

Business investment in the UK quality and methods guide

What the business investment in the UK statistics cover, how we produce them, and their quality and comparability. Includes definitions and latest, past and upcoming changes.

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1 . Overview

We produce quarterly business investment estimates showing investment in non-financial assets. Non-financial assets include capital items like machinery, computer hardware, transport equipment, software, and new building work, but exclude spending on dwellings, ownership transfer costs of non-produced assets, and capital expenditure by local or central government.

Our business investment estimates are mainly based on results from our Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS), which collects data from 24,500 UK businesses. Estimates are benchmarked annually to our Annual Business Survey (ABS).

We publish both provisional and revised business investment estimates each quarter in our [Business investment in the UK bulletins](#). These are published alongside our Gross domestic product (GDP) first quarterly estimate bulletins and our GDP quarterly national accounts, UK bulletins.

Business investment headline and asset estimates are available from 1997 onwards. Gross fixed capital formation estimates, of which business investment is a subcomponent, has annual data from 1948 and quarterly data from 1955.

Headline-only business investment estimates are available from 1965 onwards; pre-1997 data are indicative only because of limitations in the calculation methods. More information on these limitations can be found in our [Business investment headline data pre-1997 dataset](#).

These are [accredited official statistics](#). For more information, see [Section 5: Quality of the statistics](#).

Latest changes to quality and methods

We updated this guide on 21 January 2026. Important changes to quality and methods include:

- redeveloped research and development estimates, which incorporate end-to-end redeveloped Business Enterprise Research and Development (BERD) survey data
- updated estimates of own-account software, including Annual Survey of Hours and Earnings (ASHE) data

For more information on latest, past and upcoming changes, go to [Section 6: Changes and their effects on comparability over time](#).

2 . What the statistics cover

We present statistics on business investment in the UK in:

- our [Business investment by asset dataset](#)
- our [Business investment by industry and asset dataset](#)

Breakdowns in the datasets

Our datasets give breakdowns by asset, industry and sector type.

Our Business investment by asset dataset provides breakdowns of asset types for all industries, including:

- transport equipment
- information and communications technology (ICT) equipment and other machinery and equipment
- other buildings and structures
- intellectual property products
- new building work (private sector manufacturing industries only)
- other capital equipment (private sector manufacturing industries only)

Our Business investment by industry and asset dataset provides breakdowns by industry and sector type for all assets, including:

- private sector solid fuels and oil refining
- private sector metals and metal goods
- private sector chemicals and man-made fibres
- private sector engineering and vehicles
- private sector food, drink and tobacco
- private sector textiles clothing, leather and footwear
- private sector other manufacturing
- public corporations manufacturing
- electricity, gas and water
- agriculture, forestry and fishing
- mining and quarrying
- hotels and restaurants
- financial intermediation
- transportation and storage
- information and communication
- real estate renting and business
- education
- health and social work
- other services
- construction
- distribution services

We also publish further breakdowns for various periods and price types in our [Business investment within transportation and storage by industry dataset](#) and our [Business investment time series](#).

Time periods covered by these statistics

Data are available on a quarterly basis from Quarter 1 (Jan to Mar) 1997 onwards, and on an annual basis from 1997 onwards.

Historical estimates are also available from 1965 onwards in our [Business investment headline pre-1997 dataset](#). However, pre-1997 data are indicative only because of limitations in the calculation methods, which are explained in the [dataset](#).

Price types covered by these statistics

Data are available in both current price (nominal) and chained volume measures (real) bases.

Seasonal adjustment types covered by these statistics

Quarterly data are available on both a non-seasonally adjusted and a seasonally adjusted basis.

3 . Where the data come from

Our business investment statistics come from multiple data sources.

The largest source of quarterly data is our [Quarterly Acquisitions and Disposal of Capital Assets Survey \(QCAS\)](#), which collects data from 24,500 UK businesses with more than 19 employees. QCAS asks businesses to provide the value of their acquisitions and disposals of capital assets so that we can derive net investment estimates. QCAS replaced the Quarterly Survey of Capital Expenditure (CAPEX) in 2015. Further quality and methods information (QMI) is available in our [QCAS QMI](#).

