

Statistical bulletin

# Business investment in the UK: October to December 2022 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.



Contact:  
Alison McCrae  
gcf@ons.gov.uk  
+44 1633 455250

Release date:  
31 March 2023

Next release:  
12 May 2023

## Table of contents

1. [Main points](#)
2. [Business investment growth revised down in the latest quarter](#)
3. [Whole economy investment](#)
4. [International comparisons of whole economy investment for the G7 nations](#)
5. [Business investment data](#)
6. [Measuring the data](#)
7. [Related links](#)
8. [Cite this statistical bulletin](#)

# 1 . Main points

- Business investment fell by 0.2% in Quarter 4 (Oct to Dec) 2022, revised down from the provisional estimate of 4.8% growth.
- The level of business investment in Quarter 4 2022 was 2.2% below where it was in Quarter 4 2019, the quarter before the coronavirus (COVID-19) pandemic; business investment was 10.8% above where it was in the same quarter a year ago.
- Whole economy investment (technically known as gross fixed capital formation (GFCF)), which includes business and public sector investment, increased by 0.3% in Quarter 4 2022, revised down from the provisional estimate of 1.5%.
- GFCF in Quarter 4 2022 was 3.4% above where it was in Quarter 4 2019, the pre-coronavirus quarter; GFCF was 7.6% above where it was in Quarter 4 2021.
- GFCF and business investment levels in Quarter 4 2022, as a percentage of gross domestic product (GDP), were 18.7% and 10.0% respectively; this is largely consistent with their proportions over recent periods.

## 2 . Business investment growth revised down in the latest quarter

Revisions in the latest periods are largely because of a combination of new survey data, along with a review and refresh of seasonal adjustment parameters, resulting in the seasonally adjusted estimates being revised. Under our revisions policy, 2022 data have been updated in this release, and 2021 data will be revised in September 2023 as part of the annual Blue Book update. Gross domestic product (GDP) headline estimates are unaffected by these revisions because of their size and the GDP balancing process itself.

Business investment growth in Quarter 4 (Oct to Dec) 2022 has been revised downwards by 5.0 percentage points to now be a quarterly fall of 0.2%. This means business investment has still not returned to its pre-coronavirus (COVID-19) pandemic peak, being 2.2% below this level. The downward revisions in Quarter 4 2022 have been mainly driven by other machinery, with some offsetting positive revisions from software data and research and development. Upward revisions to Quarter 3 (July to Sept) 2022 levels have exacerbated these downward revisions to Quarter 4 2022 business investment growth.

## 3 . Whole economy investment

### Figure 1: The disparity since 2020 between whole economy investment (also call gross fixed capital investment (GFCF)) and business investment remains

UK business investment and whole economy investment, chained volume measure, seasonally adjusted, Quarter 1 (Jan to Mar) 1997 to Quarter 4 (Oct to Dec) 2022

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, which equals 100.

## Download the data

[.xlsx](#)

Quarterly whole economy investment growth (technically labelled gross fixed capital formation (GFCF)) was revised down in Quarter 4 2022 from the provisional estimate by 1.2 percentage points to 0.3%. The revision in levels was relatively small, remaining 3.4% above where it was in Quarter 4 2019 (the pre-coronavirus pandemic quarter), down from 3.7% above this level in the provisional estimate.

