Office for National Statistics

Statistical bulletin

Business investment in the UK: April to June 2023 revised results

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

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Release date:
29 September 2023

Next release:
22 December 2023

Correction

16 October 2023 15:38

Figure 1 has been replaced and now uses the correct data associated with this release. The published dataset was not impacted by this change, only the Figure 1 presentation. We apologise for any inconvenience caused.

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1 . Main points

- UK Business investment increased by 4.1% in Quarter 2 (Apr to June) 2023, revised up from the provisional estimate of 3.4% growth.
- Business investment has grown by 9.2% compared with the same quarter a year ago.
- The main contributor to business investment growth was transport, mainly because of investment in aircraft.
- Whole-economy investment (technically known as Gross Fixed Capital Formation (GFCF)), which includes business and public sector investment, increased by 0.8% in Quarter 2 2023, revised up from the provisional estimate of 0.0% growth.
- GFCF has grown by 4.6% compared with the same quarter a year ago.
- This release contains data that are consistent with the UK National Accounts, The Blue Book 2023, which will be released on 31 October 2023; data for all periods in this release are subject to revision in line with the National Accounts Revision Policy.

2 . Business investment

UK Business investment increased by 4.1% in Quarter 2 (Apr to June) 2023, revised up from the provisional estimate of 3.4% growth, with upwards revisions from transport, intellectual property products (IPP), and information and communication technology (ICT) and other machinery and equipment. These revisions are the result of later survey data. Business investment has grown by 9.2% compared with the same quarter a year ago.

Transport was the main contributor to the increase in business investment in Quarter 2 2023. Transport investment can be particularly volatile because of the high value of some transport equipment. Transport growth was particularly strong in air travel data because of the acquisition of new aircraft. The UK saw an increase in imports of aircraft from the United States in April 2023, as shown by our UK trade: April 2023 bulletin. The latest UK Civil Aviation Authority (CAA) data show an increase in passenger travel numbers compared with last year, however, passenger numbers are still below their pre-coronavirus (COVID-19) pandemic level.

Business investment, after lagging behind whole-economy investment (technically known as Gross Fixed Capital Formation (GFCF)) for much of the coronavirus pandemic and post-pandemic period, has recently increased at a greater rate than GFCF as shown in Figure 1. This is driven by a combination of negative contributions to GFCF, mainly weaker dwellings investment from Quarter 4 (Oct to Dec) to Quarter 2 2023, and GFCF IPP and transport data lagging behind the equivalent business investment series over the latest two quarters.

Figure 1: Business investment continued to grow at a faster rate than Gross fixed capital formation (GFCF) in Q2 2023

UK business investment and whole-economy investment, chained volume measure, seasonally adjusted, Quarter 1 (Jan to Mar) 1997 to Quarter 2 2023

Notes

1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec).
2. UK business investment, chained volume measure, seasonally adjusted, excluding the reclassification of British Nuclear Fuels (BNFL) in Quarter 2 2005.
3. Quarter 2 2020 was the largest fall on record for gross fixed capital formation excluding the reclassification of British Nuclear Fuels (BNFL) in Quarter 2 2005.
4. Index is referenced to Quarter 1 (Jan to Mar) 1997 equals 100.