Other data sources include:

- capital expenditure estimates from our [Annual Business Survey \(ABS\)](#), which collects information from approximately 62,000 UK businesses for benchmarking our timelier quarterly QCAS estimates
- quarterly imports and exports of aircraft recorded by HM Revenue and Customs (HMRC)
- estimates of research and development investment of UK businesses from our annual [Business enterprise research and development \(BERD\) survey](#)
- estimates of research and development investment of non-profit organisations from our bi-annual Private non-profit research and development (PNP) census survey
- estimates of higher education research and development investment from the [Transparent Approach to Costing \(TRAC\)](#) data
- annual estimates of cultivated assets provided by the Department for Environment, Food and Rural Affairs (DEFRA)
- modelled estimates of own-account software using our [Annual Survey of Hours and Earnings](#) (ASHE) data
- modelled estimates of entertainment and artistic originals based on production costs for TV and radio programmes and films
- income from music originals and income to authors and publishers from literary originals
- production costs of miscellaneous artwork
- investment in various assets by public corporations based on HM Treasury's (HMT) Whole of Government Accounts (WGA), our quarterly survey of the largest public corporations, administrative data from other government departments, and published accounts

More information on data sources is in our [Quarterly gross domestic product \(GDP\) data sources catalogue](#).

4 . How we produce the statistics

Business investment is a subcomponent of gross fixed capital formation (GFCF), which measures investment in fixed assets used for producing goods and services for more than a year. Therefore, the production process for our business investment statistics follows the same approach as GFCF.

Data collection and aggregation

Estimates from the [Quarterly Acquisition and Disposal of Capital Assets Survey \(QCAS\)](#) are aggregated by industry and asset type.

Further aggregation

To produce sector-, asset- and industry-level estimates at current prices, QCAS survey data are then combined with other sources, including annual and forecast data and inputs from elsewhere in the National Accounts.

Deflation

To remove the impact of price changes, we apply appropriate deflators to the current price data using:

- Producer Price Indices
- Import Price Indices
- Services Producer Price Indices
- Construction Output Price Indices

This allows us to create previous year prices and chained volume measures, which show real growth without the impact of price changes. More detail on the methodology used to create chained volume estimates is in our [Chain-linking methods used within the UK National Accounts methodology](#).

Annual reviews and benchmarking

Alongside reviews of our methods, these outputs go through the [annual gross domestic product \(GDP\) supply use balancing process](#). This is where adjustments are made to ensure consistency across GDP components. Data are also benchmarked against our [Annual Business Survey \(ABS\)](#).

Seasonal adjustment

We produce [seasonally adjusted](#) data to remove price and seasonal effects, such as seasonal business cycles. This makes short-term trends clearer by removing seasonal noise. We also publish non-seasonally adjusted estimates in our [GFCF – by sector and asset dataset](#).

National Accounts alignment

Our business investment estimates are part of GFCF, so they feed into the expenditure approach to measuring GDP. Data are aligned with previously published estimates so they comply with the [National Accounts Revisions Policy](#).

Balancing adjustments where there is known data uncertainty may be applied to maintain consistency across the three approaches to GDP: expenditure, production and income. These adjustments are agreed through expert consultation and published in our GDP releases. Further information on GDP balancing can be found in our [Recent challenges of balancing the three approaches of GDP article](#).

Quality assurance and compliance

At every stage, data undergo quality assurance checks at a micro (business) level and macro-levels by monitoring movements and ensuring compliance with National Accounts identities.

5 . Quality of the statistics

Statistical designation

The Office for Statistics Regulation independently reviewed these accredited official statistics in September 2013. They comply with the standards of trustworthiness, quality and value in the [Code of Practice for Statistics](#) and should be labelled "accredited official statistics".

How we quality assure the data and statistics

Our approach to quality follows Office for National Statistics (ONS) best practice, which is based on:

- the Quality Standard for Analysis
- the ONS Reproducible Analytical Pipelines (RAP) Minimum Standard
- supporting guidance on quality assurance, documentation, coding, and data handovers

We use these resources – including the Quality Questions framework and templates for recording assumptions, limitations and decisions – to ensure our methods, data flows and analytical outputs meet the required standards of transparency, consistency and analytical robustness.

