction to sector accounts**

The sector accounts summarise the transactions of particular groups of institutions within the economy, showing how the income from production is distributed and redistributed and how savings are used to add wealth through investment in physical or financial assets.

### **Institutional sectors**

The accounting framework identifies two kinds of institutions: consuming units (mainly households) and production units (mainly corporations, non-profit institutions or government).

Units can own goods and assets, incur liabilities and engage in economic activities and transactions with other units. All units are classified into one of five sectors:

- non-financial corporations
- financial corporations
- general government
- households and NPISH
- rest of the world

## **Types of transactions**

There are three main types of transactions.

### **Transactions in products**

Transactions in products are related to goods and services. They include output, intermediate and final consumption, gross capital formation, and exports and imports.

### **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 or units
- insurance, pension and standardised guarantee schemes
- financial derivatives and employee stock options
- other accounts receivable or payable

## 3 . Summary of changes

Several important methodological improvements have been incorporated into Blue Book 2020, impacting on current price and volume estimates of gross domestic product (GDP) as well as the sector and financial accounts and the balance of payments. The main improvements are in the areas of professional fees, financial intermediation services indirectly measured (FISIM), the chain-linking of business prices and improvements to trade data.

Further information about these improvements, and their associated data impacts, is available in [Impact of Blue Book 2020 changes on current price and volume estimates and GDP](#) and [Detailed assessment of changes to sector and financial accounts, balance of payments and quarterly GDP: 1997 to 2018](#).

### Professional fees in gross fixed capital formation

Gross fixed capital formation (GFCF) refers to the acquisition less disposals of fixed assets and includes the costs of ownership transfer of those assets. In Blue Book 2020, we have reviewed how we estimate the professional fees element of transfer costs, particularly those that relate to the purchase and sale of residential and non-residential buildings.

#### Residential buildings

We previously estimated the professional fees associated with residential buildings using a fixed proportion of the total expenditure on these buildings, taking the average property price in a given year and the number of transactions to estimate the total expenditure, of which we took a fixed proportion as referring to professional fees. In Blue Book 2020, we have incorporated direct estimates of these professional fees to help create a proportion that changes over time. This reflects information that is available from other government sources, price comparison websites and industry surveys to capture the expenditure on each component of residential professional fees. These include those fees for estate agents, conveyancing, home surveys, local authority searches and energy performance certificates (EPCs). This proportion will then be applied to the total expenditure on residential properties to estimate the total amount spent on professional fees.

## Non-residential buildings

There are numerous estimation challenges for professional fees on non-residential property as there is no complete information available on these property transactions or average property prices. We only currently have an estimate for “land fees”. As part of this year’s Blue Book, we have taken on improved estimates of these professional fees, with which we are able to calculate a proportion for non-residential properties. This covers a similar scope of transfer costs for non-residential properties – for example, estate agents and conveyancing. Data are only available for 2018, so we have produced a backcast series based on information for residential buildings.

## Financial intermediation services indirectly measured

Financial intermediaries explicitly charge commissions and fees to their customers, but there is also an implicit charge on these financial services, which reflects the interest margin. Financial intermediaries generally pay lower rates of interest to those that lend them money and charge higher rates of interest to those who borrow from them. Financial intermediation services indirectly measured (FISIM) is then calculated as the difference between these effective rates of interest payable and receivable and a “reference” rate of interest, which is a proxy of the pure cost of borrowing funds.

As part of Blue Book 2020, we have improved our estimates of FISIM in relation to other financial intermediaries (OFIs), a subsector of the financial sector. This incorporates updated estimates of loans to consumers collected by the Financial Services Survey (FSS) and loans secured on dwellings collected by the Bank of England survey to specialist mortgage institutions. We have also replaced the inter-bank reference rate that is used as a proxy for the cost of borrowing by OFIs. A new OFI-specific reference rate has been used, leading to improved estimates of margins. This has revised FISIM estimates produced by OFIs, including mortgage lenders and other credit grantors that charge an implicit margin on loans. It has also led to revised estimates of the consumption of FISIM by households.

## Chain-linking

Chain-linked business prices have been implemented in Blue Book 2020 in line with international best practice and to improve consistency with other price indices such as the Consumer Prices Index (CPI). This was previously announced as part of a [consultation](#) and is a significant improvement to the weighting and linking of business inflation statistics, which include Producer Price Index (PPI), Export Producer Price Index (EPI), Import Producer Price Index (IPI) and Services Producer Price Index (SPPI). The implementation of chain-linking is recommended by [Eurostat \(PDF, 2.21MB\)](#), to ensure international comparability, as the weighting structures are updated more frequently. As such, these are more representative of the structure of the UK economy and any changes that take place over time. We also reflect some [additional changes](#) to our methods to support the implementation of chain-linking.

GDP is initially measured in current prices, with estimates valued in the prices of the period when the activity occurred. It is then deflated to remove the effects of price changes to give volume GDP, specifically using the expenditure approach to set the annual level of volume GDP. The implementation of chain-linked business prices has therefore had an impact on how we produce volume estimates of GDP, given how these improvements will impact upon our range of expenditure deflators. There is also an impact upon our current price estimates of GDP, as there are instances in which we use price estimates to reflate our volume estimates to produce our current price estimates. For example, within our inventories’ estimates, current price acquisitions and disposals of stock are calculated using volume estimates and deflators.

## Trade including disbursements

We have continued to develop UK trade statistics as set out in the trade development plan, and we have introduced further improvements as part of the Blue Book 2020. This includes new data sources for road freight transport and the addition of cabotage, the transport of goods or passengers between two places in the same country by a transport operator from another country and cross trades to exports of freight services for the first time. For rail freight, we have updated tonnage information for the Eurotunnel and Northern Ireland to Republic of Ireland border along with updated cross-border freight rates. For air freight, data from the Civil Aviation Authority have been added so that existing financial data received from airports and airlines can be grossed up in a more representative way, which will better reflect fluctuations in the industry.

The majority of UK travel is collected via the International Passenger Survey (IPS) via air and seaports around Great Britain and Northern Ireland. However, no form of surveying takes place over the land border between Northern Ireland and the Republic of Ireland; therefore, “pseudo estimates” are currently used to compensate for this. The pseudo estimates have been re-calculated using data from the Northern Ireland Statistics and Research Agency’s (NISRA’s) Northern Ireland Passenger Survey (NIPS) and Continuous Household Survey (CHS) as well as the Central Statistics Office’s (CSO’s) Household Travel Survey (HTS).

In addition to these changes, trade in services has also been revised through the annual reconciliation of the three approaches to GDP: income, output and expenditure, enabling a single estimate of GDP to be determined through the production of supply and use tables.

## Public sector finances alignment

Data published in the UK public sector finances (PSF) are not fully consistent with the core UK National Accounts. The differences between the outputs have existed for many years and are the result of different revisions policies in the UK National Accounts and the PSF, the former being revised less frequently because of the added complexity and integrated nature of the UK National Accounts, which need to balance across all sectors of the economy and not just the public sector.

While ensuring that the PSF reflects the most up-to-date picture of government finances, we regularly compare this with the UK National Accounts and seek to improve alignment where possible. On 30 September 2019, we published analysis that highlights the largest sources of differences between the PSF and national accounts measurement of net borrowing. These tables will be updated on 30 September 2020 to show the differences existing between the quarterly national accounts, published on 30 September 2020, and PSF, published on 25 September 2020. Please also see [Alignment between PSF and national accounts](#).

## Other changes



- Further improvements to the collection of non-monetary gold have been introduced building on previous work to improve its measurement.
- Having identified that our GFCF estimates did not previously cover higher education institutions, so we have benchmarked our GFCF estimates for Standard Industrial Classification (SIC) 85 – Education to those of the Office for National Statistics's (ONS's) Annual Business Survey (ABS).
- An improved sector allocation of data series on Securities Dealers introduced in Blue Book 2017 has been implemented, following a detailed review of survey responses.
- The balance of payments uses data from the quarterly and annual foreign direct investment (FDI) surveys; in the short term, the quarterly survey is used within the balance of payments, before later being revised when the more comprehensive annual survey data become available, known as the FDI benchmark process; this benchmark process is an annual reconciliation between the quarterly and annual surveys used in the production of FDI data.
- In line with usual practice, updated data sources have also been introduced, including pension data changes that replace a mixture of forecasts and imputations from 2016 onwards.

## 4 . The basic accounting framework

The accounting framework provides a systematic and detailed description of the UK economy, including sector accounts and the input–output framework.

All elements required to compile aggregate measures, such as gross domestic product (GDP), gross national income (GNI), saving and the current external balance (the balance of payments) are included.

The economic accounts provide the framework for a system of volume and price indices, to allow chained volume measures of aggregates such as GDP to be produced. In this system, value added, from the production approach, is measured at basic prices (including other taxes less subsidies on production but not on products) rather than at factor cost (which excludes all taxes less subsidies on production).

The whole economy is subdivided into institutional sectors with current price accounts running in sequence from the production account through to the balance sheet.

The accounts for the whole UK economy and its counterpart, the rest of the world, follow a similar structure to the UK sectors, although several of the rest of the world accounts are collapsed into a single account as they can never be complete when viewed from a UK perspective.

## 5 . Table numbering system

The table numbering system is designed to show relationships between the UK, its sectors and the rest of the world. For accounts drawn directly from the European System of Accounts (ESA) 2010, a three-part numbering system is used; the first two digits denote the sector and the third digit denotes the ESA 2010 account. Not all sectors can have all types of account, so the numbering is not necessarily consecutive within each sector's chapter.

The rest of the world's identified components of accounts two to six are given in a single account numbered two. UK whole economy accounts consistent with ESA 2010 are given in Section 1.6 as a time series and in Section 1.7 in a detailed matrix identifying all sectors, the rest of the world and the UK total.

The ESA 2010 code for each series is shown in the left-hand column, using the following prefixes:

- S for the classification of institutional sectors
- P for transactions in products
- D for distributive transactions
- F for transactions in financial assets and liabilities
- K for other changes in assets
- B for balancing items and net worth

Within the financial balance sheets, the following prefixes are used: AF for financial assets and liabilities and AN for non-financial assets and liabilities.

## 6 . The purpose of an account

An account records and displays all flows and stocks for a given aspect of economic life. The sum of resources is equal to the sum of uses, with a balancing item to ensure this equality.

The system of economic accounts allows the build-up of accounts for different areas of the economy, highlighting, for example, production, income and financial transactions.

Accounts may be elaborated and set out for different institutional units or sectors (groups of units).

Usually a balancing item has to be introduced between the total resources and total uses of these units or sectors. When summed across the whole economy, these balancing items constitute significant aggregates.

Table I.1 provides the structure of the accounts and shows how gross domestic product (GDP) estimates are derived as the balancing items.

## 7 . The integrated economic accounts

The integrated economic accounts of the UK provide an overall view of the economy. Table I.1 presents a summary view of the accounts, balancing items and main aggregates and shows how they are expressed. The accounts are grouped into four main categories:

- goods and services accounts
- current accounts
- accumulation accounts
- balance sheets

## 8 . The goods and services account (Account 0)

The integrated economic accounts of the UK provide an overall view of the economy. Table I.1 presents a summary view of the accounts, balancing items and main aggregates and shows how they are expressed. The accounts are grouped into four main categories:

- goods and services accounts
- current accounts
- accumulation accounts
- balance sheets

## 9 . Current accounts: the production and distribution of income accounts

### The production account (Account I)

This account displays transactions involved in the generation of income by the activity of producing goods and services. The balancing item is value added (B.1). For the nation's accounts, the balancing items (the sum of value added for all industries) are, after the addition of taxes less subsidies on products, gross domestic product (GDP) at market prices or net domestic product when measured net of capital consumption. The production accounts are also shown for each industrial sector.

### The distribution and use of income account (Account II)

This account shows the distribution of current income (value added) carried forward from the production account and has saving as its balancing item (B.8). Saving is the difference between income (disposable income) and expenditure (or final consumption).

The distribution of income comprises four sub-accounts:

- primary distribution of income account
- secondary distribution of income
- redistribution of income in kind
- use of income account

### The allocation of primary income account (Account II.2.1)

Primary incomes are accrued to institutional units because of their involvement in production or their ownership of productive assets. They include property income (from lending or renting assets) and taxes on production and imports. They exclude taxes on income or wealth, social contributions or benefits, and other current transfers.

The primary distribution of income shows the way these are distributed among institutional units and sectors. The primary distribution account is divided into two sub-accounts: the generation and the allocation of primary incomes.

## **The secondary distribution of income account (Account II.2)**

This account describes how the balance of primary income for each institutional sector is allocated by redistribution, through transfers such as taxes on income, wealth and so on, social contributions and benefits, and other current transfers. It excludes social transfers in kind.

The balancing item of this account is gross disposable income (B.6g), which reflects current transactions and explicitly excludes capital transfers, real holding gains and losses, and the consequences of events such as natural disasters.

## **The redistribution of income in kind account (Account II.3)**

This account shows how gross disposable income of households and non-profit institutions serving households (NPISH) and government are transformed by the receipt and payment of transfers in kind. The balancing item for this account is adjusted gross disposable income (B.7g).

## **The use of income account (Account II.4)**

The use of income account shows how disposable income is divided between final consumption expenditure and saving. In addition, the use of income account includes, for households and for pensions, an adjustment item (D.8: adjustment for the change in pension entitlements), which relates to the way that transactions between households and pension funds are recorded.

## **The accumulation accounts (Account III)**

These accounts cover all changes in assets, liabilities and net worth. The accounts are structured into two groups. The first group covers transactions that would correspond to all changes in assets, liabilities and net worth that result from transactions and are known as the capital account and the financial account. They are distinguished to show the balancing item net lending or borrowing.

The second group relates to all changes in assets, liabilities and net worth owing to other factors, for example, the discovery or re-evaluation of mineral reserves or the reclassification of a body from one sector to another.

## **The capital account (Account III.1)**

The capital account is presented in two parts.

The first part shows that saving (B.8g), the balance between national disposable income and final consumption expenditure from the production and distribution and use of income accounts, is reduced or increased by the balance of capital transfers (D.9) 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 (P. 51g), changes in inventories (P.52), acquisitions less disposals of valuables (P.53) and acquisitions less disposals of non-financial non-produced assets (NP). The balance on the capital account is known as net lending or borrowing. Conceptually, net lending or borrowing for all the domestic sectors represents net lending or borrowing to the rest of the world sector.

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. The value of net lending or net borrowing is the same irrespective of whether the accounts are shown before or after deducting consumption of fixed capital (P.51c), provided a consistent approach is adopted throughout.

## **The financial account (Account III.2)**

This account shows how net lending and borrowing are achieved by transactions in financial instruments. The net acquisitions of financial assets are shown separately from the net incurrence of liabilities. The balancing item is net lending or borrowing.

In principle, net lending or borrowing should be identical for both the capital account and the financial account. In practice, however, because of errors and omissions this identity is very difficult to achieve for the sectors and the economy as a whole. The difference is known as a statistical adjustment.

## **The other changes in assets account (Account III.3)**

The other changes in assets account is concerned with the recording of changes in the values of assets and liabilities, and thus of the changes in net worth, between opening and closing balance sheets that result from flows that are not transactions, referred to as “other flows”.

This account is further subdivided into: other changes in the volume of assets account, III.3.1, and revaluation account, III.3.2.

The other changes in the volume of assets account records the changes in assets, liabilities and net worth between opening and closing balance sheets that are neither because of transactions between institutional units, as recorded in the capital and financial accounts, nor holding gains and losses as recorded in the revaluation account. Examples include reclassifications and write-offs. The balancing item for this account is other changes in volume (B.102).

The revaluation account records holding gains or losses accruing during the accounting period to the owners of financial and non-financial assets and liabilities. The balancing item for this account is nominal holding gains and losses (B.103).

## **The balance sheet (Account IV)**

The second group of accumulation accounts complete the sequence of accounts. These include the balance sheets and a reconciliation of the changes that have brought about the change in net worth between the beginning and end of the accounting period.

The opening and closing balance sheets show how total holdings of assets by the UK or its sectors match total liabilities and net worth (the balancing item). Various types of assets and liabilities can be shown in detailed presentations of the balance sheets. Changes between the opening and closing balance sheets for each group of assets and liabilities result from transactions and other flows recorded in the accumulation accounts or reclassifications and revaluations.

Net worth equals changes in assets less changes in liabilities.

## **The rest of the world account (Account V)**

This account covers the transactions between resident and non-resident institutional units and the related stocks of assets and liabilities. Written from the point of view of the rest of the world, its role is similar to an institutional sector.

## **10 . Satellite accounts**

Satellite accounts cover areas or activities not included in the central framework because they either add additional detail to an already complex system or conflict with the conceptual framework. The UK Environmental Accounts are satellite accounts linking environmental and economic data to show the interactions between the economy and the environment.

See Chapter 12: UK Environmental Accounts for further information.

## **11 . The limits of the national economy: economic territory, residence and centre of economic interest**

### **Economic territory and residence of economic interest**

The economy of the UK is made up of institutional units that have a centre of economic interest in the UK economic territory. These units are known as resident units, and it is their transactions that are recorded in the UK National Accounts.

### **UK economic territory**

The UK economic territory includes:

- Great Britain and Northern Ireland (the geographic territory administered by the UK government within which persons, goods, services and capital move freely)
- any free zones, including bonded warehouses and factories under UK customs control
- the national airspace, UK territorial waters and the UK sector of the continental shelf
- The UK economic territory excludes Crown dependencies (Channel Islands and the Isle of Man)

### **ESA 2010 economic territory**

Within the European System of Accounts (ESA) 2010, the definition of economic territory also includes territorial enclaves in the rest of the world (embassies, military bases, scientific stations, information or immigration offices and aid agencies used by the British Government with the formal political agreement of the governments in which these units are located). However, it excludes any extra territorial enclaves (that is, parts of the UK geographic territory like embassies and US military bases used by general government agencies of other countries, by the institutions of the EU, or by international organisations under treaties or by agreement)

## Centre of economic interest

When an institutional unit engages and intends to continue engaging (normally for one year or more) in economic activities on a significant scale from a location (dwelling or place of production) within the UK economic territory, it is defined as having a centre of economic interest and is a resident of the UK.