Download the data

.xlsx

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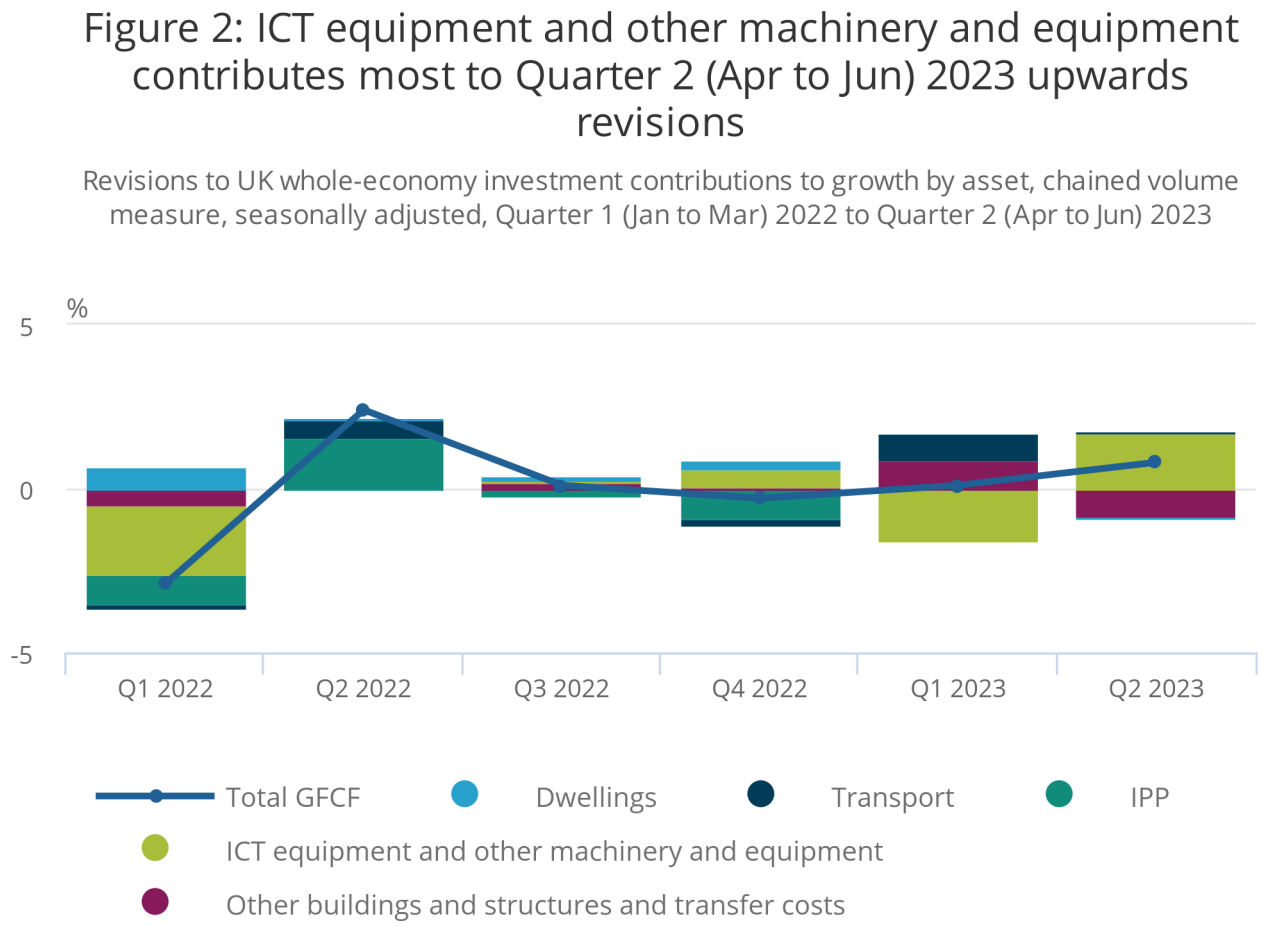
- Explore the latest trends in employment, prices and trade in our economic dashboard.
- View all economic data.

3 . Whole-economy investment

Whole-economy investment (technically known as Gross Fixed Capital Formation (GFCF)), which includes business and public sector investment, increased by 0.8% in Quarter 2 2023, revised up from the provisional estimate of 0.0% growth. The largest contribution to growth in the latest quarter came from transport with a smaller positive contribution from intellectual property products. The upwards revision to growth compared with the previous release came from the impact of downward revisions to levels of ICT equipment and other machinery and equipment investment in Quarter 1 (Jan to Mar) 2023. This revision was the result of revised survey returns as well as revised government data.