Quality assurance process

1. We quality assure data from our Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS) following the process described in Section 6: Methods used to produce the data in our [QCAS quality and methodology information \(QMI\)](#).
2. We quality assure other data sources to identify unusual movements and follow up with the data provider for review and briefing.
3. We then review aggregated data at industry and asset level to identify areas for further investigation; we investigate unusual deflator movements and review seasonally adjusted data, seeking advice from seasonal adjustment experts where required.
4. We compare data against other relevant sources, for example our Business Insights and Conditions Survey, which asks respondents about investment intentions for the relevant quarter; we use external sources as sense checks, including the Bank of England Agent's Summary, the UK Purchasing Manager's Composite Output Index and relevant investment analysis from industry representative bodies, such as the UK Manufacturers' Organisation (MAKE UK).
5. We present data to our internal stakeholders at data curiosity meetings.
6. We put our business investment and gross fixed capital formation estimates through the quarterly and annual gross domestic product (GDP) balancing process and reconcile them with other components of the National Accounts; further information on GDP Balancing can be found in our [Recent challenges of balancing the three approaches of GDP article](#).
7. We regularly review methods used in the compilation of our business investment and GFCF statistics and make improvements where appropriate to ensure their continued quality.
8. We also apply statistical disclosure control to protect confidentiality, ensuring no individual or organisation can be identified, following the Principle on Confidentiality of the Code of Practice for Official Statistics; more details are available on our [Protecting confidentiality with statistical disclosure control page](#).

Strengths and limitations

Strengths

- Our business investment accredited official statistics are well established, and are used and recognised by a broad range of stakeholders and values for the detailed breakdowns they provide.
- As a subcomponent of our wider gross fixed capital formation, our business investment statistics are produced using internationally recognised concepts based on the [European System of Accounts \(ESA\)](#) and the [System of National Accounts \(SNA\)](#).
- Our business investment estimates provide timely insights into capital expenditure in the UK.
- Estimates based on the Quarterly Acquisition and Disposal of Capital Assets Survey are published quarterly, five to six weeks after the end of the relevant quarter and on the same days as our Gross domestic product (GDP) first quarterly estimate bulletin and our GDP quarterly national accounts, UK bulletin.
- Our quarterly business investment series provides a timely and coherent shortterm indicator; as a quarterly indicator, it needs to prioritise timeliness over granularity – though larger sample sizes from surveys like our Annual Business Survey achieve greater precision through larger sample sizes, they require longer processing times.

Limitations

- The time lag between data publication and the data reference period needs to balance timeliness and data quality; provisional results give users an early indication of trends, and data quality improves in our subsequent revised results until the Quarterly Acquisitions and Disposals of Capital Assets Survey (the largest business investment data source) has typically reached its target response rate.
- As large capital expenditure tends to be reported later in the data collection period than smaller capital expenditure, this means that larger expenditures are often included in our revised business investment release but are not reported in time for the provisional release; this can result in upward revisions in later estimates for business investment and gross fixed capital formation (GFCF), which we address by adding a bias adjustment to our provisional estimate that is removed in subsequent results.

European Statistical System Quality Dimensions

The Office for National Statistics (ONS) has developed [Guidelines for measuring statistical quality](#), based on the five European Statistical System (ESS) Quality Dimensions. These are:

- relevance
- accuracy and reliability
- timeliness and punctuality
- comparability and coherence
- accessibility and clarity

We have integrated these considerations into the guide.

6 . Changes and their effects on comparability over time

As part of the updates we make to the UK National Accounts (otherwise known as the Blue Book) each year, we review our methods and incorporate updated data sources, such as data that are only available annually. These changes are described as follows and are ordered by date, with the most recent first.