If a unit conducts transactions on the economic territory of several countries, it has a centre of economic interest in each of them.

Ownership of land and structures in the UK is enough to qualify the owner to have a centre of interest in the UK.

## Residency

Resident units are:

- households
- legal and social entities such as corporations and quasi corporations, for example, branches of foreign investors
- non-profit institutions
- government
- so-called “notional residents”

Travellers, cross-border and seasonal workers, crews of ships and aircraft, and students studying overseas are all residents of their home countries and remain members of their households.

When an individual leaves the UK for one year or more (excluding students and patients receiving medical treatment), they cease being a member of a resident household and become a non-resident, even on home visits.

## 12 . Production included in economic activity

Gross domestic product (GDP) is defined as the sum of all economic activity taking place in UK territory. In practice, a “production boundary” is defined, inside which are all the economic activities taken to contribute to economic performance. To decide whether to include a particular activity within the production boundary, the following factors are considered:

- Does the activity produce a useful output?
- Is the product or activity marketable and does it have a market value?
- If the product does not have a meaningful market value, can one be assigned (imputed)?
- Would exclusion (or inclusion) of the product of the activity make comparisons between countries over time more meaningful?

The following are recorded within the European System of Accounts (ESA) 2010 production boundary:

- production of individual and collective services by government
- own-account production of housing services by owner-occupiers
- production of goods for own final consumption, for example, agricultural products
- own-account construction, including that by households
- production of services by paid domestic staff
- breeding of fish in fish farms
- production forbidden by law, as long as all units involved in the transaction enter into it voluntarily
- production from which the revenues are not declared in full to the fiscal authorities, for example, clandestine production of textiles

The following fall outside the production boundary:

- domestic and personal services produced and consumed within the same household, for example, cleaning, the preparation of meals, or the care of sick or elderly people
- volunteer services that do not lead to the production of goods, for example, caretaking and cleaning without payment
- natural breeding of fish in open seas

## 13 . Prices used to value the products of economic activity

In the UK, a number of different prices may be used to value inputs, outputs and purchases. The prices are different depending on the perception of the bodies engaged in the transaction, that is, the producer and user of a product will usually perceive the value of the product differently, with the result that the output prices received by producers can be distinguished from the prices paid by producers.

### Basic prices

Basic prices are the preferred method of valuing output in the accounts.

They are the amount received by the producer for a unit of goods or services  
minus any taxes payable  
plus  
any subsidy receivable as a consequence of production or sale.

The only taxes included in the price will be taxes on the output process, for example, business rates and Vehicle Excise Duty, which are not specifically levied on the production of a unit of output. Basic prices exclude any transport charges invoiced separately by the producer. When a valuation at basic prices is not feasible, producers' prices may be used.



## Producers' prices

Producers' prices are basic prices  
plus  
those taxes paid per unit of output (other than taxes deductible by the purchaser such as Value Added Tax (VAT), invoiced for output sold)  
minus  
any subsidies received per unit of output.

## Purchasers' or market prices

Purchasers' or market prices are the prices paid by the purchaser and include transport costs, trade margins and taxes (unless the taxes are deductible by the purchaser).

Purchasers' or market prices are producers' prices  
plus  
any non-deductible VAT or similar tax payable by the purchaser  
plus  
transport costs paid separately by the purchaser (not included in the producers' price).

## The rest of the world: national and domestic

Domestic product (or income) includes production (or primary incomes generated and distributed) resulting from all activities taking place "at home" or in the UK domestic territory.

This will include production by any foreign-owned company in the UK but exclude any income earned by UK residents from production taking place outside the domestic territory.

Gross domestic product (GDP)  
equals  
the sum of primary incomes distributed by resident producer prices.

The definition of gross national income (GNI) is GDP plus income received from other countries (notably interest and dividends), less similar payments made to other countries.

GDP  
plus  
net property income equals  
GNI.

This can be introduced by considering the primary incomes distributed by the resident producer units. Primary incomes, generated in the production activity of resident producer units, are distributed mostly to other residents' institutional units.

For example, when a resident producer unit is owned by a foreign company, some of the primary incomes generated by the producer unit are likely to be paid abroad. Similarly, some primary incomes generated in the rest of the world may go to resident units. It is therefore necessary to exclude that part of resident producers' primary income paid abroad, but include the primary incomes generated abroad but paid to resident units.

GDP (or income)  
less  
primary incomes payable to non-resident units  
plus  
primary incomes receivable from the rest of the world  
equals  
GNI.

GNI at market prices  
equals  
the sum of gross primary incomes receivable by resident institutional units or sectors.

National income includes income earned by residents of the national territory, remitted (or deemed to be remitted in the case of direct investment) to the national territory, no matter where the income is earned.

Real GDP (chained volume measures)  
plus  
trading gain  
equals  
real gross domestic income (RGDI).

RGDI  
plus  
real primary incomes receivable from abroad  
less  
real primary incomes payable abroad  
equals  
real GNI.

Real GNI (chained volume measures)  
plus  
real current transfers from abroad  
less  
real current transfers abroad  
equals  
real gross national disposable income (GNDI).

Receivables and transfers of primary incomes, and transfers to and from abroad, are deflated using the gross domestic final expenditure deflator.

## 14 . Gross domestic product: the concept of net and gross

The term gross means that, when measuring domestic production, capital consumption or depreciation has not been allowed for.

Capital goods are different from the materials and fuels used up in the production process because they are not used up in the period of account but are instrumental in allowing that process to take place. However, over time, capital goods wear out or become obsolete and in this sense gross domestic product (GDP) does not give a true picture of value added in the economy. When calculating value added as the difference between output and costs, we should also show that part of the capital goods are used up during the production process (the depreciation of capital assets).

Net concepts are net of this capital depreciation, for example:

GDP  
minus  
consumption of fixed capital  
equals  
net domestic product.

## 15 . Symbols used

In general, the following symbols are used:

.. denotes not available  
– denotes nil or less than £500,000  
£ billion denotes £1,000 million

Compendium

# National accounts at a glance

A summary of recent trends and movements within the UK economy.

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# 1 . Introduction

This section of the UK National Accounts, The Blue Book: 2020 edition provides an examination of recent trends for a range of information contained in a number of the subsequent Blue Book chapters. All UK data referred to in this section are consistent with Blue Book 2020.

## 2 . Gross domestic product and the headline economy

This section provides information on the headline economy, including the latest estimates of UK gross domestic product (GDP), which records how much output was produced in any given year.

The UK economy increased by 1.3% in 2019 in volume terms, the same rate as in the previous year. There has been a slowing of late as 2018 and 2019 are the weakest rates of annual GDP growth in the UK since 2011. In nominal terms, GDP grew 3.4% in 2019, a slight easing from 3.5% in the previous year.

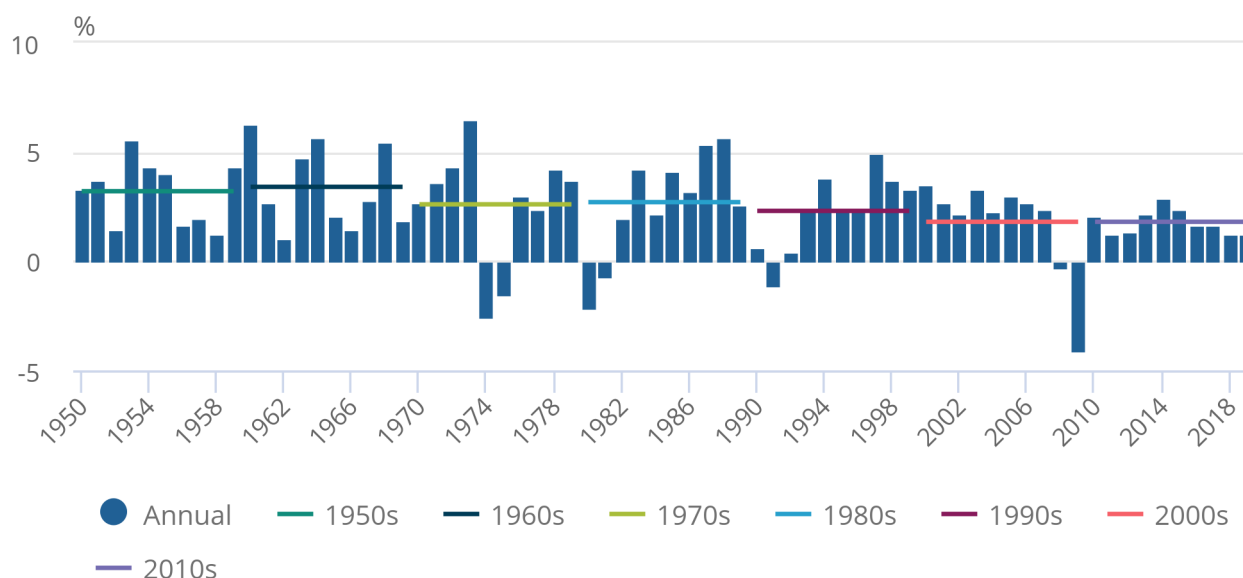
Figure 1.1 shows how the UK economy has evolved over time by looking at annual GDP growth in the UK between 1950 and 2019. The UK's average 10-year growth rate has slowed over the past several decades. In the 1950 to 1959 decade, the average growth rate was 3.2%. In the latest decade from 2010 to 2019, this growth rate had nearly halved to 1.8%. This slowing can also be seen within the latest decade. The average growth rate in the first half of the 2010s was 2.0%, slowing to 1.7% in the second half of the 2010s. Over the last five years, UK GDP growth slowed from 2.4% in 2015 to 1.3% in 2019.

**Figure 1.1: Average UK growth has slowed over the decades**

Real GDP growth, 1950 to 2019, UK

Figure 1.1: Average UK growth has slowed over the decades

Real GDP growth, 1950 to 2019, UK



Source: Office for National Statistics – UK National Accounts

**Notes:**

1. Bars show annual UK growth rate whilst lines refer to the average annual growth rate for that decade.

At the same time, there have been signs of a slowdown in the global economy in recent years. Figure 1.2 shows how the UK economy has fared compared with other G7 countries in the last few years.

In 2018, all G7 countries except the United States experienced a slowdown. A similar pattern was observed in 2019 – this time Japan was the exception, while the UK's rate of growth was unchanged compared with the previous year. In terms of relative performance, the UK economy was the fourth-fastest growing G7 economy in 2019 ahead of Japan, Germany and Italy.

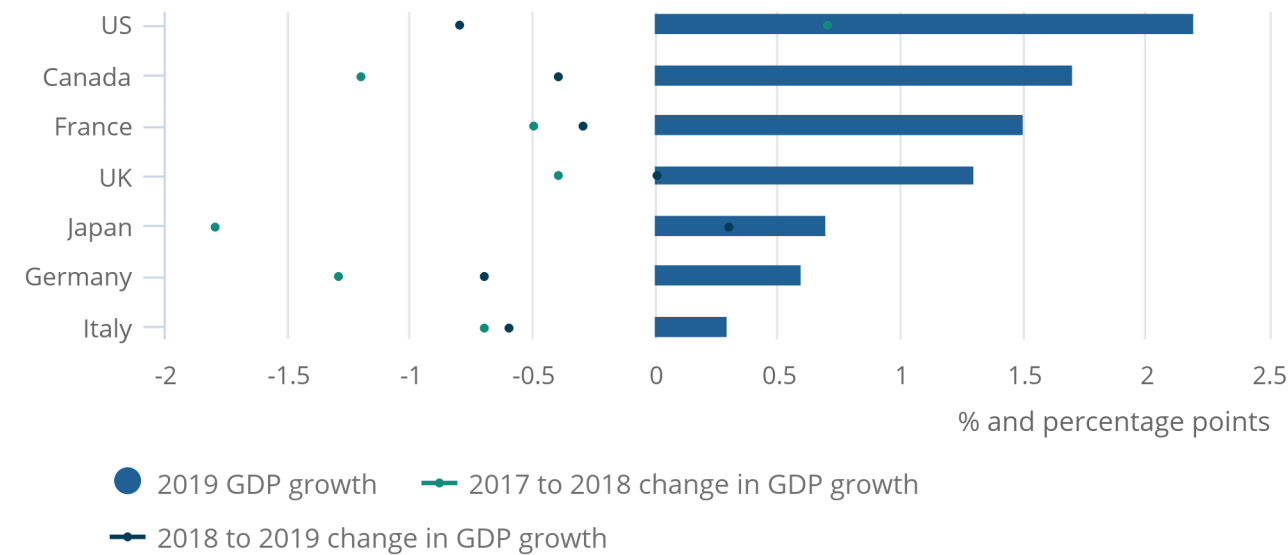
This weakening in the global economy is partly attributable to rising global trade tensions, such as those between the United States and China. According to the International Monetary Fund (IMF) [World Economic Outlook](#) published in January 2020, “trade policy uncertainty, geopolitical tensions, and idiosyncratic stress in key emerging market economies continued to weigh on global economic activity—especially manufacturing and trade—in the second half of 2019”.

**Figure 1.2: The UK economy was the fourth-fastest growing G7 economy in 2019 with signs of a slowdown in the wider global economy**

Real GDP growth, 2017 to 2019, G7 countries

Figure 1.2: The UK economy was the fourth-fastest growing G7 economy in 2019 with signs of a slowdown in the wider global economy

Real GDP growth, 2017 to 2019, G7 countries



Source: Office for National Statistics – UK National Accounts

The implied GDP deflator represents the broadest measure of inflation in the domestic economy, reflecting changes in the price of all goods and services that comprise GDP. This includes the price movements in private and government consumption, investment and the relative price of exports and imports.

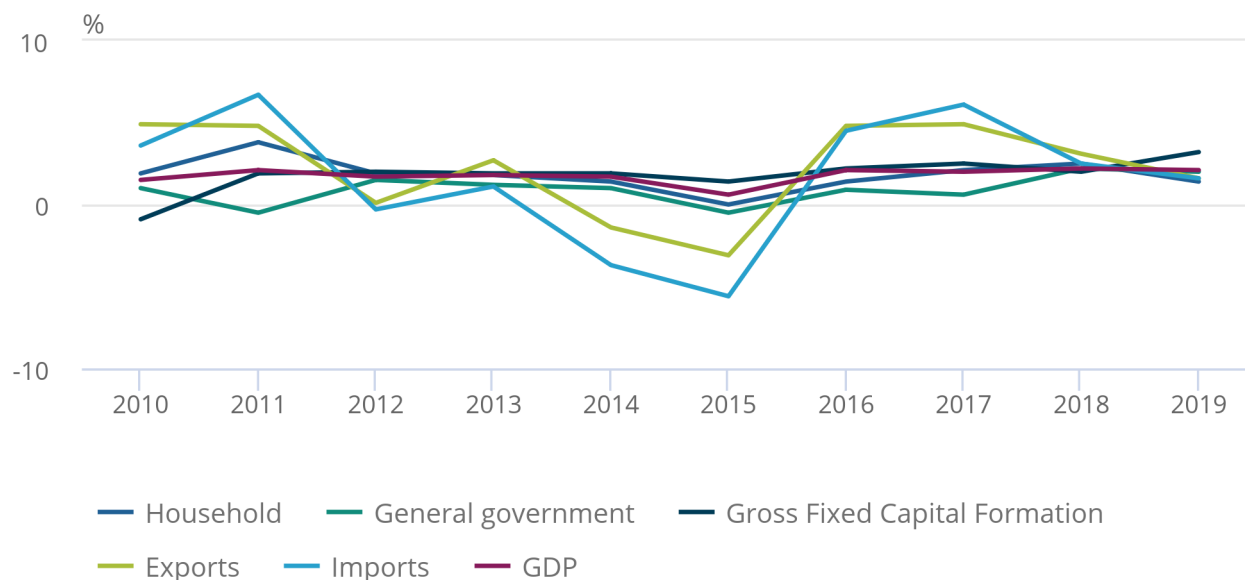
In 2019, the implied GDP deflator grew by 2.1%, a slight easing from the previous year though above the five-year average of 1.8%. Reflecting these price movements, nominal GDP growth in the UK economy was 3.4% in 2019, slightly below its five-year average annual growth rate of 3.5%. The easing in 2019 reflects a slowing in the growth of the implied deflators for households, general government, exports and imports (Figure 1.3).

**Figure 1.3: Growth in the implied deflator eased in 2019, reflecting declines in the implied deflator growth rates of households, general government, exports and imports**

Implied deflator growth, 2010 to 2019, UK

Figure 1.3: Growth in the implied deflator eased in 2019, reflecting declines in the implied deflator growth rates of households, general government, exports and imports

Implied deflator growth, 2010 to 2019, UK



Source: Office for National Statistics – UK National Accounts

### 3 . Industrial analysis

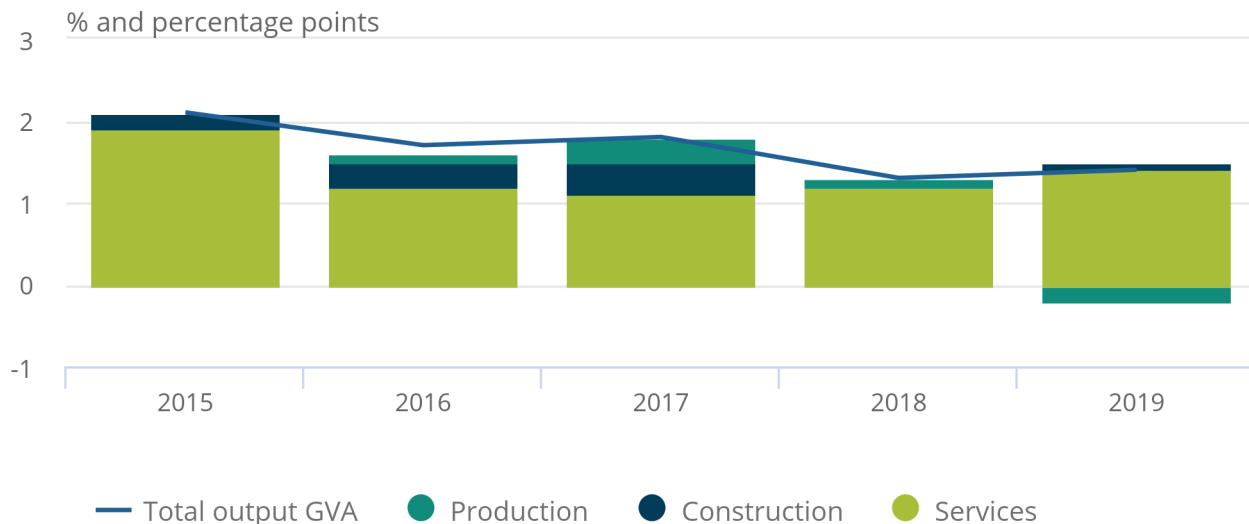
Growth in total output gross value added (GVA) picked up slightly from 1.3% in 2018 to 1.4% in 2019, driven by stronger growth in services output (Figure 1.4). Meanwhile, there was a contraction in production output in 2019 whilst construction output grew by 1.8% following no growth in 2018.