Figure 2: ICT equipment and other machinery and equipment contributes most to Quarter 2 (Apr to Jun) 2023 upwards revisions

Revisions to UK whole-economy investment contributions to growth by asset, chained volume measure, seasonally adjusted, Quarter 1 (Jan to Mar) 2022 to Quarter 2 (Apr to Jun) 2023



Source: Source: Business Investment in the UK from the Office for National Statistics

Notes:

1. Q1 refers to Quarter 1 (Jan to Mar), Q2 refers to Quarter 2 (Apr to June), Q3 refers to Quarter 3 (July to Sept) and Q4 refers to Quarter 4 (Oct to Dec)

Quarter 1 2022 growths are being influenced by upwards revisions to the Quarter 4 2021 levels changes as a result of updated Annual Business Survey (ABS) data, and the impact of supply-use balancing, as a part of the usual annual Blue Book process. GFCF growth has, on average, been revised down over 2022, largely because of the Quarter 1 2022 downwards revisions to growth in ICT equipment and other machinery and equipment, as well as smaller revisions to IPP and other buildings. Contributions to growth from IPP have also been revised downwards in 2022 Quarter 3 (Jul to Sep) and 2022 Quarter 4 (Oct to Dec).

4 . Revisions to business investment and whole- economy investment, 1997 to 2022

In the Blue Book 2023, we have updated a number of data sources used for our whole-economy investment (technically known as Gross Fixed Capital Formation (GFCF)) estimates. This includes receiving revised Air Transport data from HM Revenue and Customs (HMRC), which affects our transport asset across the whole time series. We also updated a number of data sources for own-account software data, which includes wages and salaries data from the Annual Survey of Hours and Earnings (ASHE), non-wage labour costs which are estimated from the Annual Business Survey (ABS) and non-labour costs coming from the Supply and Use tables.

We have seen further changes from the continued improvement to the quality of estimates relating to government dwellings. As is usual during the Blue Book process, the opportunity was taken to review and improve national accounts balancing adjustments across all transactions. This included those indirectly affected by the government dwellings, such as GFCF. In Blue Book 2023, GFCF estimates have been particularly affected as a result of this change, with a positive impact being seen across the time series, affecting both the financial sector and whole economy.

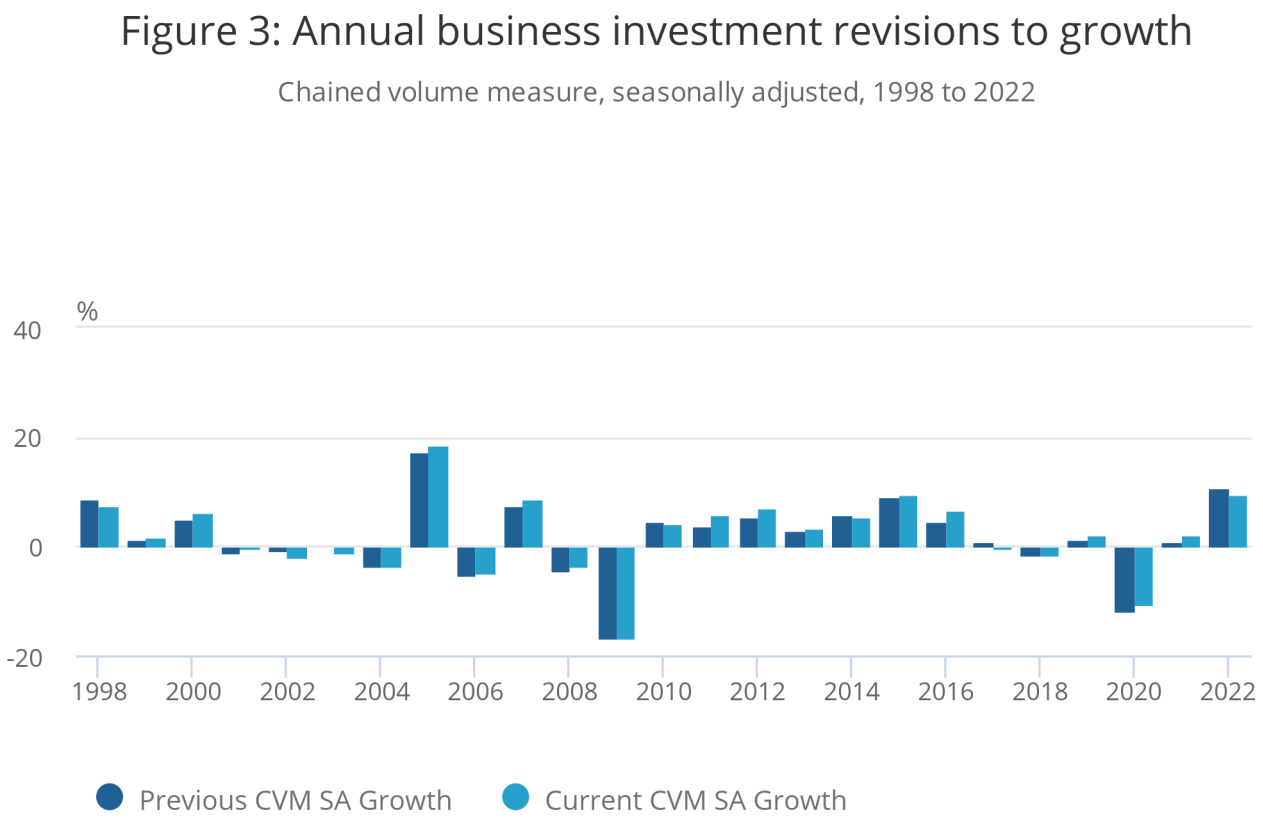
Further changes include the incorporation of revised Annual Business Survey benchmarks for 2020 and new data for 2021.