Latest changes

Changes introduced at Blue Book 2025

- We included end-to-end redeveloped Business Enterprise Research and Development (BERD) survey data for 2022 and 2023 for the first time, and a revised back series for periods before 2022; users should be aware that BERD data are only available up to and including 2023, so research and development estimates will be subject to revision until the latest BERD data are available.
- We incorporated an improved research and development deflator, as described in our [Deflator improvements to the UK National Accounts: Blue Book 2025 article](#).
- We reflected changes resulting from the globalisation pharmaceutical industry review, as discussed in our [Blue Book 2025: Globalisation article](#).
- We improved our estimates of own-account software using updated Annual Survey of Hours and Earnings (ASHE) data and updated occupation codes.
- We incorporated revised Annual Business Survey (ABS) benchmarks for 2022 and new ABS data for 2023.
- We moved the base year used for weighting our chained volume measure estimates from 2022 to 2023, to better reflect the changes in the composition of the economy in recent years.
- We included updates from the latest annual seasonal adjustment review to ensure the seasonal adjustment models used to process data are still appropriate, following revisions to the data.
- For further information on our research and development improvements, see our [Improvements to estimation of research and development within gross fixed capital formation and business investment article](#) and our [The impact of new Business Enterprise Research and Development Survey data on UK business investment: 2022 article](#).
- To understand the impact of these recent changes on our business investment statistics and their wider revisions performance, we published our [Business Investment in the UK revisions in Blue Book: 2025 article](#).

Past changes

Changes introduced at Blue Book 2024

- We incorporated revised Annual Business Survey (ABS) benchmarks for 2021 and new ABS data for 2022.
- We returned to our pre-coronavirus (COVID-19) pandemic approach to chain-linking by moving the last base year on to 2022 as part of our production process.

Changes introduced at Blue Book 2023

- We incorporated revised air transport data from HM Revenue and Customs (HMRC), which affected the transport asset across the time series.
- We updated several data sources feeding into our own-account software data, including wages and salaries data from the Annual Survey of Hours and Earnings (ASHE), non-wage labour costs estimated from the Annual Business Survey (ABS), and non-labour costs coming from the supply and use tables.
- We updated Annual Business Survey (ABS) benchmarks for 2020 and new ABS data for 2021.

Changes before 2023

Changes introduced in [earlier Blue Books](#) are described each year in the introductory text in our gross fixed capital formation supplementary tables.

Upcoming changes

We describe proposed changes that will be introduced as part of the annual national accounts Blue Book updates in scope and content articles for the relevant year. Any changes outside of the annual Blue Book production round are announced separately.

7 . Comparability and coherence with other statistics producers

HM Revenue and Customs

HM Revenue and Customs (HMRC) [Corporation tax statistics](#) on capital allowances qualifying expenditure are not comparable with ours because of the following differences.

Office for National Statistics

- are acquisitions net of disposals
- do not include purchases relating to internal, integral parts of buildings, such as lifts
- exclude certain software purchases
- investment by foreign branches of UK companies is not in scope
- excludes some industry sectors that are included in HMRC's capital allowances qualifying expenditure

HM Revenue and Customs

- qualifying expenditure is not net of disposals
- includes purchases relating to internal, integral parts of buildings, such as lifts
- includes certain software purchases that are not included in our estimates
- investment by foreign branches of UK companies is in scope
- includes some industry sectors that are excluded from our estimates

International comparisons

Business investment is not an internationally recognised concept. Therefore, it cannot be used to make international comparisons.

Gross fixed capital formation (GFCF) is an internationally recognised concept in the [European System of Accounts \(ESA\)](#) and the [System of National Accounts \(SNA\)](#) and is internationally comparable.

8 . Users and uses of these statistics

Business investment is part of the UK National Accounts and provides the basis for analysing the economic performance of the country. It is used by the public sector, a broad range of industries throughout the business and research communities, education, media, and the general public.

Examples of users include:

- HM Treasury, who use these statistics to monitor and inform economic policy
- the Bank of England, who use our statistics as part of their economic suite of data used to make monetary policy decisions
- the Office for Budget Responsibility, who use our statistics for fiscal and forecasting purposes

9 . Definitions

10 . Related links

[A short guide to gross fixed capital formation and business investment](#)

Article | Released 25 May 2017

Background information on how to interpret, compare and analyse statistics regarding gross fixed capital formation and business investment.

[A guide to the UK National Accounts: March 2020](#)

Methodology | Last revised 6 March 2020

Introduction to the concepts and underlying principles of national accounting and description of the various publications available.

[Business investment in the UK](#)

Bulletin | Published quarterly

Estimates of short-term indicators of investment in non-financial assets; business investment, and asset and sector breakdowns of total gross fixed capital formation.

11 . Cite this page

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