**Figure 1.4: Services made a larger positive contribution to growth in 2019 whilst production subtracted from growth**

Contribution to total output gross value added (GVA) growth, 2015 to 2019, UK

## Figure 1.4: Services made a larger positive contribution to growth in 2019 whilst production subtracted from growth

Contribution to total output gross value added (GVA) growth, 2015 to 2019, UK



Source: Office for National Statistics – UK National Accounts

### Notes:

1. Chart shows contribution to total output GVA growth.
2. Components contributions may not sum to total because of rounding.

Looking back over the last five years, there has been a general slowing in services growth. Services output grew by 2.5% in 2015, slowing considerably to 1.6% in 2016 and hovering around this rate in subsequent years.

This slowdown was mainly driven by the real estate, and professional scientific admin and support industries. Whilst these two industries accounted for nearly 60% of services growth in 2015, by 2019 their contribution to services growth was less than a third. According to the Quarter 2 2016 [Bank of England Agents' Summary of Business Conditions \(PDF, 471KB\)](#), major business decisions were being delayed during the pre-referendum period, which was “reflected in a slowing of M&A {mergers and acquisitions}, IPO {initial public offerings}, and commercial real estate investment activity.”

Following growth of 1.6% in 2018, services output increased by 1.8% in 2019, reflecting growth in all services industries except financial and insurance activities (Figure 1.5). Of note, the transport, storage and communications industry grew by 5.1% in 2019 whilst output in the wholesale and retail trade industry grew by 2.5%.

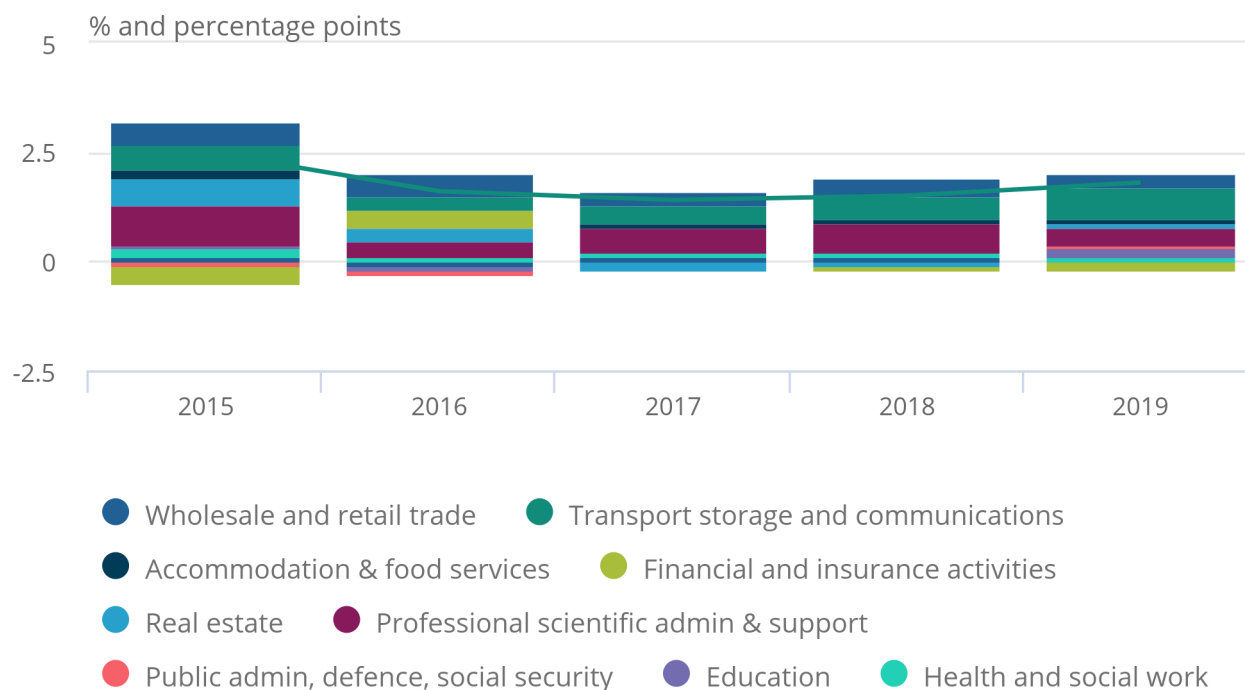


**Figure 1.5: Services output increased by 1.8% in 2019, reflecting growth in all services industries except financial and insurance activities**

Contribution to services output growth, 2015 to 2019, UK

Figure 1.5: Services output increased by 1.8% in 2019, reflecting growth in all services industries except financial and insurance activities

Contribution to services output growth, 2015 to 2019, UK



Source: Office for National Statistics – UK National Accounts

Between 2015 and 2017, there was a sharp rise in the rate of production growth, increasing from 0.3% in 2015 to 1.8% in 2017. This was primarily driven by manufacturing, which went from being a drag on growth in 2015 to making a large positive contribution to growth in 2017. By 2017, manufacturing growth was accounting for over 90% of growth in production. This partly reflected strength in manufacturing exports, which was supported by sterling's depreciation following the EU referendum in 2016 and stronger demand in important international markets.

However, since then, there has been a reversal in the path of production growth. Between 2017 and 2018, the rate of growth in production output halved from 1.8% to 0.9%, largely reflecting a slowdown in manufacturing. According to the Quarter 4 2018 [Bank of England Agents' Summary of Business Conditions](#), there was an easing in the growth of manufacturing exports, reflecting "a combination of a waning boost from sterling's 2016 depreciation and weaker demand for diesel cars, rail and marine goods, notably from Asia".

Production growth was volatile in the first half of 2019, mainly driven by manufacturing. This was consistent with activity being brought forward ahead of the UK's original intended EU departure date at the end of March, followed by a decline in activity in the second quarter exacerbated by partial car plant shutdowns in April. Similar impacts were seen in the manufacturing industry ahead of the second intended EU departure date in October, although to a lesser degree.

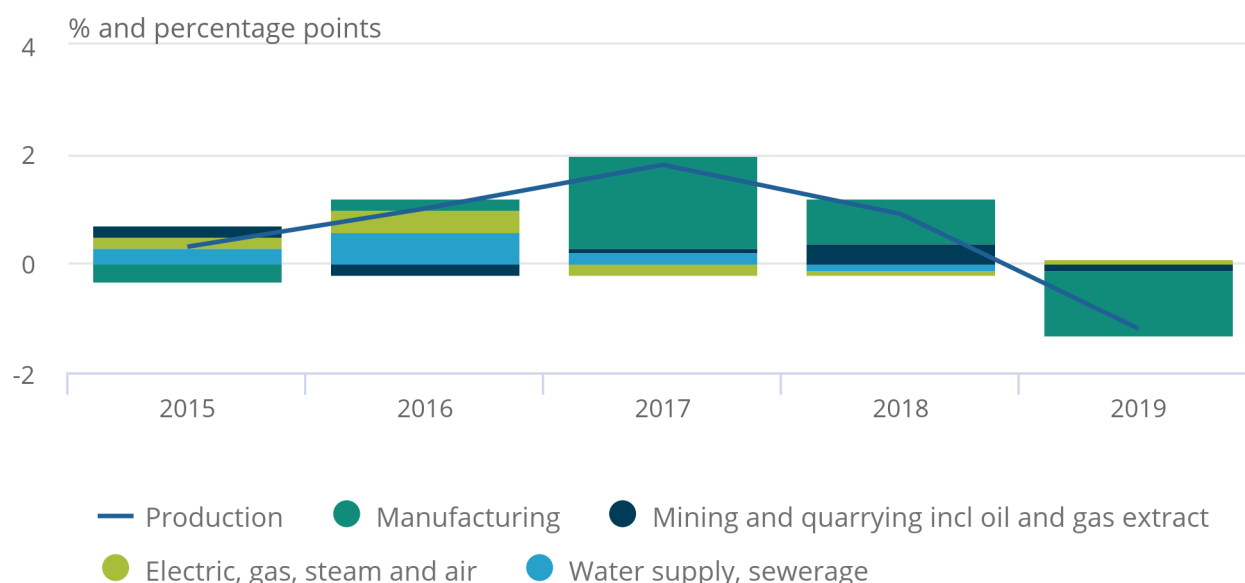
On an annual basis, production output fell by 1.2% in 2019, primarily driven by a contraction in manufacturing output (Figure 1.6). This decline may partially reflect relatively weaker global GDP growth, as global trade tensions weighed on economic activity. Meanwhile, mining and quarrying, and water supply and sewerage production also fell compared with 2018. Electricity, gas, steam and air conditioning was the only production sub-industry that grew in 2019, growing by 1.0% following two consecutive years of decline.

**Figure 1.6: Production output fell by 1.2% in 2019, primarily reflecting a decline in manufacturing output**

Contribution to production output growth, 2015 to 2019, UK

Figure 1.6: Production output fell by 1.2% in 2019, primarily reflecting a decline in manufacturing output

Contribution to production output growth, 2015 to 2019, UK



Source: Office for National Statistics – UK National Accounts

Notes:

1. Chart shows contribution to annual production output growth.
2. Components contributions may not sum to total because of rounding.

Construction growth has also slowed in recent years. Growth in construction output was 3.8% in 2015, strengthening to 6.1% in 2017. However, construction output showed no growth in 2018, and whilst it did return to growth in 2019, the 1.8% growth rate was markedly lower than its five-year average growth rate of 3.2% between 2015 and 2019.

## 4 . Spending in the UK economy

Figure 1.7 shows how UK gross domestic product (GDP) has evolved over the last five years by looking at the contributions to real UK GDP growth by expenditure component.

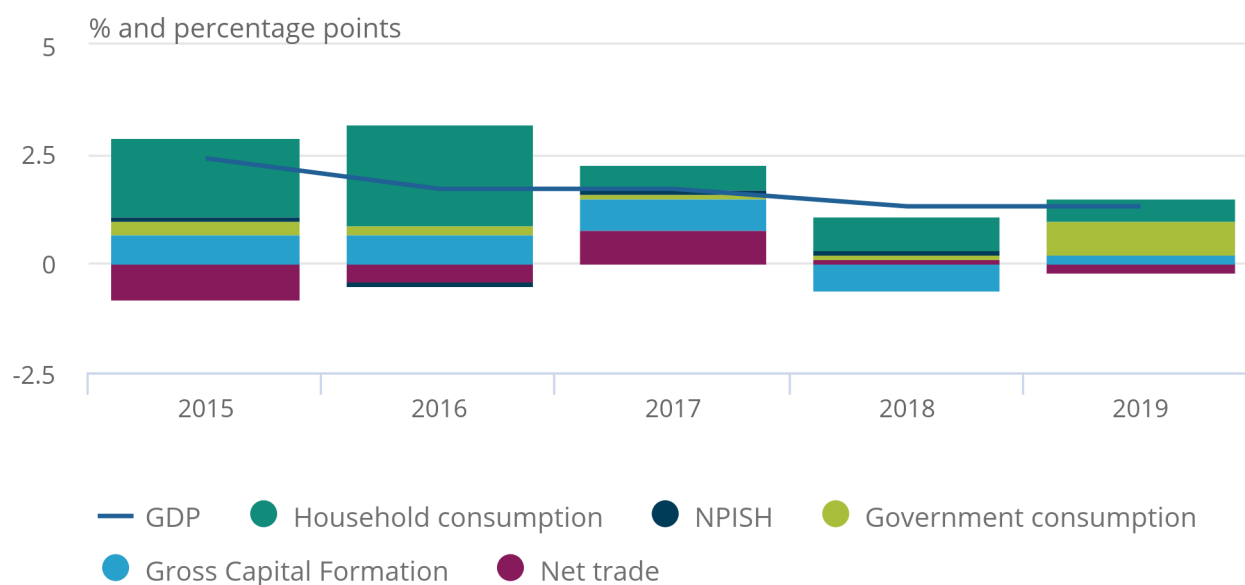
Household consumption growth slowed from 1.3% in 2018 to 0.8% in 2019, representing the slowest rate of growth since 2012. Gross capital formation made a positive contribution to growth in 2019, a reversal from the previous year, while net trade went from making a positive contribution to growth in 2018 to being a drag on growth in 2019.

**Figure 1.7: Private consumption growth slowed in 2019 whilst net trade subtracted from growth**

Contribution to real GDP growth, 2015 to 2019, UK

Figure 1.7: Private consumption growth slowed in 2019 whilst net trade subtracted from growth

Contribution to real GDP growth, 2015 to 2019, UK



Source: Office for National Statistics – UK National Accounts

Notes:

1. Chart shows contribution to annual real GDP growth.
2. Components contributions may not sum to total because of rounding. The statistical discrepancy is also not displayed.

Figure 1.8 shows growth in household consumption broken down by type of good. Durable goods are goods that can be repeatedly or continuously used over a period of more than a year, for example, a washing machine. Non-durable goods and services can only be consumed or used once, a good example being food. Semi-durable is used to describe those goods that are used continuously or repeatedly over a period of a year, but tend to have a shorter lifespan and significantly lower purchaser price than durable goods. An example of a semi-durable good is an item of clothing.

The slowdown in household consumption in 2019 was primarily driven by non-durable goods, as shown in Figure 1.8. This is reflected in official [retail sales figures](#), which showed a decline in sales in food stores at the end of 2019. The slowdown in real household consumption in 2019 is echoed in the Quarter 4 2019 [Bank of England Agents' Summary of Business Conditions](#), which noted muted growth in consumer services as well as weak sales of big-ticket items such as new cars and household goods.

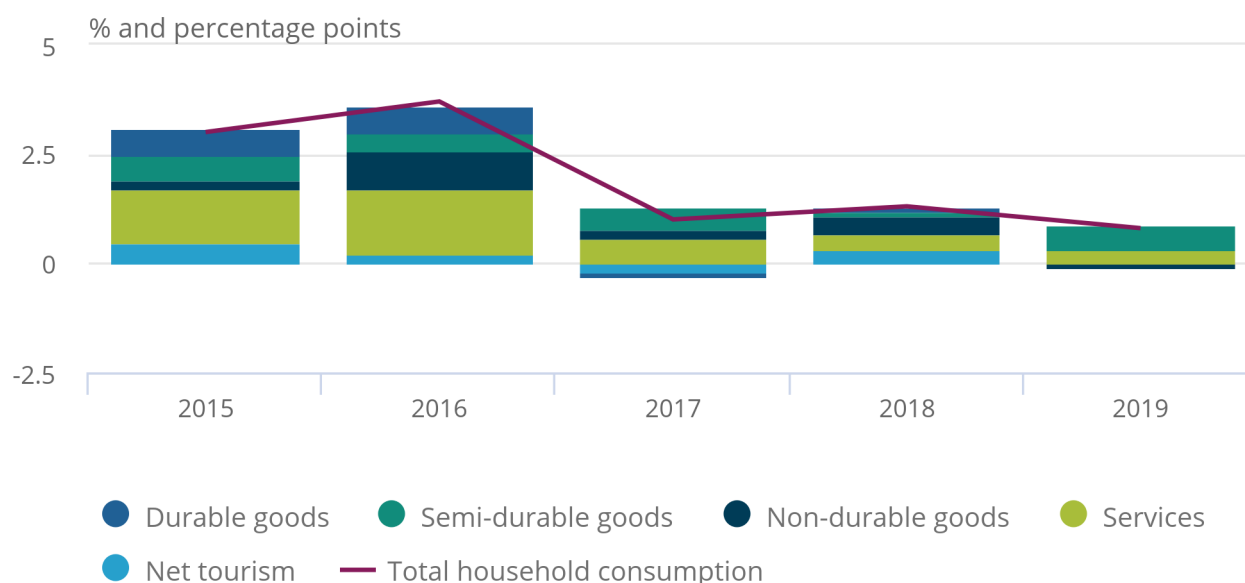
In other external survey evidence, although the [GfK Consumer Confidence](#) figures in December showed a slight increase in consumer sentiment at the end of 2019, the overall Consumer Confidence Index score remained in negative territory. The report noted that “the Overall Index Score has failed to break into positive territory for the past four years due to confusion and uncertainty about the future direction of the UK”.

**Figure 1.8: Growth in household consumption eased in 2019, primarily driven by non-durable goods**

Contribution to real household consumption growth, 2015 to 2019, UK

## Figure 1.8: Growth in household consumption eased in 2019, primarily driven by non-durable goods

Contribution to real household consumption growth, 2015 to 2019, UK



Source: Office for National Statistics – UK National Accounts

Government consumption increased by 4.1% in 2019, reflecting higher spending on health and education. This represents a considerable strengthening from the previous year when government consumption grew by 0.6% and marks the highest annual growth rate in the volume of government expenditure since 2002.