As was advised previously in Section 6, Measuring the data, of our previous Business investment in the UK bulletin, business investment estimates were subject to more uncertainty than usual during the coronavirus (COVID-19) pandemic period. This was because of data collection challenges faced at the time. This release has now incorporated updated data, a review of our seasonal adjustment parameters (as is usual during annual national accounts preparation). It has also incorporated new data sources, including a new computer hardware deflator, as explained in our Impact of Blue Book 2023 changes on current price and volume estimates of gross domestic product methodology. This has affected ICT equipment and other machinery and equipment, and reflects quality improvements. Any further revisions to data will be included, as is usual, when the dataset is opened in coming years in line with national accounts revisions policy.

Annual business investment growth was revised up 0.4 percentage points on average between 1997 and 2022 in chain volume measures (CVM).

Figure 3: Annual business investment revisions to growth

Chained volume measure, seasonally adjusted, 1998 to 2022

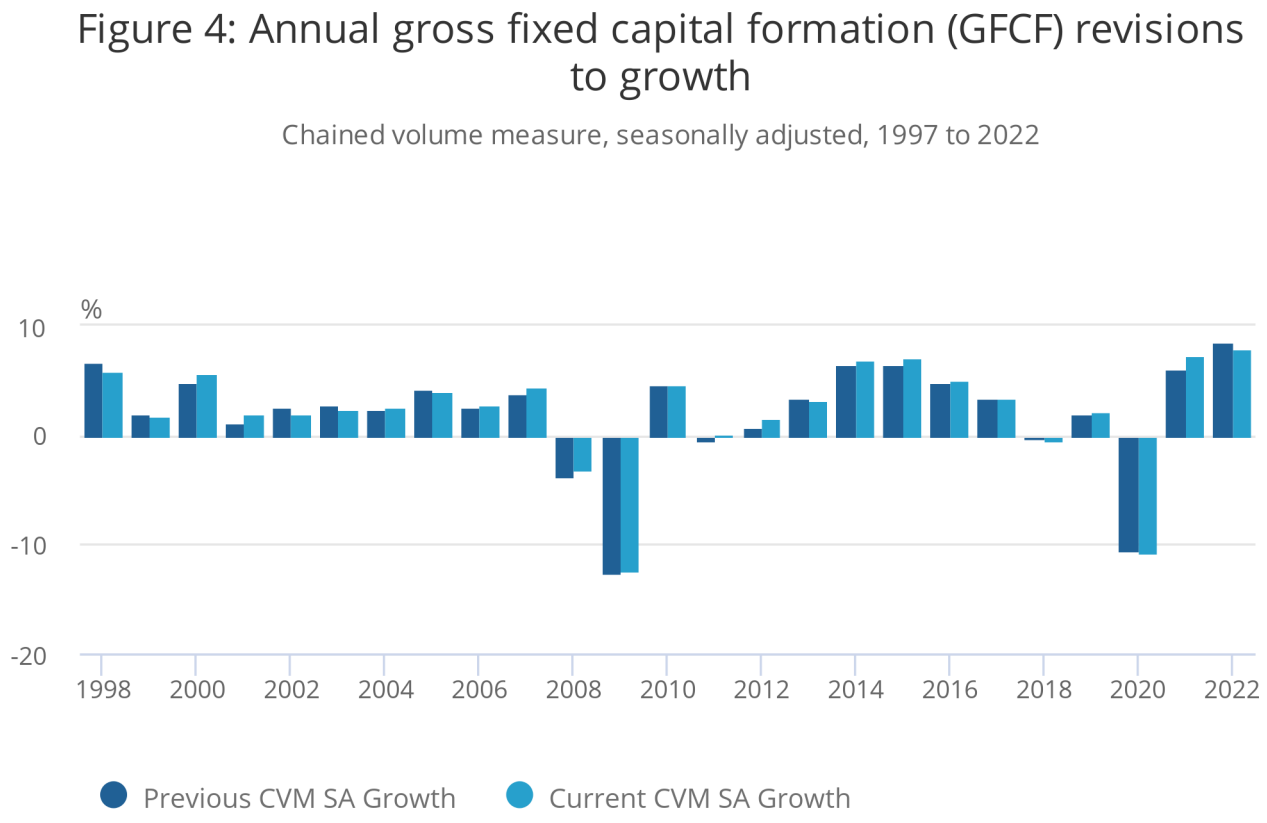


Source: Source: Business Investment in the UK from the Office for National Statistics

Annual GFCF growth was revised up 0.2 percentage points on average between 1997 and 2022 in chain volume measures (CVM).

Figure 4: Annual gross fixed capital formation (GFCF) revisions to growth

Chained volume measure, seasonally adjusted, 1997 to 2022



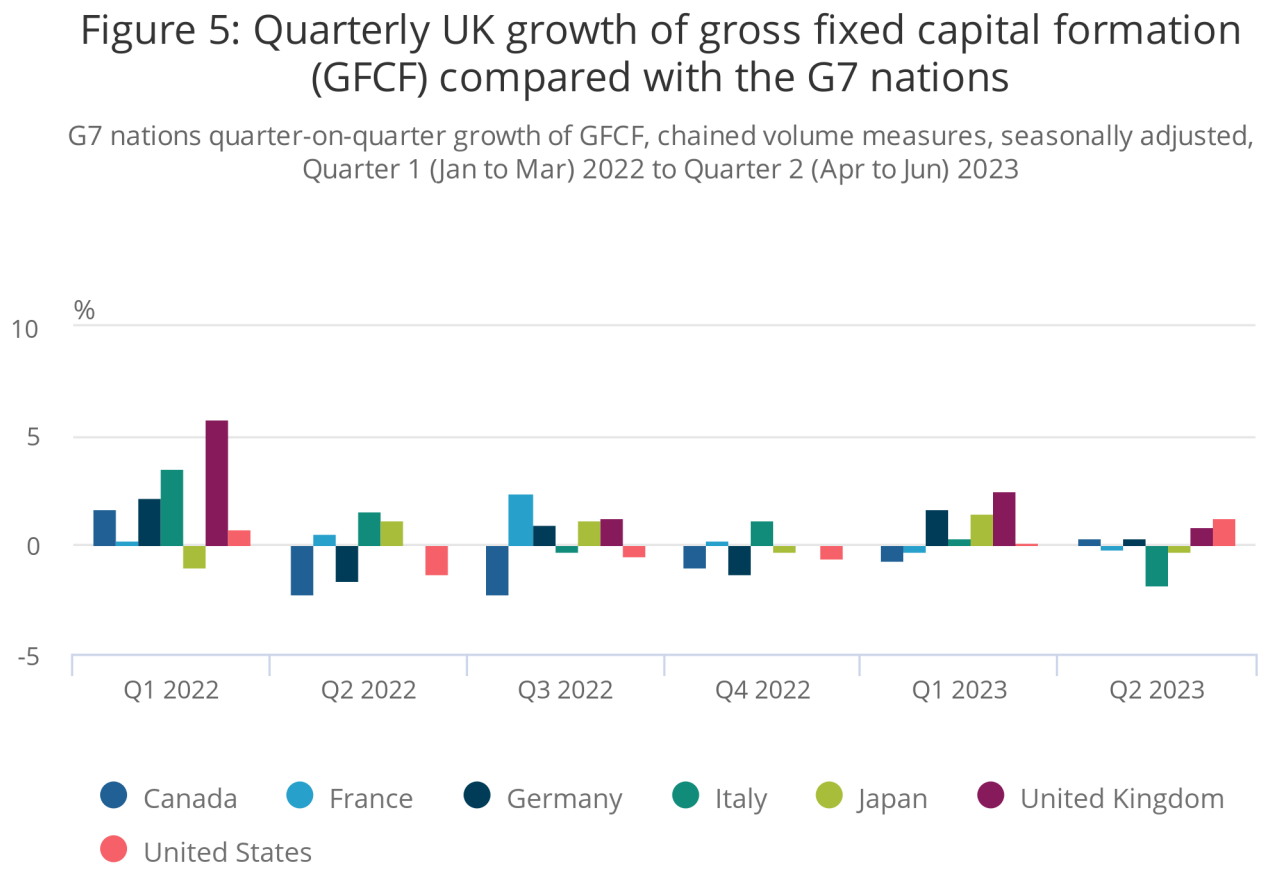
Source: Business investment in the UK from the Office for National Statistics