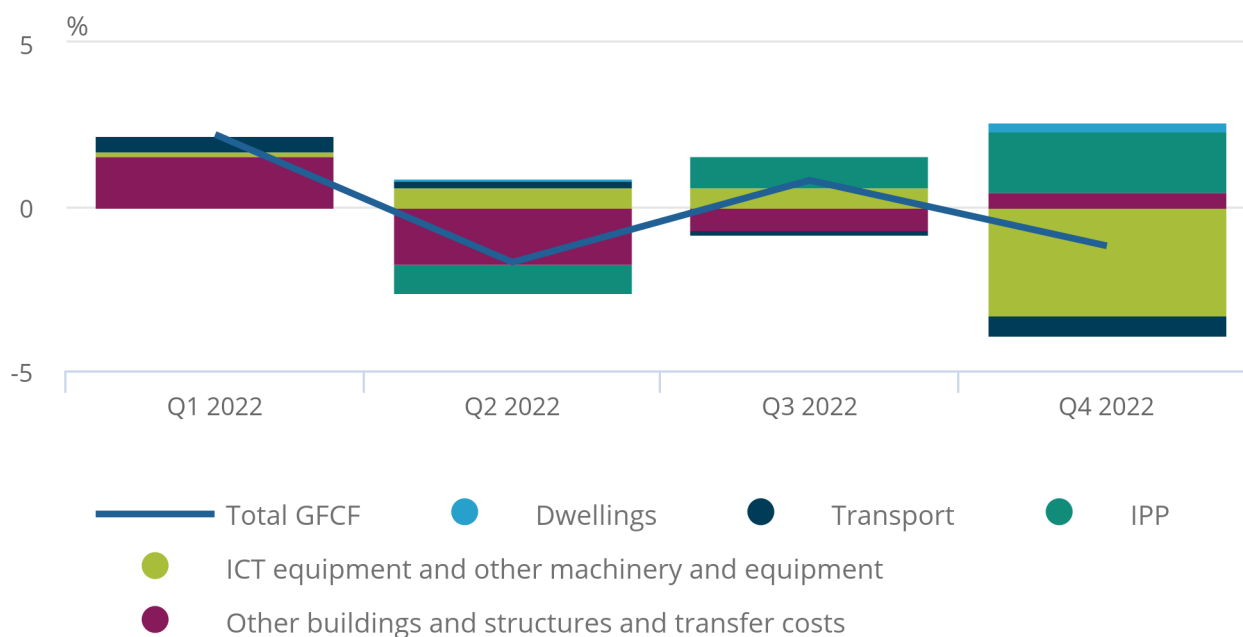
The revisions to whole economy investment were primarily driven by the overall downward revision to business investment components. These were partially offset by smaller upwards revisions to dwellings and government investment. Dwellings investment was revised upwards in Quarter 4 2022 by 1.3 percentage points from the provisional estimate, though remained in minus numbers at negative 1.9%. Government investment continued to contribute positively to whole economy investment in revised estimates, increasing by 8.3% in Quarter 4 2022, revised up from 1.8%.

### Figure 2: Downwards revisions to headline whole economy investment were driven by transport, ICT equipment, and other machinery and equipment

Revisions to UK whole economy investment contributions to growth by asset, chained volume measure, seasonally adjusted, Quarter 1 (Jan to Mar) 2021 to Quarter 4 (Oct to Dec) 2022

#### Figure 2: Downwards revisions to headline whole economy investment were driven by transport, ICT equipment, and other machinery and equipment

Revisions to UK whole economy investment contributions to growth by asset, chained volume measure, seasonally adjusted, Quarter 1 (Jan to Mar) 2021 to Quarter 4 (Oct to Dec) 2022



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

#### Notes:

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).

The temporary tax relief on qualifying capital asset investment, known as “super-deduction” will end on 31 March 2023. This tax allowance was introduced to encourage investment after the coronavirus pandemic. Despite some differences in qualifying items, the impact of this incentive is most likely to be reflected in ICT equipment, other machinery and equipment, and transport. These measures are being replaced by a 100% full expensing capital allowance.

As noted by the Office for Budget Responsibility (OBR) in its [Economic and fiscal outlook – March 2023](#), full expensing provides an incentive to bring forward investment that is currently planned for a later date. The OBR expects full expensing to raise business investment in the three years the measure is in place by around 3% when the scheme’s effect is at its peak. This is a smaller peak impact on investment than the super deduction measures.

ICT equipment and other machinery and equipment was revised downwards, falling from 11.9% in the provisional estimate to negative 8.2% in the revised estimate of Quarter 4 2022. This was driven primarily by a downward revision in other machinery and equipment. Transport investment can be particularly volatile because of the high value of some transport equipment. Transport increased by 14.9% in Quarter 4 2022 and remained one of the strongest components, despite a downward revision of 12.6 percentage points. This strength potentially reflects the “super deduction” incentive to purchase such equipment.