Gross fixed capital formation (GFCF) increased by 1.5% in 2019, reflecting growth in business investment and government investment. Business investment grew by 1.1% in 2019 following a decline of 2.5% in 2018.

However, the quarterly path shows that business investment fell in the final quarter of 2019, likely reflecting how the heightened uncertainty about the future trading relationship with the European Union weighed on investment intentions. Previous analysis has highlighted how business investment at this point in the cycle was subdued compared with comparative points in previous cycles, as external evidence pointed to the effects of heightened economic uncertainty. For example, the Quarter 4 2019 [Bank of England Agents' Summary of Business Conditions](#) reported that “investment intentions remained depressed by slower global growth and political uncertainty” whilst the Quarter 4 2019 [Decision Maker's Panel](#) stated that “the share of firms reporting that Brexit was an important source of uncertainty for their business remained elevated in November”.

Looking at the quarterly path of inventories throughout 2019, there is some evidence to suggest that stockbuilding took place as part of EU exit contingency planning. Alignment and balancing adjustments are typically applied to the inventories component to help balance the different approaches to GDP. However, when these adjustments are removed, there is some evidence that stockpiling took place in the first quarter (Jan to Mar) of 2019 as there was an increase of £6.1 billion in stocks held by UK companies in the run-up to the UK's original exit date from the EU at the end of March.

Following this period of pronounced stockpiling in the first quarter, businesses appeared to run down their stock levels in the second and third quarters of 2019. In Quarter 4 (Oct to Dec) 2019, stocks held by UK companies increased by £1.0 billion, indicating that stockpiling also took place in late 2019 ahead of the second planned EU exit date in October, though to a lesser extent than in the first quarter.

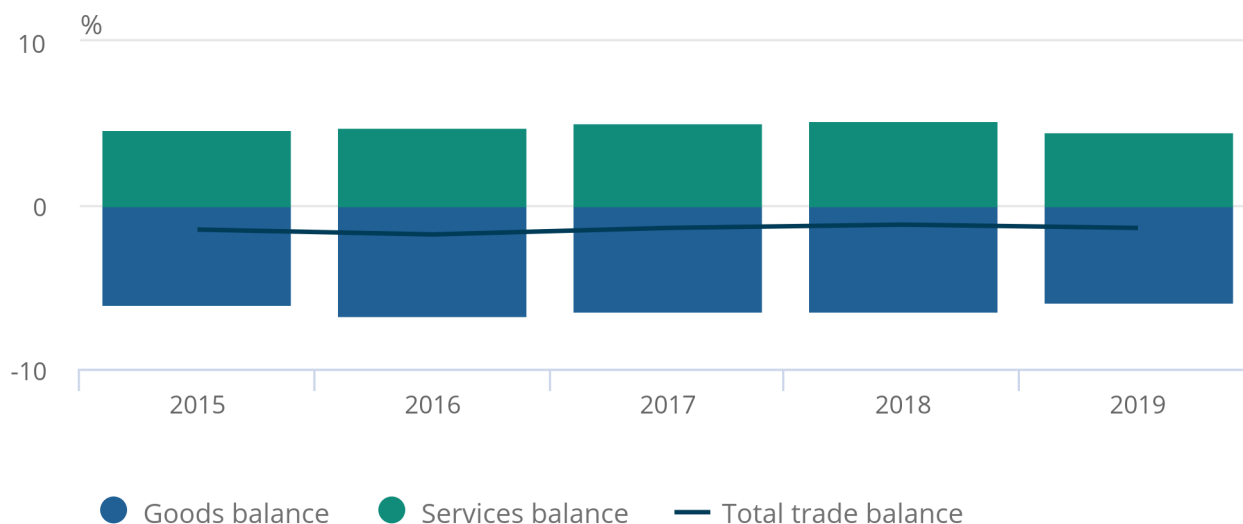
Net trade was the only expenditure component to contribute negatively to real GDP growth in 2019. Import volumes grew by 3.3% in 2019, whilst export volumes grew by 2.8%. The UK trade deficit widened from 1.2% of nominal GDP in 2018 to 1.4% in 2019. While the goods deficit fell in 2019, there was a relatively larger fall in the services surplus, as shown in Figure 1.9. Monthly data on UK imports from the EU suggest that activity was being brought forward in preparation for the UK's intended departure date from the EU on 31 October 2019. In particular, increases in trade in goods imports from the EU in September and October were followed by falls in November and December. This pattern is consistent with that seen in advance of the UK's original departure date at the end of March 2019, albeit less pronounced.

**Figure 1.9: The trade deficit widened to 1.4% of nominal GDP in 2019, reflecting a fall in the services balance**

Trade balances as a percentage of nominal GDP, 2015 to 2019, UK

Figure 1.9: The trade deficit widened to 1.4% of nominal GDP in 2019, reflecting a fall in the services balance

Trade balances as a percentage of nominal GDP, 2015 to 2019, UK



Source: Office for National Statistics – UK National Accounts

## 5 . Institutional sector accounts

The income and expenditure of each sector implies a net lending or borrowing position for households, non-profit institutions serving households (NPISH), corporations, government and the rest of the world. By definition, these flows must sum to zero in fully supply and use balanced years – for each pound that is borrowed by one sector, there must be a pound that is lent by another.

Figure 1.10 shows the net lending and borrowing position for each sector in the UK and from the rest of the world. The rest of the world continues to be a net lender to the UK, financing the overall net borrowing position of the domestic sectors. Corporations and government are net borrowers, while households are net lenders.

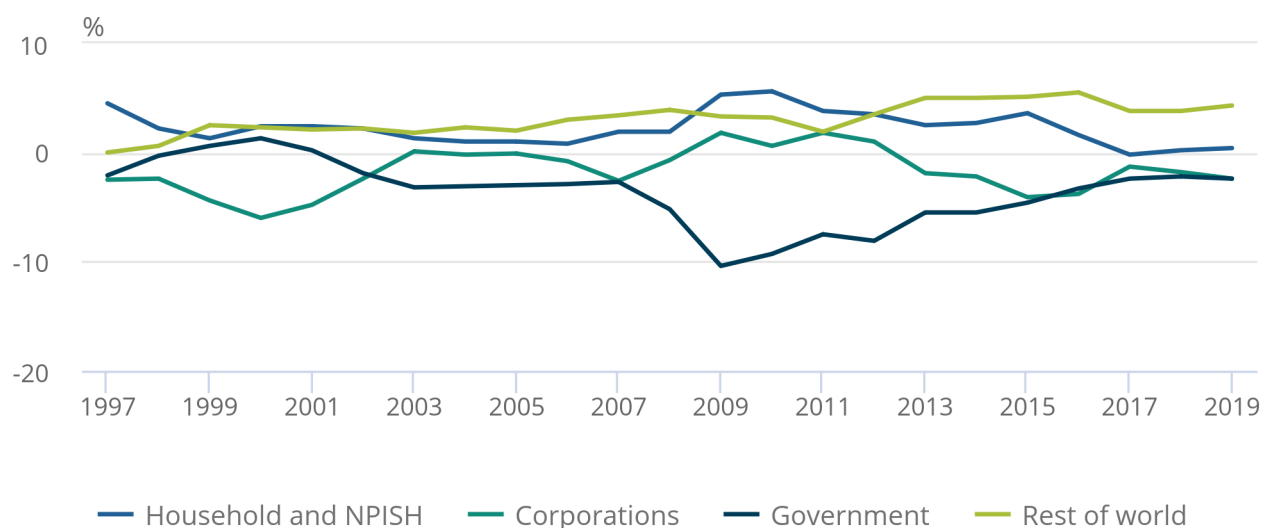
The net lending position of households was 1.0% in 2019, up from 0.6% in 2018. Following the financial crisis, the government budget deficit widened to 10.4% of GDP in 2009. This deficit has narrowed over the last decade, reaching 2.4% of GDP in 2019, though government net borrowing increased relative to 2018. The corporate sector experienced a pickup in capital investment following the financial crisis, with corporates going from being net lenders to net borrowers since 2013. In 2019, their net borrowing position was 2.4% of GDP. UK net borrowing from the rest of the world increased to 4.3% of GDP in 2019 compared with 3.8% of GDP in 2018.

**Figure 1.10: Households increased their net lending position in 2019 while net borrowing by corporations and government increased**

Net lending or borrowing position as a percentage of GDP, 1997 to 2019, UK

Figure 1.10: Households increased their net lending position in 2019 while net borrowing by corporations and government increased

Net lending or borrowing position as a percentage of GDP, 1997 to 2019, UK



Source: Office for National Statistics – UK National Accounts

The increase in the net borrowing position of corporations in 2019 reflects an increase in net borrowing by private non-financial corporations (PNFCs). This was mainly driven by a fall in net reinvested earnings on foreign direct investment as businesses across several industries withdrew capital from their overseas interests. Additionally, PNFCs increased their gross capital formation in 2019, reflecting stockpiling activity in early and late 2019 as part of EU exit contingency planning.

The increase in household net lending in 2019 reflects the 3.1% growth in gross household disposable income (GHDl). This increase is reflected in official labour market data, which show that real wages in 2019 were above their pre-financial crisis peak.

With nominal household expenditure growth of 2.2% in 2019 – a slowing compared with the 3.7% increase in 2018 – the relatively stronger growth in GHDl helped boost gross savings by households in 2019. Gross saving in the household sector increased by £11.3 billion in 2019, with the households' saving ratio increasing from 6.2% in 2018 to 6.8% in 2019.

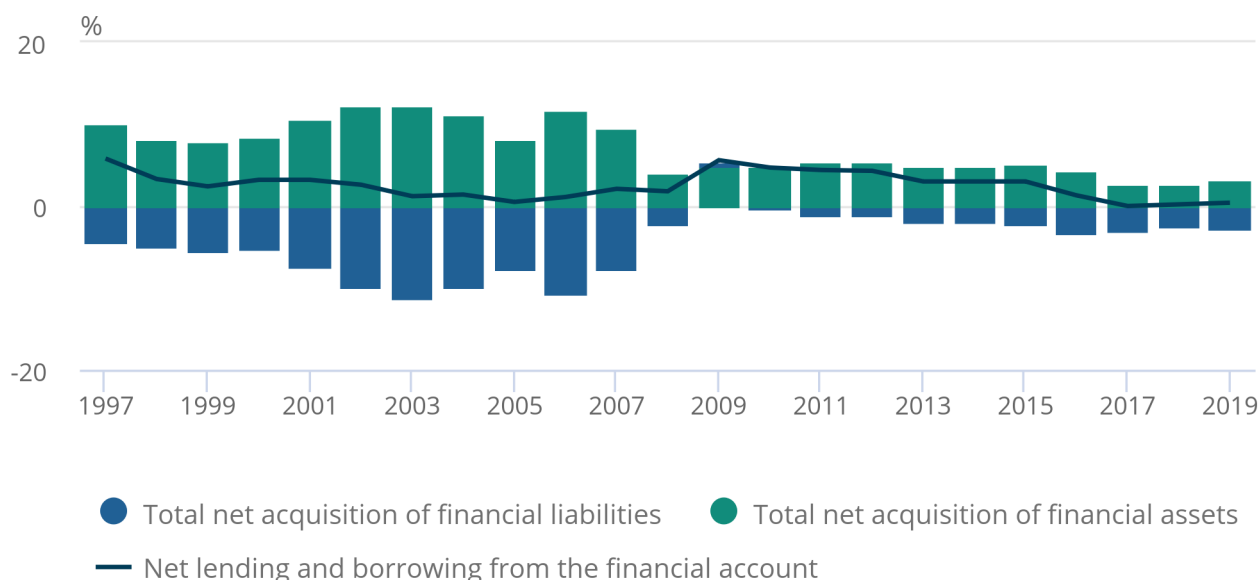
Households increased their net acquisition of financial liabilities in 2019, (Figure 1.11). However, the increase in their net acquisition of financial assets more than offset this, leaving a net lending position of 0.4% of GDP in the financial account of the household sector in 2019.

**Figure 1.11: Household net lending in the financial account increased in 2019 for the second year in a row**

Households' net acquisition of financial assets and liabilities as a percentage of GDP, 1997 to 2019, UK

**Figure 1.11: Household net lending in the financial account increased in 2019 for the second year in a row**

Households' net acquisition of financial assets and liabilities as a percentage of GDP, 1997 to 2019, UK



Source: Office for National Statistics – UK National Accounts

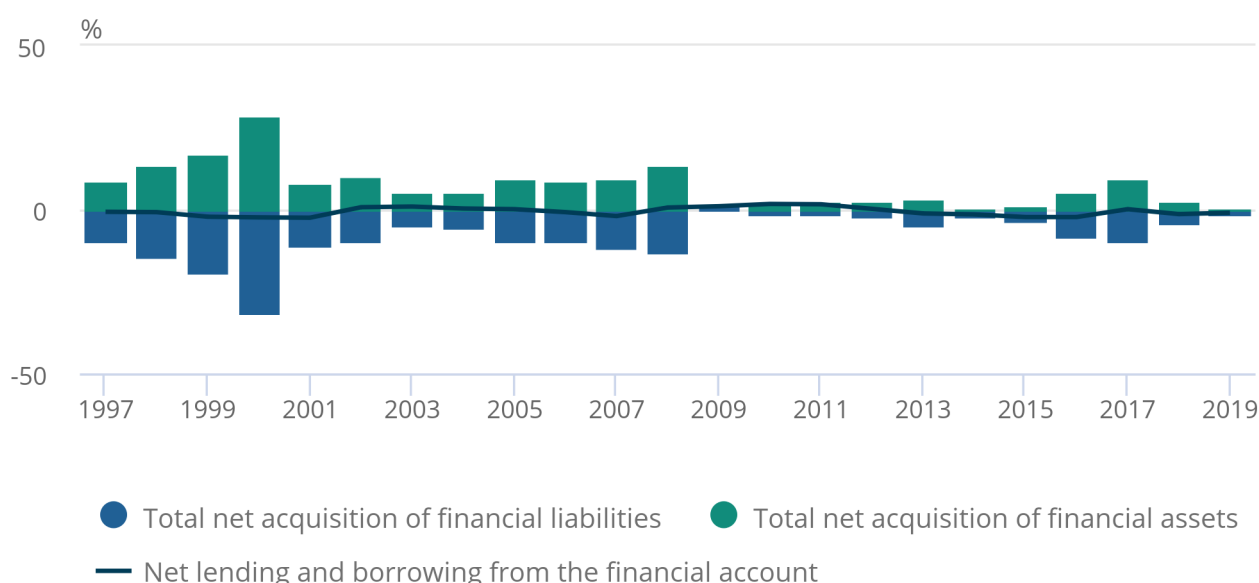
Private non-financial corporations' (PNFCs) net borrowing in the financial account was 1.0% of GDP in 2019 (Figure 1.12). Although PNFCs reduced their net acquisition of assets in 2019, they also decreased their net acquisition of financial liabilities, with an overall effect of reducing their net borrowing position relative to the previous year.

**Figure 1.12: Private non-financial corporations (PNFCs) reduced their net borrowing in the financial account in 2019**

PNFCs' net acquisition of financial assets and liabilities as a percentage of GDP, 1997 to 2019, UK

**Figure 1.12: Private non-financial corporations (PNFCs) reduced their net borrowing in the financial account in 2019**

PNFCs' net acquisition of financial assets and liabilities as a percentage of GDP, 1997 to 2019, UK



Source: Office for National Statistics – UK National Accounts

From a financial balance sheet position, household financial assets increased in value to £6.8 trillion – or 305.6% of GDP – in 2019 (Figure 1.13). Meanwhile, the value of household financial liabilities increased to £1.9 trillion in 2019, though this fell as a share of GDP compared with the previous year.

Household financial liabilities as a percentage of GDP have been on a steady decline since 2009, falling from 101.0% of GDP in 2009 to 86.1% in 2019. With the increase in the value of household financial assets offsetting the increase in the value of household financial liabilities in 2019, household financial net worth as a share of GDP rose to 219.6% of GDP in 2019.

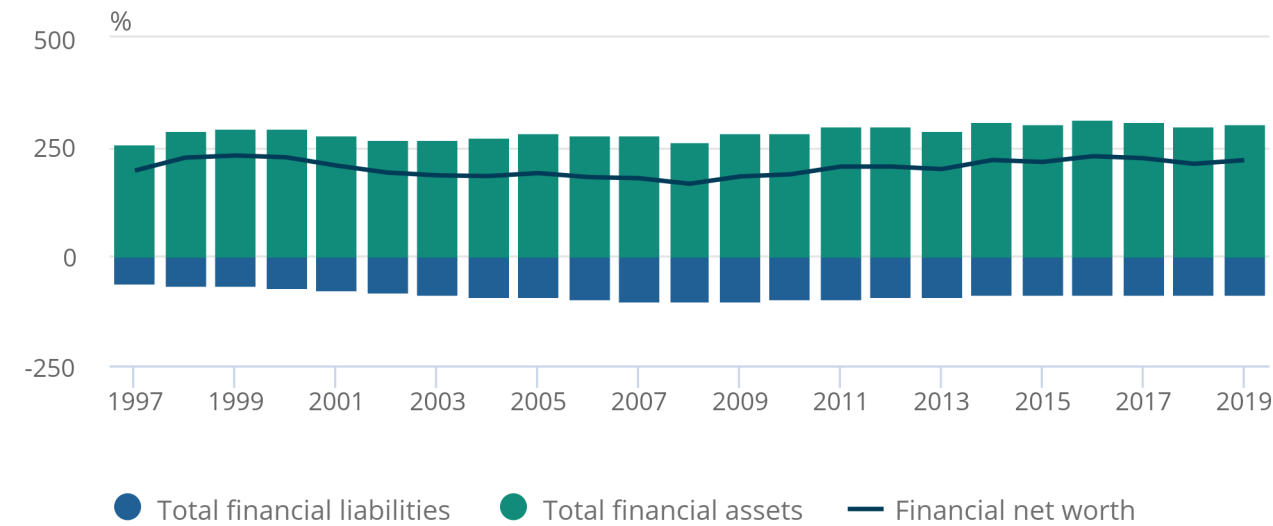


Figure 1.13: Household financial net worth increased to 219.6% of gross domestic product in 2019

Household financial assets and liabilities as a percentage of GDP, 1997 to 2019, UK

Figure 1.13: Household financial net worth increased to 219.6% of gross domestic product in 2019

Household financial assets and liabilities as a percentage of GDP, 1997 to 2019, UK



Source: Office for National Statistics – UK National Accounts

Compendium

# The industrial analyses

Analysis of the 10 broad industrial groups' contributions to gross value added, compensation of employees and workforce jobs, and summary supply and use tables.