5 . International comparisons of gross fixed capital formation for the G7 nations

Using data collated by the Organisation for Economic Co-operation and Development (OECD) from relevant national statistical institutes, we can compare whole-economy investment (labelled gross fixed capital formation (GFCF) in OECD data tables) within the G7 nations. Figure 5 shows whole-economy investment for the G7 nations back to Quarter 1 (Jan to Mar) 2022. GFCF in the UK increased by 0.8% in Quarter 2 2023. This is the second largest of the G7 nations, surpassed only by the United States.

Figure 5: Quarterly UK growth of gross fixed capital formation (GFCF) compared with the G7 nations

G7 nations quarter-on-quarter growth of GFCF, chained volume measures, seasonally adjusted, Quarter 1 (Jan to Mar) 2022 to Quarter 2 (Apr to Jun) 2023



Source: Business investment in the UK from the Office for National Statistics and OECD

Notes:

1. The Group of 7 (G7) nations is an intergovernmental organisation consisting of Canada, France, Germany, Italy, Japan, the UK and the US.

2. The coronavirus (COVID-19) pandemic has affected each country in different ways and as a result, restrictions have been put in place at differing times by each country.

3. Data shown in this chart reflect the latest available from OECD Statistics at the time of production of this bulletin, including provisional data, which may subsequently be revised.

6 . Business investment data

Business investment by asset
Dataset | Released 29 September 2023
Detailed breakdown of business investment by asset, in current prices and chained volume measures, non-seasonally adjusted and seasonally adjusted, UK.

Gross fixed capital formation – by sector and asset
Dataset | Released 29 September 2023
Sector and asset breakdowns of gross fixed capital formation (GFCF), including business investment and revisions, in current prices and chained volume measures, non-seasonally adjusted and seasonally adjusted, UK.

Quarterly Stocks Survey (QSS) and Capital Assets Survey (QCAS) Textual Data Analysis
Dataset | Released 29 September 2023
The indicators and analysis in this dataset are based on qualitative responses from comments left by responding businesses to both our Quarterly Acquisitions and Disposals of (QCAS) and Quarterly Stocks Survey (QSS).

Annual Gross fixed capital – sector and asset
Dataset | Released 28 October 2021
Annual sector and asset breakdowns of gross fixed capital formation (GFCF), in current prices and chained volume measures, non-seasonally adjusted and seasonally adjusted, UK.

7 . Measuring the data

Quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in our Business investment Quality and Methodology Information (QMI).

In August 2022, we reviewed the methods used for estimating data from the Quarterly Acquisitions and Disposals of Capitals Assets Survey (QCAS). The imputation review found that the methods used were appropriate and no changes were made.

Revisions

In line with theNational Accounts Revisions Policy, all periods from 1997 Quarter 1 (Jan to Mar) to 2023 Quarter 2 (April to June) are open in this publication.

Data within this bulletin

All data within this bulletin, unless specified, are presented in chained volume measure (CVM). This means it has the effect of price changes removed (in other words, the data are deflated).

In Quarter 2 (Apr to Jun) 2023, the Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS), the largest data source for gross fixed capital formation (GFCF) and business investment, had a response rate of 79.4% for estimates used in the revised release.

The release of the Business investment in the UK dataset (consistent with annual national accounts) on 29 September 2023, includes an update to the Business investment by asset dataset, which was not updated along with the 30 September 2022 Business Investment and subsequent publications.

The following datasets will be published alongside the UK National Accounts, The Blue Book 2023, which will be released on 31 October 2023:

- Business investment by industry and asset
- Business investment within the transportation and storage industries
- Annual gross fixed capital formation by industry and asset

8 . Adjustments

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 the revised (month-3) results but are not reported in time for the provisional (month-2) results. This can lead to a tendency toward upward revisions in the later estimates for business investment and gross fixed capital formation (GFCF). Following investigation of the impact of this effect, from Quarter 3 (July to Sept) 2013, a bias adjustment was introduced in the provisional estimate.

This adjustment was suspended in Quarter 2 (Apr to June) 2020 because of uncertainties surrounding the effect of the coronavirus (COVID-19) pandemic. However, since Quarter 4 (Oct to Dec) 2021, after further investigation and analysis of its impact, the bias adjustment was reintroduced to business investment and GFCF. The bias adjustment, as is usual, has been removed for the revised release.

9 . User consultation

Alongside our May 2023 and June 2023 Business Investment bulletins, we ran a user consultation exercise to find out more about what matters most to Business Investment users.

We received responses to this survey from a combination of policy, academic and other users of the data.

From these responses, though most respondents did read our Business Investment bulletin each time it was published, a majority also said data-only releases would continue to meet their needs.

Based on these findings, we will continue to publish the datasets that accompany the Business Investment bulletin, but we will no longer publish a bulletin as part of the provisional Business Investment release. This will enable us to focus on the revised bulletin only, and to add even more informative content. This will take effect from November 2023, therefore, our next Business Investment bulletin will be published on 22 December 2023 alongside the Quarterly National Accounts. This meets wider ONS objectives to review our publication models.

Users also confirmed that they would like us to retain the number of datasets we currently publish alongside the releases. As part of that, we will be reviewing the format and publication of these to make their content clearer, more consistent and to reduce overlap where possible.

10 . Business investment and gross fixed capital formation publication information

The following list gives details of the business investment and gross fixed capital formation (GFCF) data we will publish from Quarter 3 (July to Sept) 2023 onwards. These datasets are consistent with what we have previously published, except for the provisional business investment release.

Annual gross fixed capital formation by industry and assetdataset

Annual estimates of gross fixed capital formation (GFCF, investment) by asset and industry. The estimates are given in both current prices (CP) and chained volume measures (CVMs).

- published as part of our revised Business investment release in March, June, September, December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

- published at the time of our Annual National Accounts publication (either July or October each year)

Business investment – revisions triangles

Headline growth and revisions for Business investment chained volume measure seasonally adjusted for both provisional and revised estimates for each publication back to 1998.

- published as part of our provisional Business investment release in February, May, August and November

- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Business investment by asset

Headline business investment and asset annual and quarterly estimates on a current prices seasonally adjusted and chained volume measure seasonally adjusted basis.

- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Business investment by industry and asset

Business investment by broad industry and asset, in current prices and chained volume measures, non-seasonally adjusted and seasonally adjusted.

- published as part of revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Business investment headline data pre-1997

Business investment data pre-1997 are available on a current price Seasonally Adjusted (CP SA) and Chained Volume Measure Seasonally Adjusted (CVM SA) basis only; data pre-1997 are to be regarded as indicative only because of the basic method of calculation and other limitations in the methods used for compiling this dataset.

- published as part of our provisional Business investment release in February, May, August and November

- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Business investment in the UK statistical bulletin

Commentary on and analysis of estimates of short-term indicators of investment in non-financial assets; business investment and whole-economy investment (technically known as gross fixed capital formation (GFCF).

- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Business investment real-time database

Headline levels of business investment chained volume measure seasonally adjusted for both provisional and revised estimates for each publication back to 1997.