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4. [Chained volume indices \(2018=100\) analyses](#)
5. [Workforce jobs by industry](#)
6. [Summary supply and use tables for the UK](#)
7. [Gross value added \(GVA\)](#)

# 1 . The industrial analysis

Analysis of the 10 broad industrial groups shows that in 2018, the government, health and education industries provided the largest contribution to gross value added (GVA) at current basic prices. These industries contributed 18.1% to the total GVA of £1,910 billion, with a value of £346 billion. Of the remainder:

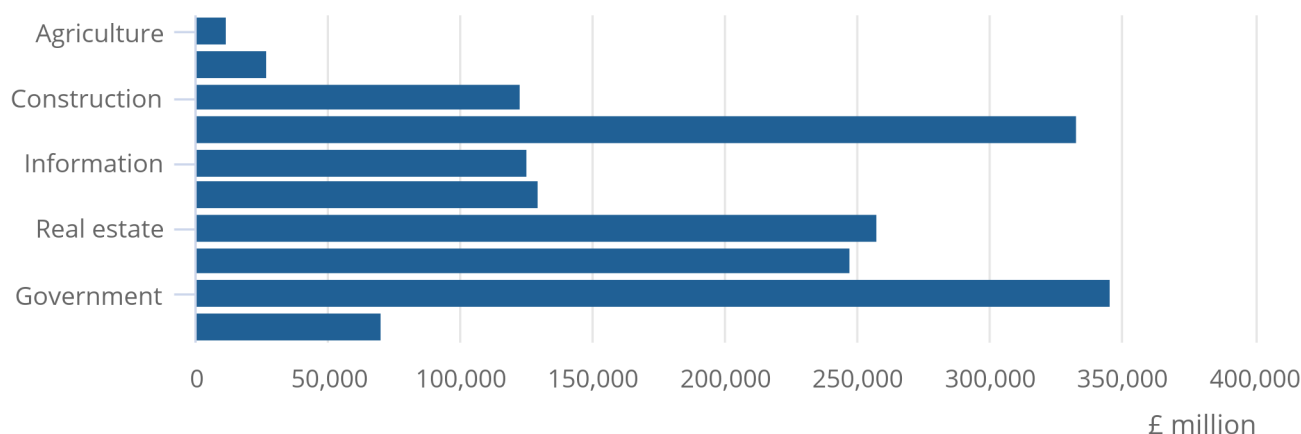
- distribution, transport, hotels and restaurants industries contributed 17.4%
- production industries contributed 13.9%
- real estate industries contributed 13.5%

**Figure 2.1: Government, health and education provided the largest contribution to GVA in 2018**

Breakdown of gross value added at basic prices, by industry, UK, 2018

Figure 2.1: Government, health and education provided the largest contribution to GVA in 2018

Breakdown of gross value added at basic prices, by industry, UK, 2018



Source: Office for National Statistics – Blue Book 2020

In 2018, of all goods and services within final demand:

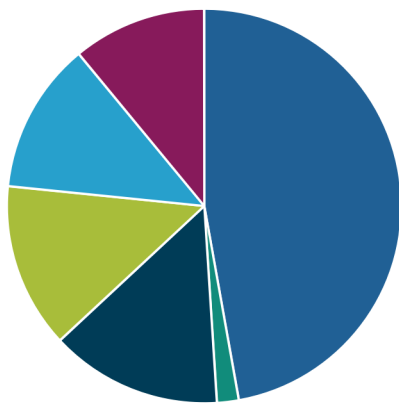
- households consumed 47.2%
- government, both central and local, consumed 14.1%
- non-profit institutions serving households (NPISH) consumed 1.8%
- gross capital formation, by all sectors of the economy, consumed 13.5%
- 12.4% were exported goods, and 11.0% were exported services

**Figure 2.2: Households consumed nearly half of goods and services within final use in 2018**

Composition of final use, UK, 2018

Figure 2.2: Households consumed nearly half of goods and services within final use in 2018

Composition of final use, UK, 2018



Source: Office for National Statistics – Blue Book 2020

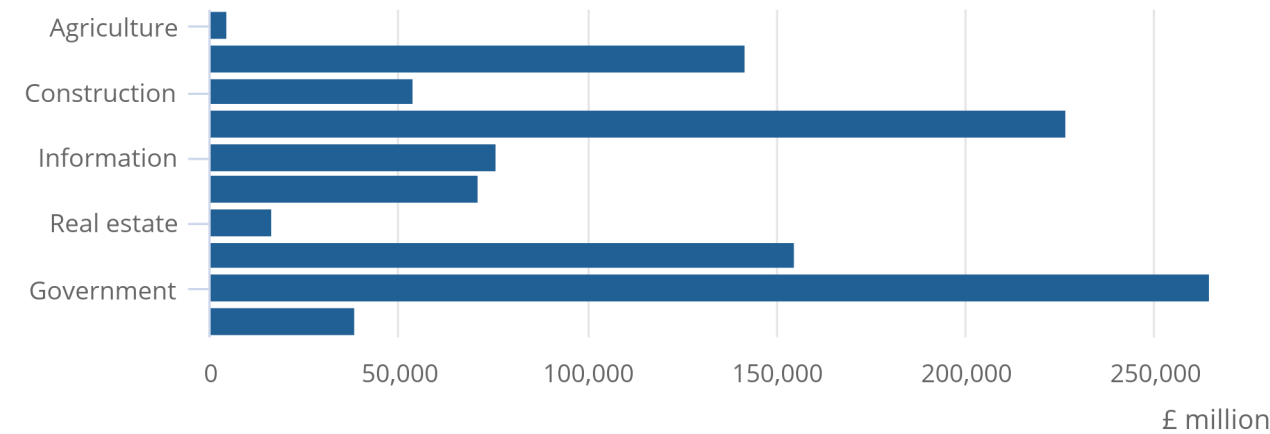
The government, health, and education industries showed the highest level of compensation of employees in 2018 at £264.6 billion (25.2%). The second largest industry grouping, in terms of their contribution to total compensation of employees, were the distribution, transport, and hotels and restaurants industries at £226.4 billion (21.6%).

**Figure 2.3: Government, health and education showed the highest level of compensation of employees in 2018**

Breakdown of compensation of employees, by industry, UK, 2018

Figure 2.3: Government, health and education showed the highest level of compensation of employees in 2018

Breakdown of compensation of employees, by industry, UK, 2018



Source: Office for National Statistics – Blue Book 2020

## 2 . Input-output supply and use tables

The annual estimates included in UK National Accounts, The Blue Book: 2020 edition, incorporate the results of annual inquiries that become available in the first part of the year, although the last year’s estimates are based largely on quarterly information. Any newly collected data are shown as revisions. To reassess these estimates, supply and use tables (SUTs) are prepared using all the available information on inputs, outputs, gross value added, income and expenditure. To produce consolidated sector and financial accounts requires preparation of “top-to-bottom” sector and subsector accounts to identify discrepancies in the estimates relating to each sector.

The latest annual supply and use tables provide estimates for the years 1997 to 2018. Data for 2018 are balanced for the first time. Data for 2016 and 2017 have been fully re-balanced. Data from 1997 to 2015 have been revised to incorporate changes required under new international standards and guidelines, as well as to make sure the data are comparable and meet user needs.

Further general information regarding the supply and use framework and the balancing process can be found in the Guidance and methodology.

### 3 . Current price analysis

The analyses of gross value added and other variables by industry, shown in [Tables 2.1, 2.1A and 2.2](#), reflect estimates based on Standard Industrial Classification 2007: SIC 2007. These tables are based on current price data reconciled through the input-output supply and use framework from 1997 to 2018.

Estimates of total output and gross value added are valued at basic prices, the method recommended by the European System of Accounts 2010: ESA 2010. Therefore, the only taxes and subsidies included in the price will be those paid or received as part of the production process (such as business rates), rather than those associated with the production of a unit of output (such as Value Added Tax).

### 4 . Chained volume indices (2018=100) analyses

[Table 2.3](#) shows chained volume estimates of gross value added (GVA) at basic prices by industry. The output approach provides the lead indicator of economic change in the short term. In the longer term, the output measure of real gross domestic product (GDP) is required to follow the annual path indicated by the expenditure measure of real GDP (usually to two decimal places). To achieve this coherence, balancing adjustments are sometimes applied to the services industries within the output-based GVA estimates at each annual Blue Book.

We have developed an automatic function for assigning the annual adjustments to GVA. This is designed to minimise changes to the quarterly path while adjusting the overall annual growth rate to align to the expenditure measure. For technical and other reasons, the adjustments are not, at present, made to retail or the non-services industries for any years.

### 5 . Workforce jobs by industry

Workforce jobs (WFJ) is the preferred measure of the change in jobs by industry. A person can have more than one job; the number of jobs is not the same as the number of people employed.

[Table 2.4](#) breaks down WFJ into 10 broad industry groupings on Standard Industrial Classification 2007: SIC 2007.

The main component of WFJ is employee jobs. Estimates for employee jobs are obtained mainly from surveys of businesses selected from the Inter-Departmental Business Register (IDBR). All other business surveys collecting economic data also use this register.

WFJ also includes Her Majesty's Forces (within industry section O) and government-supported trainees from administrative sources (split by industry using the Labour Force Survey).

The Labour Force Survey (LFS), a household survey, is used to collect self-employment jobs. It codes respondents according to their own view of the industry they work in, therefore the industry breakdown is less reliable than that for the business surveys.

### 6 . Summary supply and use tables for the UK

New tables are available for all years back to 1997. Links to tables for the latest years are included below.

[Table 2.1a: Summary supply and use tables 2015](#)

[Table 2.1b: Summary supply and use tables 2016](#)

[Table 2.1c: Summary supply and use tables 2017](#)

[Table 2.1d: Summary supply and use tables 2018](#)

## 7 . Gross value added (GVA)

The UK National Accounts provide a comprehensive industry breakdown of gross value added (GVA), with activities grouped into 20 broad sections in accordance with Standard Industrial Classification 2007: SIC 2007.

This also includes supplementary information for the different components that make up GVA for each industry. Under the income approach, GVA is split into compensation of employees (CoE), taxes less subsidies, gross operating surplus (GOS) and mixed income. Estimates of each industry's intermediate consumption and total output are also published, with the difference between the two equalling GVA.

This additional information allows for more detailed analysis of national output to be conducted. For example, CoE can be used to calculate how much of an industry's production income is spent on wages and salaries and employers' social contributions. GOS data can be used to estimate how much profit is generated by companies after considering labour costs and taxes less subsidies.

Compendium

# Non-financial corporations

Public and private sector non-financial corporations.

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To be announced

## Table of contents

1. [Non-financial corporations](#)

# 1 . Non-financial corporations

Non-financial corporations produce goods and services for the market and do not, as a primary activity, deal in financial assets and liabilities.

This sector includes retailers, manufacturers, utilities, business service providers (such as accountancy and law firms), caterers, haulage companies, airlines, construction companies and farms among others.

The non-financial sector is broken down into two subsectors:

- public sector non-financial corporations
- private sector non-financial corporations

[Tables 3.1.1 to 3.1.11](#) relate to non-financial corporations as a whole. [Tables 3.2.1 to 3.2.11](#) relate to public non-financial corporations, which are government-owned trading businesses. [Tables 3.3.1 to 3.3.11](#) relate to private non-financial corporations, which are trading businesses in the private sector. All the tables are downloadable as an Excel workbook.

Further information on sector classifications and classification decisions can be found in [Economic statistics classifications](#).

Compendium

## Financial corporations

Financial corporations including monetary financial institutions, insurance corporations and pension funds, and other financial corporations.

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## Table of contents

1. [Financial corporations](#)



# 1 . Financial corporations

The financial corporations sector (S.12) consists of institutional units that are independent legal entities and market producers, and whose principal activity is the production of financial services. Such institutional units comprise all corporations and quasi corporations that are principally engaged in:

- financial intermediation (financial intermediaries)
- auxiliary financial activities (financial auxiliaries)

Also included are institutional units providing financial services, where most of either their assets or their liabilities are not transacted on open markets.

Financial intermediation is the activity in which an institutional unit acquires financial assets and incurs liabilities on its own account by engaging in financial transactions on the market. The assets and liabilities of financial intermediaries are transformed or repackaged in relation to, for example, maturity, scale or risk in the financial intermediation process. Auxiliary financial activities are activities related to financial intermediation, but which do not involve financial intermediation themselves.

Financial corporations are presented in the following groupings:

- monetary financial Institutions (MFI)
- insurance corporations and pension funds (ICPF)<sup>1</sup>
- financial corporations except MFI and ICPF

Further information on sector classifications and classification decisions can be found in [Economic statistics classifications](#).

## Notes:

1. This combines the pension entitlements of households held in both private and public sector pension schemes and also represents the value of the deficit of these pension schemes. This is calculated as the liabilities of pension funds minus their assets.

For private sector pension schemes, the calculation to produce an annual, end-year estimate of private sector employees' defined benefit pension entitlements is based on updated data on the full buyout (FBO) liabilities reported in the Pension Protection Fund (PPF) Purple Book. This is now consistent with the latest Purple Book, which has figures as at 31 March 2019. The Office for National Statistics (ONS) has also used administrative data from the Pensions Regulator, first used in Blue Book 2018, to update the estimate of private sector employees' defined contribution pension entitlements.

For public sector pension schemes, public sector employees' pension entitlements have been updated for 2016 to 2018 using the latest administrative data, including information from the 2016 triennial valuation of the Local Government Pension Scheme (LGPS) and results from ONS pensions surveys.

Additionally, the ONS has updated total pension scheme net assets for the private and public sectors. The update for the private sector is based on data from the ONS's new Financial Survey of Pension Schemes, replacing forecasts from 2018 onwards. For the public sector, the source of revision is a mixture of the latest administrative and survey data relating to the sector, replacing a forecast for 2017 onwards.

Compendium

# General government

General government sector by central and local government.

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## Table of contents

1. [General government](#)

# 1 . General government

The general government sector is made up of 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 (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 NHS, the armed forces and the police. Non-departmental public bodies are also included in the general government sector.

The UK National Accounts, The Blue Book: 2020 edition presents estimates for the general government sector and subsector breakdowns for:

- central government
- local government

Further information on sector classifications and classification decisions can be found in [Economic statistics classifications](#).

Compendium

## Households and non-profit institutions serving households

Households, and non-profit institutions serving households sectors.

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## Table of contents

1. [Households and non-profit institutions serving households](#)

# 1 . Households and non-profit institutions serving households

The households sector covers people living independently in residential accommodation and those living in communal establishments. Residential households are 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. Examples of communal establishments include prisons, student accommodation, care homes and boarding schools.

The households sector also includes self-employed (market producers) who do not form part of quasi-corporations, as well as individuals or groups of individuals who produce goods and non-financial services for their own final use.

Non-profit institutions serving households (NPISH) are institutions that:

- provide goods and services, either free or below market prices
- mainly derive their income from grants and donations
- are not controlled by the government

In the UK, the NPISH sector includes:

- charitable organisations
- trade unions
- religious organisations
- political parties
- universities and further education establishments

The UK National Accounts, The Blue Book: 2020 edition presents estimates for the households and NPISH sectors separately. To allow comparison with previous Blue Book publications, estimates for the combined households and NPISH sectors are also presented.

Further information on sector classifications and classification decisions can be found in [Economic statistics classifications](#).

Compendium

## Rest of the world

Rest of the world sector including all institutions or individuals not resident in the UK that have economic interactions with resident units.

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## Table of contents

1. [Rest of the world](#)

# 1 . Rest of the world

The rest of the world sector 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. The sector also includes foreign embassies and consulates on UK soil.

Further information on sector classifications and classification decisions can be found in [Economic statistics classifications](#).

Compendium

## Gross fixed capital formation supplementary tables

Gross fixed capital formation estimates of net capital expenditure on fixed assets by public and private sectors.

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## Table of contents

1. [Gross fixed capital formation supplementary tables](#)

# 1 . Gross fixed capital formation supplementary tables

Gross fixed capital formation (GFCF) is the estimate of net capital expenditure (acquisitions less the proceeds from disposals) on fixed assets by both the public and private sectors. Fixed assets are purchased assets used in production processes for more than one year.

Examples of capital expenditure include spending on:

- machinery and equipment
- transport equipment
- software
- artistic originals
- research and development
- new dwellings and major improvements to dwellings
- other buildings and major improvements to buildings
- structures, such as roads

In the Blue Book 2020, we have introduced several improvements to our GFCF estimates covering:

## Current price improvements to data sources:

Detailed explanations of some of these data and methodological improvements together with the resulting revisions for 1997 through to 2018 can be found in the [Impact of Blue Book 2020 changes on current price and volume estimates of gross domestic product](#) article, published 20 July 2020.

The largest change affecting the GFCF estimates is attributed to transfer costs estimates resulting from a change in how we measure the professional fees that relate to the purchase and sale of residential and non-residential buildings. The impact article describes the new methodology and how this differs to previous methods.

Further changes include:

- expanding our data sources for higher education, specifically universities
- updated research and development estimates
- the inclusion of fruit-bearing trees and bushes that are productive for more than a year in our agriculture estimates
- the inclusion of estimates for the amount of own account construction that is gross fixed capital formation

## Regular current price data source updates:

Incorporation of revised Annual Business Survey benchmarks for 2016 and 2017 and new data for 2018.

## Chained volume measure (CVM) methodological improvements:

We have implemented chain-linked business prices across the UK National Accounts in line with international best practice, and to improve consistency with other price indices such as the Consumer Price Index (CPI). This is a significant improvement to the weighting and linking of business inflation statistics. The [Chain-linking in business prices](#) article, published 20 July 2020, explains these changes in more detail.

Compendium

## National balance sheet

A measure of the national wealth, or total net worth, of the UK, showing the estimated market value of financial assets.

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## Table of contents

1. [National balance sheet](#)



# 1 . National balance sheet

The national balance sheet is a measure of the national wealth, or total net worth, of the UK. It shows the estimated market value of financial assets, for example, shares and deposits at banks, and non-financial assets like dwellings and machinery. Market value is an estimate of how much these assets would sell for, if sold on the market.

The estimates are used for international comparisons, to monitor economic performance and inform monetary and fiscal policy decisions.

Financial assets and liabilities include:

- means of payment, such as currency
- financial claims, such as loans
- economic assets, which are close to financial claims in nature, such as shares

Non-financial assets include:

Produced non-financial assets:

- dwellings
- buildings and other structures
- machinery and equipment
- certain farming stocks, mainly dairy cattle and orchards
- intellectual property products, such as computer software and databases, and research and development inventories

Non-produced assets:

- contracts, leases and licences
- natural resources

Data sources include:

- the Office for National Statistics' (ONS) National Balance Sheet Survey
- annual reports of public corporations and major businesses
- industry publications
- other government departments and agencies

Where non-financial asset market valuations are not readily available, we use a proxy based on the UK net capital stocks data, modelled in the perpetual inventory method (PIM).

For central government, data are taken from returns made by government departments to HM Treasury.

Local authority housing is shown in the public non-financial corporations sector. This is because government-owned market activities are always treated as being carried out by public corporations, either in their own right or via quasi-corporations.

Compendium

## Public sector supplementary tables

The main taxes and social contributions payable by UK residents to central and local government and the European Union.

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### Table of contents

1. [Introduction](#)
2. [Taxes and social contributions payable by UK residents](#)

# 1 . Introduction

The majority of government income is provided by taxes and social contributions. [Table 10.1](#) provides a breakdown of the main taxes and social contributions payable by UK residents to both the government (central and local government) and the European Union (EU).

## 2 . Taxes and social contributions payable by UK residents

Taxes on production are included in gross domestic product (GDP) at market prices.

Other taxes on production include taxes levied on inputs to production. These include national non-domestic rates, also known as business rates, and a range of compulsory unrequited levies that producers have to pay.

Taxes on products are taxes levied on the sale of goods and services; this includes Value Added Tax (VAT) and Fuel Duty. Taxes on income and wealth include Income Tax and Corporation Tax. Income Tax is the largest single source of tax revenue paid by UK residents. This category also includes a number of other charges payable by households including Council Tax, the BBC licence fee and taxes such as Vehicle Excise Duty, which, when paid by businesses, are classified as taxes on production. The totals include tax credits and reliefs recorded as expenditure in the national accounts, such as Working Tax Credit and Child Tax Credit.

The European System of Accounts 2010: ESA 2010 has a specific category of payments to the government called compulsory social contributions. These are payments associated with social security schemes, such as unemployment benefit and pensions. In the UK accounts this category includes all National Insurance contributions. Details of total social contributions and benefits are shown in [Tables 5.2.4S](#) and [5.3.4S](#).

Capital taxes are taxes levied at irregular or infrequent intervals on the values of assets, gifts or legacies. In the UK the main capital tax is Inheritance Tax.

Some UK taxes are recorded as the resources of the EU. These include taxes on imports, which are payable to the EU under the EU treaties.

Compendium

## Statistics for European purposes

How the EU uses national accounts data in the calculation of gross national income, used to set the EU budget and member contributions.

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# Table of contents

1. [Introduction](#)
2. [UK transactions with the institutions of the EU](#)
3. [Data to monitor government deficit and debt](#)

# 1 . Introduction

The EU uses UK National Accounts data for a number of administrative and economic purposes. Gross national income (GNI) is one of the four measures used by the EU and is calculated in accordance with the European System of Accounts (ESA). GNI is used to set the EU budget and to calculate part of member states' contributions to the EU budget and is based on the European System of Accounts 2010: ESA 2010.

## 2 . UK transactions with the institutions of the EU

Table 11.a shows payments flowing between the EU and the UK. The first part of the table shows the payments flowing into the UK in the form of EU expenditure. The second part of the table shows the UK contribution to the EU budget, which depends on UK GNI. An explanatory article detailing the UK [contribution to the EU budget](#) was published on 30 September 2019.

## 3 . Data to monitor government deficit and debt

The convergence criteria for the Economic and Monetary Union (EMU) are set out in the 1992 Treaty on European Union (The Maastricht Treaty). The treaty, plus the Stability and Growth Pact, require member states to avoid excessive government deficits – defined as general government net borrowing and gross debt as a percentage of gross domestic product (GDP). The treaty does not determine what constitutes “excessive”. This is agreed by the Economic and Finance Council (ECOFIN).

Member states report their planned and actual deficits and the levels of their debt to the European Commission. Data to monitor excessive deficits are supplied in accordance with EU legislation.

The UK submitted the estimates in Table 11.a to the European Commission in September 2020.

Table 11.a: UK government debt and deficit, 2012 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
<b>General government deficit</b>								
<b>Net borrowing (£bn)</b>	139.2	98.0	103.1	87.3	65.4	50.1	48.2	51.2
<b>as percentage of GDP</b>	8.1	5.5	5.5	4.5	3.3	2.4	2.2	2.3
<b>General government debt</b>								
<b>Debt at nominal value (£bn)</b>	1,423.5	1,498.3	1,603.3	1,664.7	1,730.9	1,785.6	1,837.1	1,891.1
<b>as percentage of GDP</b>	83.2	84.2	86.1	86.7	86.8	86.3	85.8	85.4

Source: Office for National Statistics

# Environmental accounts

Estimates of oil and gas reserves, energy consumption, atmospheric emissions, material flows and natural capital.

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1. [Environmental accounts](#)
2. [Oil and gas reserves](#)
3. [Energy consumption](#)
4. [Atmospheric emissions](#)
5. [Material flows](#)
6. [Natural capital](#)
7. [More information](#)

# 1 . Environmental accounts

- Environmental accounts are “satellite accounts” to the main UK National Accounts.
- They are compiled in accordance with the [System of Environmental-Economic Accounting \(SEEA\)](#), which closely follows the [United Nations System of National Accounts \(SNA\)](#).
- They measure the impact the economy has on the environment, how the environment contributes to the economy, and how society responds to environmental issues by using the accounting framework and concepts of the national accounts.
- They are used to inform sustainable development policy, model impacts of fiscal or monetary measures and evaluate the environmental impacts of different sectors of the economy.
- Data are mostly provided in units of physical measurement (mass or volume) but can be provided in monetary units, where these are the most relevant or only data available.

[Tables 12.1 to 12.5](#) show estimates of oil and gas reserves, energy consumption, atmospheric emissions and material flows. More data, information and other environmental accounts (including fuel use, environmental goods and services sector, environmental taxes and environmental protection expenditure) can be found on the [UK Environmental Accounts release page](#).

## 2 . Oil and gas reserves

[Table 12.1](#) presents non-monetary estimates of the oil and gas reserves and resources in the UK. “Resources” are minerals that are potentially valuable and could eventually be extracted, whereas “reserves” refer to discovered minerals that are recoverable and commercially viable.

Discovered reserves can be proven, probable or possible depending on the level of certainty that, based on the available evidence, they can be technically and commercially producible:

- proven reserves: better than 90% chance
- probable reserves: between 50% and 90% chance
- possible reserves: between 10% and 50% chance

Contingent resources are also shown in [Table 12.1](#). These are the quantities of oil and gas estimated to be potentially recoverable from known sites, but the plans are not yet mature enough for commercial development. Potentially recoverable in this case means a better than 50% chance of being technically producible.

The Oil and Gas Authority (OGA) also produce estimates for prospective resources – those undiscovered or “yet to find”. Methodology for estimating this has changed over the years so it is not possible to show a consistent time series in [Table 12.1](#).

Oil is defined as both oil and the liquids that can be obtained from gas fields. Shale oil is not included in the estimates.

Gas includes gas expected to be available for sale from dry gas fields, gas condensate fields, oil fields associated with gas and a small amount from coal-bed methane projects. Shale gas is not included in these estimates. These reserves include onshore and offshore discoveries, but not flared gas or gas consumed in production operations.

Data is sourced from the OGA and the Department for Business, Energy and Industrial Strategy (BEIS).

### 3 . Energy consumption

[Table 12.2](#) presents energy consumption by industry for the UK. Energy consumption is defined as the use of energy for power generation, heating and transport. This is essential to most economic activities, for example, as input for production processes. The term “direct use of energy” refers to the energy content of fuel for energy at the point of use, allocated to the original purchasers and consumers of fuels. On the other hand, “reallocated use of energy” means that the losses incurred during transformation<sup>1</sup> and distribution<sup>2</sup> are allocated to the final consumer of the energy rather than incorporating it all in the electricity generation sector.

Fossil fuels are the main source of energy for consumption, although other sources (including nuclear, net imports, renewable<sup>3</sup> and waste sources) are becoming increasingly important.

Short-term fluctuations in energy consumption are often attributable to changes in temperature or gross domestic product (GDP). Longer term, the decline in energy consumption has largely been driven by the switch away from coal by the energy supply and manufacturing industries to other, more efficient fuels, such as natural gas and, more recently, renewable sources.

Data are provided by Ricardo Energy and Environment.

#### Notes for: Energy consumption

1. Transformation losses are the differences between the energy content of the input and output product, arising from the transformation of one energy product to another.
2. Distribution losses are losses of energy product during transmission (for example, losses of electricity in the grid) between the supplier and the user of the energy.
3. Renewable sources include: solar photovoltaic, geothermal and energy from wind, wave and tide, hydroelectricity, wood, charcoal, straw, liquid biofuels, biogas from anaerobic digestion and sewage gas. Landfill gas, poultry litter and municipal solid waste combustion have also been included within this definition.

### 4 . Atmospheric emissions

[Tables 12.3 and 12.4](#) show emissions of greenhouse gases, acid rain precursors (ARP) and other pollutants by industry for the UK.

Atmospheric emissions of greenhouse gases are widely believed to contribute to global warming and climate change.

The greenhouse gases included in the tables are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydro-fluorocarbons (HFC), perfluorocarbons (PFC), nitrogen trifluoride (NF<sub>3</sub>) and sulphur hexafluoride (SF<sub>6</sub>). For comparability, all figures are presented as carbon dioxide equivalents (CO<sub>2</sub>e).



Other important atmospheric emissions include acid rain precursors (ARPs). Acid rain is caused primarily by emissions of sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and ammonia (NH<sub>3</sub>) and can have harmful effects on the environment. For comparability, all figures are weighted according to their acidifying potential and presented as sulphur dioxide equivalents (SO<sub>2</sub>e).

Emissions levels are influenced by factors such as gross domestic product (GDP) and UK temperatures as well as policy initiatives, for example, those encouraging adoption of cleaner technologies or emissions standards on motor vehicles. Changes in energy consumption, particularly energy from fossil fuels, directly influence air emissions.

Data are provided by Ricardo Energy and Environment.

## 5 . Material flows

[Table 12.5](#) presents economy-wide material flow accounts, which estimate the physical flow of materials through the UK economy.

Domestic extraction is divided into four categories: biomass, non-metallic minerals, fossil energy materials and carriers, and metal ores:

- biomass includes material of biological origin that is not from fossil, such as crops, wood and wild fish catch
- non-metallic minerals are mainly construction and industrial minerals, including limestone and gypsum, sand and gravel, and clays
- fossil energy materials and carriers include coal, peat<sup>1</sup>, crude oil and natural gas
- metal ores include precious metals such as gold

Data are compiled from multiple sources including the Department for Environment, Food and Rural Affairs (Defra), the United Nations Food and Agriculture Organisation (FAO), the British Geological Survey (BGS), Eurostat, and the Kentish Cobnuts Association.

### Physical trade balance

The physical trade balance (PTB) shows the relationship between imports and exports and is calculated by subtracting the weight of exports from the weight of imports<sup>2</sup>. The UK has a positive PTB, meaning that more materials and products are imported than are exported suggesting that the UK may be becoming more reliant on the production of materials in other countries.

### Material consumption

Direct material input (DMI) (domestic extraction plus imports) measures the total amount of materials that are available for use in the economy.

Domestic material consumption (DMC) (domestic extraction plus imports minus exports) measures the amount of materials used in the economy and is calculated by subtracting exports from DMI.

### Notes for: Material flows

1. For fossil energy materials and carriers (which include coal, crude oil, natural gas and peat) peat estimates were not available from 2016.
2. The physical trade balance (imports minus exports) is defined in reverse to the monetary trade balance (exports minus imports). Physical estimates can differ quite significantly from monetary estimates.

## 6 . Natural capital

In collaboration with the Department for Environment, Food and Rural Affairs (Defra) we have been developing natural capital accounts to estimate the wealth of the UK's environment. These are currently Experimental Statistics.

The UK's natural wealth is reflected in the productivity of its soils, its access to clean water, and the splendour of its mountains. Any natural resource or process that supports human life forms an important part of our natural capital. Natural capital is one part of a wider move to better understand wealth. In that respect we are not only estimating what wealth the UK inherited in its islands and seas but what it might provide to future generations.

These figures are partial in terms of the number of services. We will continue to work to include as much of the economic value of the natural world as possible but may never complete that work, given the complexity and scale of the natural world. Our asset values are also narrowly market driven and not an absolute "value" of the natural world because nature supports all life on earth. Nature's wholesale collapse would be our own. For more detail please see the [UK Natural Capital Accounts](#).

## 7 . More information

There is more information about environmental accounts on the [UK Environmental Accounts release page](#).

The residency adjustment is included as the UK Environmental Accounts are based on a UK residency basis (as opposed to a territory basis). This is in line with national accounting principles, allowing environmental impacts to be compared on a consistent basis with economic indicators such as gross domestic product (GDP).

UK figures for [energy](#) and [air emissions](#) on a territory basis are published by the Department for Business, Energy and Industrial Strategy (BEIS) and the Department for Environment, Food and Rural Affairs (Defra). Energy and air emissions bridging tables are available, which illustrate the difference between these estimates.

Further explanation of the differences can be found in articles on [energy consumption](#), [alternative approaches to reporting UK greenhouse gas emissions \(PDF, 253KB\)](#) and [Net Zero and the different official measures of the UK's greenhouse gas emissions](#).

Data rounded to thousand tonnes can be found on the UK Environmental Accounts release page.

Compendium

## Flow of funds

Estimates of stocks and flows of financial assets and liabilities by institutional sector and financial instrument.

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## Table of contents

1. [Introduction](#)
2. [What is flow of funds?](#)

# 1 . Introduction

The tables in this chapter present estimates of stocks and flows of financial assets and liabilities by institutional sector and financial instrument.

Of these tables:

- [Table 13.1](#) presents flows (or transactions) of financial assets and liabilities for each institutional sector and lower-level financial instrument (financial account)
- [Table 13.2](#) presents levels (or stocks) of financial assets and liabilities for each institutional sector and lower-level financial instrument (balance sheet)
- [Tables 13.3.1 to 13.3.8](#) present both financial flows and stocks by institutional sector and financial instrument

Estimates for all the institutional sectors are brought together in this chapter to allow changes in assets and liabilities to be compared across the sectors. Estimates for each individual sector are also published in the appropriate sector chapters in this publication.

These financial statistics are important for identifying the build-up of risks in the financial sector and for understanding financial connections among the institutional sectors and subsectors within the economy.

## 2 . What is flow of funds?

“Flow of funds” refers to the financial flows across sectors of the UK economy and the rest of the world. Information can be presented on debtor and creditor relationships and the changes in financial assets and liabilities in the economy. Flow of funds is based on the principle that the movement of all funds must be accounted for. Across the total economy (UK and the rest of the world), the total sources of funds must equal the total uses of funds, and every financial asset transaction must have a counterpart liability transaction.

Since the recent global financial crisis, the international community has had an increased focus on the analysis of financial stability, and the development of improvements to the data that support that analysis. This is particularly important for those countries, like the UK, that have a significant financial sector. An important area identified internationally for improvement is the development of flow of funds counterpart statistics. These improve our understanding of how each individual sector may be exposed to the risk that could build up in other sectors. These statistics support macro-economic analysis and financial stability policy.

Counterpart statistics are not currently presented in this chapter. However, in response to the need for counterpart statistics, the Office for National Statistics (ONS) and the Bank of England started the joint Flow of Funds Project in 2014. More information on the project and experimental counterpart statistics is available based on last year's figures. Updated figures will be published on 7 December 2020.

Compendium

## Glossary

An A to Z definition of the main terms used within the national accounts.

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# 1 . A to B

## Above the line

Transactions in the production, current and capital accounts that are above the net lending (positive) or net borrowing (negative) (financial surplus or deficit) line in the presentation used in the economic accounts. The financial transactions account is below the line in this presentation.

## Accruals basis

A method of recording transactions based on when the exchange of ownership of the goods, services or financial asset occurs (see also cash basis). For example, Value Added Tax (VAT) accrues when the expenditure to which it relates takes place but HM Revenue and Customs (HMRC) receives the cash some time later. The difference between accruals and cash results in an asset and liability in the financial accounts, shown as amounts receivable or payable (F.7).

## Actual final consumption

The value of goods consumed, but not necessarily purchased, by a sector (see also final consumption expenditure, intermediate consumption).

## Advance and progress payments

Payments made for goods in advance of completion and delivery of the goods and services. Also referred to as staged payments.

## Asset boundary

A boundary separating assets included (for example, plant and factories and non-produced assets such as land and water resources) and those excluded (such as natural assets not managed for an economic purpose) in creating core economic accounts.

## Assets

Entities over which ownership rights are enforced by institutional units – individually or collectively – and from which economic benefits may be derived by owners holding them over a period of time.