- published as part of our provisional Business investment release in February, May, August and November
- published as part of our revised Business investment release in March, June, September, December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Business investment time series (CXNV)

Detailed breakdown of business investment by industry and asset, in current prices, chained volume measures, non-seasonally adjusted and seasonally adjusted

- published as part of our provisional Business investment release in February, May, August and November
- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Business investment within transportation and storage by industry

Quarterly estimates of business investment in transportation and storage, by two-digit industry breakdown. Covers investment in assets such as other buildings and structures, transport, ICT equipment and intellectual property products. Estimates are in current prices and non-seasonally adjusted.

- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Capital expenditure and survey populations by employment sizeband

Time series of data from the Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS), broken down by employment sizebands. Includes manufacturing and non-manufacturing industries back to 2012

- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Gross fixed capital formation – by sector and asset

Sector and asset breakdowns of gross fixed capital formation (GFCF) and revisions, in current prices and chained volume measures, non-seasonally adjusted and seasonally adjusted, UK.

- published as part of our provisional Business investment release in February, May, August and November
- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS) investment made by energy industries

Acquisitions less disposals of assets by the energy industries sourced from the Quarterly Acquisitions and Disposals of Capital Assets survey (QCAS)

- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Quarterly Stocks Survey (QSS) and Capital Assets Survey (QCAS) textual data analysis

Analysis based on respondent comments by businesses to the Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS) and Quarterly Stocks Survey (QSS).

- published as part of our provisional Business investment release in February, May, August and November
- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Total Business investment and general government data excluding British Nuclear Fuels (BNFL)

Gross fixed capital formation (GFCF) data for total business investment and general government, excluding the impact of the transfer of British Nuclear Fuels (BNFL) between the Public Corporations and General Government sectors in Quarter 2 (Apr to June) 2005. Series are provided in current price and chained volume measures, in non-seasonally adjusted and seasonally adjusted format.

- published as part of our provisional Business investment release in February, May, August and November
- published as part of our revised Business investment release in March, June, September and December; either June or September will be the Annual National Accounts (Blue Book) consistent publication – this varies according to National accounts revisions policy

Gross fixed capital formation at current purchasers' prices: Analysis by type of asset and sector

Gross fixed capital formation in current prices split at asset and sector level.

- published as part of the UK Annual National Accounts publication (The Blue Book) in either July or October according to National Accounts revisions policy

Gross fixed capital formation at current purchasers' prices: analysis by broad sector and type of asset

Gross fixed capital formation in current prices split at sector and asset level

- published as part of the UK Annual National Accounts publication (The Blue Book) in either July or October according to National Accounts revisions policy

Gross fixed capital formation at current purchasers' prices: analysis by type of asset

Gross fixed capital formation in current prices at total economy level by asset.

- published as part of the UK Annual National Accounts publication (The Blue Book) in either July or October according to National Accounts revisions policy

Gross fixed capital formation, chained volume measures: analysis by broad sector and type of asset

Gross fixed capital formation in chained volume measures split at sector and asset level.

- published as part of the UK Annual National Accounts publication (The Blue Book) in either July or October according to National Accounts revisions policy

Gross fixed capital formation, chained volume measures: analysis by type of asset

Gross fixed capital formation in chained volume measures prices at total-economy level by asset

- published as part of the UK Annual National Accounts publication (The Blue Book) in either July or October according to National Accounts revisions policy

11 . Related links

GDP Quarterly National Accounts UK: April to June 2023
Bulletin | Released 29 September 2023
Revised quarterly estimate of gross domestic product (GDP) for the UK. Uses additional data to provide a more precise indication of economic growth than the first estimate.

National balance sheet estimates for the UK: 1995 to 2021
Bulletin | Released 23 January 2023
Annual estimates of the market value of financial and non-financial assets for the UK, providing a measure of the nation's wealth.

Capital stocks and fixed capital consumption, UK: 2023
Dataset | Released 14 August 2023
Preliminary annual estimates of the value and types of non-financial assets used in the production of goods or services within the UK economy and their loss in value over time.

12 . Cite this statistical bulletin

Office for National Statistics (ONS), released 29 September 2023, ONS website, statistical bulletin, Business investment in the UK: April to June 2023 revised results