## Balancing item

An accounting construct obtained by subtracting the total value of the entries on one side of an account from the total value for the other side.

## Balance of payments

A summary of the transactions between residents of a country and residents abroad in a given time period.

## **Balance of trade**

The balance of trade in goods and services is a summary of the imports and exports of goods and services across an economic boundary in a given period.

## **Balance sheet**

A statement, drawn up at a particular point in time, of the value of assets owned and of the financial claims (liabilities) against the owner of these assets.

## **Bank of England**

This comprises S.121, the central bank subsector of the financial corporation's sector.

## **Bank of England – Issue Department**

This part of the Bank of England deals with the issue of bank notes on behalf of central government. It was formerly classified to central government, though it is now part of the central bank and monetary authorities sector. Its activities include, among other things, market purchases of commercial bills from UK banks.

## **Basic prices**

These are the preferred method of measuring gross value added (GVA) and output. They reflect the amount received by the producer for a unit of goods or services, minus any taxes payable, plus any subsidy receivable on that unit as a consequence of production or sale (that is the cost of production including subsidies).

The only taxes included in the basic price are taxes on the production process – such as business rates and any Vehicle Excise Duty paid by businesses – that are not specifically levied on the production of a unit of output. Basic prices exclude any transport charges invoiced separately by the producer.

## **Below the line**

The financial transactions account that shows the financing of net lending (positive) or net borrowing (negative) (formerly financial surplus or deficit).

## **Bond**

A financial instrument that usually pays interest to the holder. Bonds are issued by governments and by companies and other institutions, for example, local authorities. Most bonds have a fixed date on which the borrower will repay the holder.

Bonds are attractive to investors because they can be bought and sold easily in a secondary market. Special forms of bonds include deep discount bonds, equity warrant bonds, Eurobonds and zero-coupon bonds.

## **British government securities**

Securities issued or guaranteed by the UK government; these also known as gilts.

## **2 . C to D**

### **Capital**

Capital assets are those that contribute to the productive process to produce an economic return. In other contexts, the word can include tangible assets (for example, buildings, plant and machinery), intangible assets and financial capital (see also fixed assets, inventories).

### **Capital formation**

Acquisitions less disposals of fixed assets, improvement of land, change in inventories and acquisitions less disposals of valuables.

### **Capital stock**

A measure of the cost of replacing the capital assets of a country held at a particular point in time.

### **Capital transfers**

Transfers that are related to the acquisition or disposal of assets by the recipient or payer. They may be in cash or kind and may be imputed to reflect the assumption or forgiveness of debt.

### **Cash basis**

The recording of transactions when cash or other assets are actually transferred, rather than on an accruals basis.

### **Certificate of deposit**

A short-term, interest-paying instrument issued by deposit-taking institutions in return for money deposited for a fixed period. Interest is earned at a given rate. The instrument can be used as security for a loan if the depositor requires money before the repayment date.

### **Chained volume measures**

Time series that measure economic activity in real terms (that is, excluding price effects). Series are calculated in the prices of the previous year and in current price, and these two-year series are then “chain linked” together. The advantage of the chain-linking method is that the previous period’s price structure is more relevant than the price structure of a fixed period from further in the past.



## **Cost, insurance and freight (CIF)**

The basis of valuation of imports for customs purposes, including the cost of insurance premiums and freight services. These need to be deducted to obtain the Free On Board (FOB) valuation consistent with the valuation of exports that is used in the economic accounts.

## **Classification of individual consumption by purpose (COICOP)**

An international classification that groups consumption according to its function or purpose. The heading clothing, for example, includes expenditure on garments, clothing materials, laundry and repairs. It is used to classify the expenditure of households.

## **Combined use table**

Table of the demand for products by each industry group or sector, whether from domestic production or imports, estimated at purchasers' prices. It displays the inputs used by each industry to produce their total output and separates out intermediate purchases of goods and services. The table shows which industries use which products: columns represent the purchasing industries; rows represent the products purchased.

## **Commercial paper**

This is an unsecured promissory note for a specific amount, maturing on a specific date. The commercial paper market allows companies to issue short-term debt directly to financial institutions, which then market this paper to investors or use it for their own investment purposes.

## **Compensation of employees**

Total remuneration payable to employees in cash or in kind. Includes the value of social contributions payable by the employer.

## **Consolidated accounts**

Accounts drawn up to reflect the affairs of a group of entities. For example, a ministry or holding company with many different operating agencies or subsidiary companies may prepare consolidated accounts reflecting the affairs of the organisation as a whole and accounts for each operating agency or subsidiary.

## **Consolidated fund**

An account of central government into which most government revenue (excluding borrowing and certain payments to government departments) is paid and from which most government expenditure (excluding loans and National Insurance benefits) is paid.

## **Consumption**

See final consumption, intermediate consumption.

## **Consumption of fixed capital**

The amount of capital resources used up in the process of production in any period. It is not an identifiable set of transactions but an imputed transaction, which can only be measured by a system of conventions.

## **Corporations**

All bodies recognised as independent legal entities that are producers of market output and whose principal activity is the production of goods and services.

## **Counterpart**

In a double-entry system of accounting, each transaction gives rise to two corresponding entries. These entries are the counterparts to each other, so the counterpart of a payment by one sector is the receipt by another.

## **Debenture**

A long-term bond issued by a UK or foreign company and secured on fixed assets. A debenture entitles the holder to a fixed-interest payment or a series of such payments.

## **Depreciation**

See consumption of fixed capital.

## **Derivatives (F.71)**

Financial instruments whose value is linked to the value of another financial instrument, indicator or commodity. Unlike the holder of a primary financial instrument (for example, a government bond or a bank deposit), who has an unqualified right to receive cash (or some other economic benefit), the holder of a derivative has only a qualified right to receive such a benefit. Examples of derivatives are options and swaps.

## **Dividend and Interest Matrix (DIM)**

This represents property income flows related to holdings of financial transactions. The gross flows are shown in D.4 property income.

## **Direct investment**

Net investment by UK or foreign companies in their foreign or UK branches, subsidiaries or associated companies. A direct investment in a company means that the investor has a significant influence on the operations of the company, defined as having an equity interest in an enterprise resident in another country of 10% or more of the ordinary shares or voting stock.

Investment includes not only acquisition of fixed assets, stock building and stock appreciation but also all other financial transactions such as: additions to, or payments of, working capital; other loans and trade credit; and acquisitions of securities. Estimates of investment flows allow for depreciation in any undistributed profits. Funds raised by the subsidiary or associate company in the economy in which it operates are excluded as they are locally raised and not sourced from the parent company.

## **Discount market**

The part of the market dealing with short-term borrowing. It is called the discount market because the interest on loans is expressed as a percentage reduction (discount) on the amount paid to the borrower. For example, for a loan of £100 face value, when the discount rate is 5%, the borrower will receive £95 but will repay £100 at the end of the term.

## **Double deflation**

A method for calculating value added by industry chained volume measures, which takes separate account of the differing price and volume movements of input and outputs in an industry's production process.

## **Dividend**

A payment made to company shareholders from current or previously retained profits. Dividends are recorded when they become payable.

## **3 . E to F**

### **ECGD**

See Export Credit Guarantee Department.

## **Economically significant prices**

These are prices whose level significantly affects the supply of the good or service concerned. Market output consists mainly of goods and services sold at "economically significant" prices, while non-market output comprises those provided free or at prices that are not economically significant.

## **Employee stock options**

An agreement made on a given date (the "grant" date) under which an employee may purchase a given number of shares of the employer's stock at a stated price (the "strike" price), either at a stated time (the "vesting" date) or within a period of time (the "exercise" period) immediately following the vesting date.

## **Enterprise**

An institutional unit producing market output. Enterprises are found mainly in the non-financial and financial corporation's sectors but exist in all sectors. Each enterprise consists of one or more kind-of-activity units.

## **Environmental accounts**

A satellite account describing the relationship between the environment and the economy.

## **Equity**

The ownership of a residual claim on the assets of the institutional unit that issued the instrument. Equities differ from other financial instruments in that they confer ownership of something more than a financial claim. Shareholders are owners of the company, whereas bond holders are merely outside creditors.

## **European System of National and Regional Accounts (ESA)**

An integrated system of economic accounts; the European version of the System of National Accounts (SNA).

## **European Investment Bank**

This was set up to assist economic development within the EU. Its members are the member states of the EU.

## **Exchange Cover Scheme (ECS)**

A scheme introduced in 1969 whereby UK public bodies raise foreign currency from overseas residents, either directly or through UK banks, and surrender it to the Exchange Equalisation Account in exchange for sterling to finance expenditure in the UK. HM Treasury sells the borrower foreign currency to service and repay the loan at the exchange rate that applied when the loan was taken out.

## **Exchange Equalisation Account (EEA)**

The government account with the Bank of England in which transactions in reserve assets are recorded. These transactions are classified to the central government sector. It is the means by which the government, through the Bank of England, influences exchange rates.

## **Export credit**

Credit extended abroad by UK institutions, primarily in connection with UK exports but also including some credit in respect of third country trade.

## **Export Credit Guarantee Department (ECGD)**

A non-ministerial government department, classified to the public corporations sector, the main function of which is to provide insurance cover for export credit transactions.

## **Factor cost**

In the SNA 1968, this was the basis of valuation that excluded the effects of taxes on expenditure and subsidies.

## **Final consumption expenditure**

The expenditure on those goods and services used for the direct satisfaction of individual needs or the collective needs of members of the community, as distinct from their purchase for use in the productive process. It may be contrasted with actual final consumption, which is the value of goods consumed, but not necessarily purchased, by that sector (see also intermediate consumption).

## **Financial auxiliaries (S.126)**

Activities closely related to financial intermediation but that are not financial intermediation themselves, such as the repackaging of funds, insurance broking and fund management. Financial auxiliaries include insurance brokers and fund managers.

## **Financial corporations (S.12)**

All bodies recognised as independent legal entities whose principal activity is financial intermediation and/or the production of auxiliary financial services.

## **Financial intermediation**

The activity by which an institutional unit acquires financial assets and incurs liabilities on its own account by engaging in financial transactions on the market. The assets and liabilities of financial intermediaries have different characteristics so that the funds are transformed or repackaged with respect to maturity, scale or risk, for example, in the financial intermediation process.

## **Financial Intermediation Services Indirectly Measured (FISIM)**

The implicit charge for the service provided by monetary financial institutions paid for by the interest differential between borrowing and lending rather than through fees and commissions.

## **Financial leasing**

A form of leasing in which the lessee (the lease holder) contracts to assume the rights and responsibilities of ownership of leased goods from the lessor (the legal owner) for the whole (or virtually the whole) of the economic life of the asset. In the economic accounts, this is recorded as the sale of the asset to the lessee, financed by an imputed loan (F.42). The leasing payments are split into interest payments and repayments of principal.

## **Fixed assets**

Produced assets that are themselves used repeatedly or continuously in the production process for more than one year. They comprise buildings and other structures, vehicles and other plant and machinery as well as plants and livestock that are used repeatedly or continuously in production, for example, fruit trees or dairy cattle. They also include intangible assets such as computer software, research and development, and artistic originals.

## Flows

These reflect the creation, transformation, exchange, transfer or extinction of economic value. They involve changes in the volume, composition or value of an institutional unit's assets and liabilities. They are recorded in the production, distribution and use of income and accumulation accounts.

## Free On Board (FOB)

A Free On Board (FOB) price excludes the cost of insurance and freight from the country of consignment but includes all charges up to the point of the exporting country's customs frontier.

## Futures

Forward contracts traded on organised exchanges. They give the holder the right to purchase a commodity or a financial asset at a future date.

## 4 . G to H

### Gilts

Bonds issued or guaranteed by the UK government. Also known as gilt-edged securities or British Government securities.

### Gold

The SNA and the International Monetary Fund (IMF) (in the sixth edition of its Balance of Payments Manual) recognise three types of gold:

- monetary gold, treated as a financial asset
- gold held as a store of value, to be included in valuables
- gold as an industrial material, to be included in intermediate consumption or inventories

The present treatment is as follows:

In the accounts, a distinction is drawn between gold held as a financial asset (financial gold) and gold held like any other commodity (commodity gold). Commodity gold in the form of finished manufactures, together with net domestic and overseas transactions in gold moving into or out of finished manufactured form (as in for jewellery, dentistry, electronic goods, medals and proof – but not bullion – coins) is recorded in exports and imports of goods.

All other transactions in gold (that is, those involving semi-manufactures, for example, rods and wire, bullion, bullion coins, or banking-type assets and liabilities denominated in gold, including official reserve assets) are treated as financial gold transactions and included in the financial account of the balance of payments.

The UK has adopted different treatment to avoid distortion of its trade in goods account by the substantial transactions of the London bullion market.

## **Grants**

Voluntary transfer payments. They may be current or capital in nature. Grants from the government or the EU to producers are subsidies.

## **Gross**

Important economic series can be shown as gross (as in, before deduction of the consumption of fixed capital) or net (as in, after deduction). Gross has this meaning throughout this publication unless otherwise stated.

## **Gross domestic product (GDP)**

The total value of output in the economic territory. It is the balancing item on the production account for the whole economy. Domestic product can be measured gross or net. It is presented in the accounts at market (or purchasers') prices.

## **Gross fixed capital formation (GFCF)**

Acquisitions less disposals of fixed assets and the improvement of land.

## **Gross national disposable income**

The income available to the residents arising from gross domestic product (GDP) and receipts from, less payments to, the rest of the world of employment income, property income and current transfers.

## **Gross national income (GNI)**

GDP less net taxes on production and imports, less compensation of employees and property income payable to the rest of the world, plus the corresponding items receivable from the rest of the world.

## **Gross value added (GVA) (B.1g)**

The value generated by any unit engaged in production and the contributions of individual sectors or industries to GDP. It is measured at basic prices, excluding taxes less subsidies on products.

## **Holding companies**

A purely financial concern that uses its capital solely to acquire interests (normally controlling interests) in a number of operating companies. Although the purpose of a holding company is mainly to gain control and not to operate, it will typically have representation on the boards of directors of the operating firms.

Holding companies provide a means by which corporate control can become highly concentrated through pyramiding. A holding company may gain control over an operating company which itself has several subsidiaries.

## **Holding gains or losses**

Profit or loss obtained by virtue of the changing price of assets being held. Holding gains or losses may arise from either physical or financial assets.

## **Households (S.14)**

Individuals or small groups of individuals as consumers, and in some cases as entrepreneurs, producing goods and market services (where such activities cannot be hived off and treated as those of a quasi corporation).

## **5 . I to J**

### **Imputation**

The process of inventing a transaction where, although no money has changed hands, there has been a flow of goods or services. It is confined to a very small number of cases where a reasonably satisfactory basis for the assumed valuation is available.

### **Index-linked gilts**

Gilts whose coupon and redemption value are linked to movements in the Retail Prices Index.

### **Institutional unit**

The individual bodies whose data are amalgamated to form the sectors of the economy. A body is regarded as an institutional unit if it has decision-making autonomy in respect of its principal function and either keeps a complete set of accounts or is in a position to compile, if required, a complete set of accounts that would be meaningful from both an economic and a legal viewpoint.

### **Input–output**

A detailed analytical framework based on supply and use tables. These are matrices showing the composition of output of individual industries by types of product and how the domestic and imported supply of goods and services is allocated between various intermediate and final uses, including exports.

### **Institutional sector**

In the economic accounts, the economy is split into different institutional sectors, that is, units grouped according broadly to their role in the economy. The main sectors are non-financial corporations, financial corporations, general government, households and non-profit institutions serving households (NPISH). The rest of the world is also treated as a sector for many purposes within the accounts.



## Intellectual property products (AN.112)

Products including mineral exploration, computer software, research and development, and entertainment, literary or artistic originals. Expenditure on them is part of GFCF. They exclude non-produced non-financial assets such as leases, transferable contracts and purchased goodwill, expenditure on which would be intermediate consumption.

## Intermediate consumption

The consumption of goods and services in the production process. It may be contrasted with final consumption and capital formation.

## International Monetary Fund (IMF)

A fund set up as a result of the Bretton Woods Conference in 1944, which began operations in 1947. It currently has [190 member countries](#) (as of October 2020) including most of the major countries of the world. The fund was set up to supervise the fixed exchange rate system agreed at Bretton Woods and to make available to its members a pool of foreign exchange resources to assist them when they have balance of payments difficulties. It is funded by member countries' subscriptions according to agreed quotas.

## Inventories

Finished goods (held by the producer prior to sale, further processing or other use) and products (materials and fuel) acquired from other producers to be used for intermediate consumption or resold without further processing as well as military inventories.

## 6 . K to L

### Kind-of-activity unit (KAU)

An enterprise, or part of an enterprise, that engages in only one kind of non-ancillary productive activity or in which the principal productive activity accounts for most of the value added. Each enterprise consists of one or more kind-of-activity units.

## Liability

A claim on an institutional unit by another body that gives rise to a payment or other transaction transferring assets to the other body. Conditional liabilities, where the transfer of assets only takes place under certain defined circumstances, are known as contingent liabilities.

## Life assurance

An insurance policy that, in return for the payment of regular premiums, pays a lump sum on the death of the insured. In the case of policies limited to investments that have a cash value, in addition to life cover, a savings element provides benefits that are payable before death. In the UK, endowment assurance provides life cover or a maturity value after a specified term, whichever is sooner.

## **Liquidity**

The ease with which a financial instrument can be exchanged for goods and services. Cash is very liquid whereas a life assurance policy is less so.

## **Lloyd's of London**

The international insurance and reinsurance market in London.

## **7 . M to N**

### **Marketable securities**

Securities that can be sold on the open market.

### **Market output**

Output of goods and services sold at economically significant prices.

### **Merchant banks**

Monetary financial institutions whose main business is primarily concerned with corporate finance and acquisitions.

### **Mixed income**

The balancing item on the generation of income account for unincorporated businesses owned by households. The owner or members of the same household often provide unpaid labour inputs to the business. The surplus is therefore a mixture of remuneration for such labour and return to the owner as entrepreneur.

### **Monetary financial institutions (MFIs) (S.121-S.123)**

As defined by the European Central Bank, these consist of all institutional units included in the central bank (S.121), deposit-taking corporations except the central bank (S.1.22) and money market funds (S.123) subsectors.

### **Money market**

The market in which short-term loans are made and short-term securities traded. "Short-term" usually applies to periods of under one year but can be longer in some instances.

## **NACE**

The industrial classification used in the EU. Revision 2 is the "Statistical classification of economic activities in the European Community in accordance with Commission Regulation (EC) No. 1893/2006 of 20 December 2006".

## **National income**

The total value of goods produced and services provided by a country during one year, equal to the GDP plus the net income from foreign investments.

## **Net**

After deduction of the consumption of fixed capital. Also used in the context of financial accounts and balance sheets to denote, for example, assets less liabilities.

## **Non-market output**

Output of own account production of goods and services provided free or at prices that are not economically significant. Non-market output is produced mainly by the general government and NPISH sectors.

## **Non-observed economy**

Certain activities that may be productive and also legal but are concealed from the authorities for various reasons, for example, to evade taxes or regulation. In principle these, as well as economic production that is illegal, are to be included in the accounts but are by their nature difficult to measure.

## **Non-profit institutions serving households (NPISH) (S.15)**

These include bodies such as charities, universities, churches, trade unions and members' clubs.

## **8 . O to P**

### **Operating leasing**

The conventional form of leasing in which the lessee makes use of the leased asset for a period in return for a rental while the asset remains on the balance sheet of the lessor. The leasing payments are part of the output of the lessor and the intermediate consumption of the lessee (see also Financial leasing).

### **Operating surplus**

The balance on the generation of income account. Households also have a mixed income balance. It may be seen as the surplus arising from the production of goods and services before taking into account flows of property income.

### **Ordinary share**

The most common type of share in the ownership of a corporation. Holders of ordinary shares receive dividends (see also equity).

## **Output for own final use (P.12)**

Production of output for final consumption or GFCF by the producer. Also known as own-account production.

## **Own-account production**

Production of output for final consumption or GFCF by the producer. Also known as output for own final use.

## **Par value**

A security's face or nominal value. Securities can be issued at a premium or discount to par.

## **Pension funds (S.129)**

The institutions that administer pension schemes. Pension schemes are significant investors in securities. Self-administered funds are classified in the financial accounts as pension funds. Those managed by insurance companies are treated as long-term business of insurance companies.

## **Perpetual inventory model (or method) (PIM)**

A method for estimating the level of assets held at a particular point in time by accumulating the acquisitions of such assets over a period and subtracting the disposals of assets over that period. Adjustments are made for price changes over the period. The perpetual inventory model (PIM) is used in the UK National Accounts to estimate the stock of fixed capital and as such the value of the consumption of fixed capital.

## **Portfolio**

A list of the securities owned by a single investor. In the balance of payments statistics, portfolio investment is investment in securities that does not qualify as direct investment.

## **Preference share**

This type of share guarantees its holder a prior claim on dividends. The dividend paid to preference shareholders is normally more than that paid to holders of ordinary shares. Preference shares may give the holder a right to a share in the ownership of the company (participating preference shares). However, in the UK they usually do not, and are therefore classified as bonds (F.3).

## **Prices**

See economically significant prices, basic prices, purchasers' prices.

## **Principal**

The lump sum that is lent under a loan or a bond.

## **Production boundary**

Boundary between production included in creating core economic accounts (such as all economic activity by industry and commerce) and production that is excluded (such as production by households that is consumed within the household).

## **Promissory note**

A security that entitles the bearer to receive cash. These may be issued by companies or other institutions (see commercial paper).

## **Property income**

Incomes that accrue from lending or renting financial or tangible non-produced assets, including land, to other units. See also tangible assets.

## **Public corporations (S.11001 and S.12001)**

These are public trading bodies that have a substantial degree of financial independence from the public authority which created them. A body is normally treated as a trading body when more than half of its income is financed by fees. A public corporation is publicly controlled to the extent that the public authorities appoint a majority of the board of management or when public authorities can exert significant control over general corporate policy through other means.

Since the 1980s, many public corporations, such as the BT Group, have been privatised and reclassified within the accounts as private non-financial corporations. Public corporations can also exist in the financial sector.

## **Public sector**

Central government, local government and public corporations.

## **Purchasers' prices**

These are the prices paid by purchasers. They include transport costs, trade margins and taxes (unless the taxes are deductible by the purchaser from their own tax liabilities).

## **9 . Q to R**

### **Quasi corporations**

Unincorporated enterprises that function as if they were corporations. For the purposes of allocation to sectors and subsectors, they are treated as if they were corporations, that is, separate units from those to which they legally belong. Three main types of quasi corporation are recognised in the accounts:

- unincorporated enterprises owned by the government that are engaged in market production
- unincorporated enterprises (including partnerships) owned by households
- unincorporated enterprises owned by foreign residents

The last group consists of permanent branches or offices of foreign enterprises and production units of foreign enterprises that engage in significant amounts of production in the territory over long or indefinite periods of time.

## **Real national disposable income (RNDI)**

Gross national disposable income adjusted for changes in prices and in the terms of trade.

## **Related companies**

Branches, subsidiaries, associates or parents.

## **Related import or export credit**

Trade credit between related companies included in direct investment.

## **Rental**

The amount payable by the user of a fixed asset to its owner for the right to use that asset in production for a specified period of time. It is included in the output of the owner and the intermediate consumption of the user.

## **Rents (D.45)**

The property income derived from land and subsoil assets. It should be distinguished in the current system from rental income derived from buildings and other fixed assets, which is included in output (P.1).

## **Repurchase agreement (repo or reverse repo)**

This is short for “sale and repurchase agreement”. One party agrees to sell bonds or other financial instruments to other parties under a formal legal agreement to repurchase them at some point in the future – usually up to six months – at a fixed price.

Reverse repos are the counterpart asset to any repo liability. Repo or reverse repo transactions are generally treated as borrowing or lending within other investment, rather than as transactions in the underlying securities.

The exception is for banks, where repos are recorded as deposit liabilities. Banks’ reverse repos are recorded as loans, the same as for all other sectors. Legal ownership does not change under a “repo” agreement. It was previously treated as a change of ownership in the UK financial account but under the SNA is treated as a collateralised deposit (F.22).

## **Reserve assets**

Short-term assets that can be very quickly converted into cash. They comprise the UK's official holdings of gold, convertible currencies, special drawing rights and changes in the UK reserve position in the IMF.

Also included between July 1979 and December 1998 are European Currency Units (ECUs) acquired from swaps with the European Monetary Cooperation Fund (EMCF), European Monetary Institute (EMI) and the European Central Bank (ECB).

## **Residents**

These comprise general government, individuals, private non-profit-making bodies serving households and enterprises within the territory of a given economy.

## **Residual error**

The term used in the former accounts for the difference between the measures of GDP from the expenditure and income approaches.

## **Resources and uses**

The term resources refers to the side of the current accounts where transactions that add to the amount of economic value of a unit or sector appear. For example, wages and salaries are a resource for the unit or sector receiving them. Resources are by convention put on the right side or at the top of tables arranged vertically.

The left side (or bottom section) of the accounts, which relates to transactions that reduce the amount of economic value of a unit or sector, is termed uses. To continue the example, wages and salaries are a use for the unit or sector that must pay them.

## **Rest of the world**

This sector records the counterpart of transactions of the whole economy with non-residents.

# **10 . S to T**

## **Satellite accounts**

Satellite accounts describe areas or activities not dealt with by core economic accounts. These areas or activities are considered to require too much detail for inclusion in the core accounts or they operate with a different conceptual framework. Internal satellite accounts re-present information within the production boundary. External satellite accounts present new information not covered by the core accounts.

## **Saving (B.8g)**

The balance on the use of income account. It is that part of disposable income that is not spent on final consumption and may be positive or negative.

## **Secondary market**

A market in which holders of financial instruments can resell all or part of their holding. The larger and more effective the secondary market for any particular financial instrument, the more liquid that instrument is to the holder.

## **Sector**

See institutional sector.

## **Securities**

Tradable or potentially tradable financial instruments.

## **Standard Industrial Classification (SIC)**

The industrial classification applied to the collection and publication of a wide range of economic statistics. The current version, Standard Industrial Classification (SIC) 2007, is consistent with NACE, revision 2. See NACE for further details.

## **System of National Accounts (SNA)**

The internationally agreed standard system for macroeconomic accounts. The latest version is described in SNA 2008.

## **Special drawing rights (SDRs) (F.12)**

These are reserve assets created and distributed by decision of the members of the IMF. Participants accept an obligation to provide convertible currency to another participant, when designated by the IMF to do so, in exchange for special drawing rights (SDRs) equivalent to three times their own allocation.

Only countries with a sufficiently strong balance of payments are so designated by the IMF. SDRs may also be used in certain direct payments between participants in the scheme and for payments of various kinds to the IMF.

## **Special purpose entities (SPEs)**

These are generally organised or established in economies other than those in which the parent companies are resident and engaged primarily in international transactions but in few or no local operations.

Special purpose entities (SPEs) are defined either by their structure (for example, financing subsidiary, holding company, base company or regional headquarters) or their purpose (for example, sale and regional administration, management of foreign exchange risk or facilitation of financing of investment).

SPEs should be treated as direct investment enterprises if they meet the 10% criterion. They are an integral part of direct investment networks as are, for the most part, SPE transactions with other members of the group.



## Staged payments

See advance and progress payments.

## Standardised guarantees

These are normally issued in large numbers, usually for fairly small amounts, along identical lines. There are three parties involved in these arrangements: the debtor, the creditor and the guarantor. Either the debtor or creditor may contract with the guarantor to repay the creditor if the debtor defaults. The classic examples are export credit guarantees and student loan guarantees.

## Subsidiaries

Companies owned or controlled by another company. Under Section 1159 of the Companies Act (2006) this means, broadly speaking, that another company either:

- holds a majority of the voting rights
- is a member and has the right to appoint or remove a majority of its board of directors
- is a member and controls alone (pursuant to an agreement with other members) a majority of the voting rights

The category also includes subsidiaries of subsidiaries.

## Subsidies (D.3)

Current unrequited payments made by general government or the EU to enterprises. Those made on the basis of a quantity or value of goods or services are classified as “subsidies on products” (D.31). Other subsidies based on levels of productive activity (for example, numbers employed) are designated “other subsidies on production” (D.39).

## Suppliers' credit

Export credit extended overseas directly by UK firms other than to related concerns.

## Supply table

Table of estimates of domestic industries' output by type of product. Compiled at basic prices and including columns for imports of goods and services, for distributors' trading margins and for taxes less subsidies on products. The final column shows the value of the supply of goods and services at purchasers' prices. This table shows which industries make which products: columns represent the supplying industries, rows represent the products supplied.

## **Taxes**

Compulsory unrequited transfers to central or local government or the EU. Taxation is classified in the following main groups: taxes on production and imports (D.2), current taxes on income wealth and so on (D.5), and capital taxes (D.91).

## **Technical reserves (of insurance companies) (F.61)**

These reserves consist of prepaid premiums, reserves against outstanding claims, actuarial reserves for life insurance and reserves for with-profit insurance. They are treated in the economic accounts as the property of policy-holders.

## **Terms of trade**

Ratio of the change in export prices to the change in import prices. An increase in the terms of trade implies that the receipts from the same quantity of exports will finance an increased volume of imports, so measurement of real national disposable income needs to take account of this factor.

## **Transfers**

Unrequited payments made by one unit to another. They may be current transfers (D.5 to D.7) or capital transfers (D.9). The most important types of transfers are taxes, social contributions and benefits.

## **Treasury bills**

Short-term securities or promissory notes that are issued by the government in return for funding from the money market. Each week in the UK, the Bank of England invites tenders for sterling Treasury bills from the financial institutions operating in the market. European currency unit (ECU) or euro-denominated bills were issued by tender each month, but this programme has now wound down; the last bill was redeemed in September 1999. Treasury bills are an important form of short-term borrowing for the government, generally being issued for periods of three or six months.

# **11 . U to Z**

## **Unit trusts**

Institutions within subsector S.123 through which investors pool their funds to invest in a diversified portfolio of securities. Individual investors purchase units in the fund representing an ownership interest in the large pool of underlying assets, giving them an equity stake. The selection of assets is made by professional fund managers.

Unit trusts give individual investors the opportunity to invest in a diversified and professionally managed portfolio of securities, without the need for detailed knowledge of the individual companies issuing the stocks and bonds. They differ from investment trusts in that the latter are companies in which investors trade shares on the stock exchange, whereas unit trust units are issued and bought back on demand by the managers of the trust.

The prices of unit trust units reflect the value of the underlying pool of securities, whereas the price of shares in investment trusts are affected by the usual market forces.

## Uses

See resources and uses.

## Use table

See combined use table.

## United Kingdom (UK)

Broadly, in the accounts, the United Kingdom (UK) comprises Great Britain plus Northern Ireland and that part of the continental shelf deemed by international convention to belong to the UK. It excludes the Channel Islands and the Isle of Man.

## Valuables

Goods of considerable value that are not used primarily for production or consumption but are held as stores of value over time, for example, precious metals, precious stones, jewellery and works of art.

## Valuation

See basic prices, purchasers' prices, factor cost.

## Value added

The balance on the production account: output less intermediate consumption. Value added may be measured net or gross.

## Value Added Tax (VAT) (D.211)

A tax paid by enterprises. In broad terms an enterprise is liable for VAT on the total of its taxable sales but may deduct tax already paid by suppliers on its inputs (intermediate consumption). Therefore, the tax is effectively on the value added by the enterprise. Where the enterprise cannot deduct tax on its inputs, the tax is referred to as non-deductible. VAT is the main UK tax on products (D.21).

Compendium

## Background notes

Information about the compilation of the latest national accounts including quality and reliability issues.

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## 1 . Feedback

We welcome your feedback on this publication. If you would like to get in touch, please contact us via email: [blue.book.coordination@ons.gov.uk](mailto:blue.book.coordination@ons.gov.uk).

## 2 . Release policy

This release includes data up to 2019. Data are consistent with the [Index of Production](#) and the current price trade in goods data within [UK trade](#), both published on 9 October 2020, as well as the [balance of payments](#), [quarterly national accounts](#) and [UK Economic Accounts](#), published on 30 September 2020.

## 3 . Continuous improvement of sources, methods and communication

Because of changes to our publishing regime as a result of the coronavirus (COVID-19) pandemic, which allowed us to increase our level of cross-cutting analysis to service the needs of the UK, we have been unable to provide our separate high-level articles detailing methods guidance for Blue Book 2020. However, we have published a series of articles detailing the changes and the impact they would have within Blue Book 2020. These can be found on the Office for National Statistics (ONS) website using the following keywords: BlueBook2020, BB20 and NationalAccounts.

## 4 . National accounts classification decisions

The UK National Accounts are produced under internationally agreed guidance and rules set out [European System of Accounts: ESA 2010 \(PDF, 6.4MB\)](#) and the accompanying [Manual on Government Deficit and Debt – Implementation of ESA 2010 to 2016 edition \(MGDD\) \(PDF, 3.7MB\)](#).

In the UK, we are responsible for the application and interpretation of these rules. Therefore, we make [classification decisions](#) based on the agreed guidance and rules.

## 5 . Economic context

We publish [economic commentary](#), giving commentary on the latest gross domestic product (GDP) estimate and our other economic releases. The next commentary will be published on 22 December 2020.

## 6 . Important quality issues

Common pitfalls in interpreting series include:

- expectations of accuracy and reliability in early estimates are often too high
- revisions are an inevitable consequence of the trade-off between timeliness and accuracy
- early estimates are based on incomplete data

Very few statistical revisions arise because of “errors” in the popular sense of the word. All estimates, by definition, are subject to statistical “error”. In this context, the word refers to the [uncertainty](#) inherent in any process or calculation that uses sampling, estimation or modelling. Most revisions reflect either the adoption of new statistical techniques or the incorporation of new information, which allow the statistical error of previous estimates to be reduced. Only rarely are there avoidable “errors”, such as human or system failures, and such mistakes are made clear when they do occur.

## 7 . The quality of Blue Book estimates

Unlike many of the short-term indicators we publish, there is no simple way of measuring the accuracy of the Blue Book dataset. All estimates, by definition, are subject to statistical [uncertainty](#), and for many well-established statistics we measure and publish the sampling error and non-sampling error associated with the estimate, using this as an indicator of accuracy. Since [sampling](#) is typically done to determine the characteristics of a whole population, the difference between the sample and population values is considered a sampling error. Non-sampling errors are a result of deviations from the true value that are not a function of the sample chosen, including various systematic errors and any other errors that are not because of sampling.

The Blue Book dataset, however, is currently constructed from various data sources, some of which are not based on random samples or do not have published sampling and non-sampling errors available. This makes it very difficult to measure both error aspects and their impact on gross domestic product (GDP). While development work continues in this area, like all other G7 National Statistical Institutes (NSIs) we do not publish a measure of the sampling error or non-sampling error associated with this dataset.

## 8 . Reliability

Estimates for the most recent quarters are provisional and are subject to revision in the light of updated source information. We currently provide an analysis of past revisions in the gross domestic product (GDP) and other statistical bulletins that present time series.

Our [revisions to economic statistics page](#) brings together our work on revisions analysis, linking to articles and revisions policies. Revisions to data provide one indication of the reliability of main indicators.

## 9 . Further information

You can get the latest copies of this and all our other releases through our [release calendar](#).

Details of the policy governing the release of new data are available from the UK Statistics Authority.

We are committed to ensuring that all information provided is kept strictly confidential and will only be used for statistical purposes. Further details regarding confidentiality can be found in the respondent charters for [businesses](#) and [households](#).

## 10 . Code of Practice

[National Statistics](#) are produced to high professional standards set out in the [Code of Practice for Statistics](#). They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.