ICT equipment and other machinery and equipment, as well as transport, experienced strong growth rates over the last couple of years, coinciding with the super deduction period. ICT equipment and other machinery and equipment increased by 11.3% since Quarter 1 (Jan to Mar) 2021, the quarter prior to the introduction of the “super deduction”, and transport increased by 64.6% over the same period.

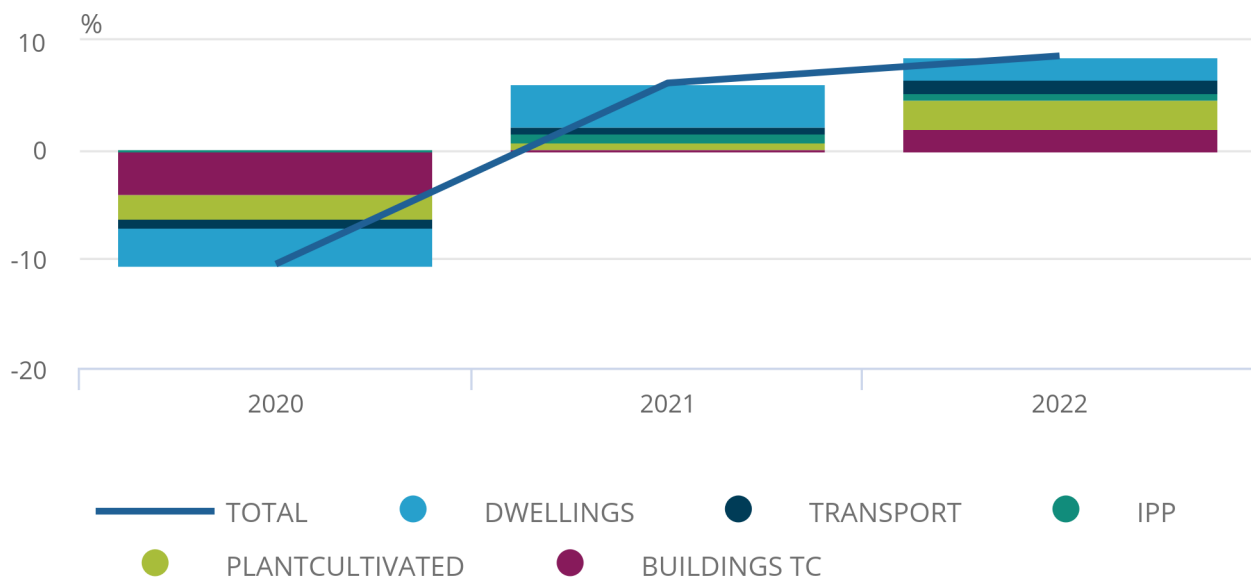
Headline GFCF increased by 6.1% and 8.6% over the same period. The OBR’s [Economic and fiscal outlook – March 2023](#) estimated that the “super deduction” increased business investment by around 5% at its peak. However, this figure is subject to uncertainty.

**Figure 3: All whole economy investment assets contributed positively to growth during 2021 and 2022**

UK GFCF asset contributions to growth, chained volume measure, seasonally adjusted, 2020 to 2022

Figure 3: All whole economy investment assets contributed positively to growth during 2021 and 2022

UK GFCF asset contributions to growth, chained volume measure, seasonally adjusted, 2020 to 2022



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

## **4 . International comparisons of whole economy investment 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 4 shows whole economy investment for the G7 nations back to Quarter 1 (Jan to Mar) 2021.

Whole economy investment in the UK increased by 0.9% in current prices in Quarter 4 (Oct to Dec) 2022, the second largest of the G7 nations, surpassed only by Italy. The UK is also the only G7 nation, along with Italy, to have experienced positive whole economy investment growth in all the previous seven quarters.

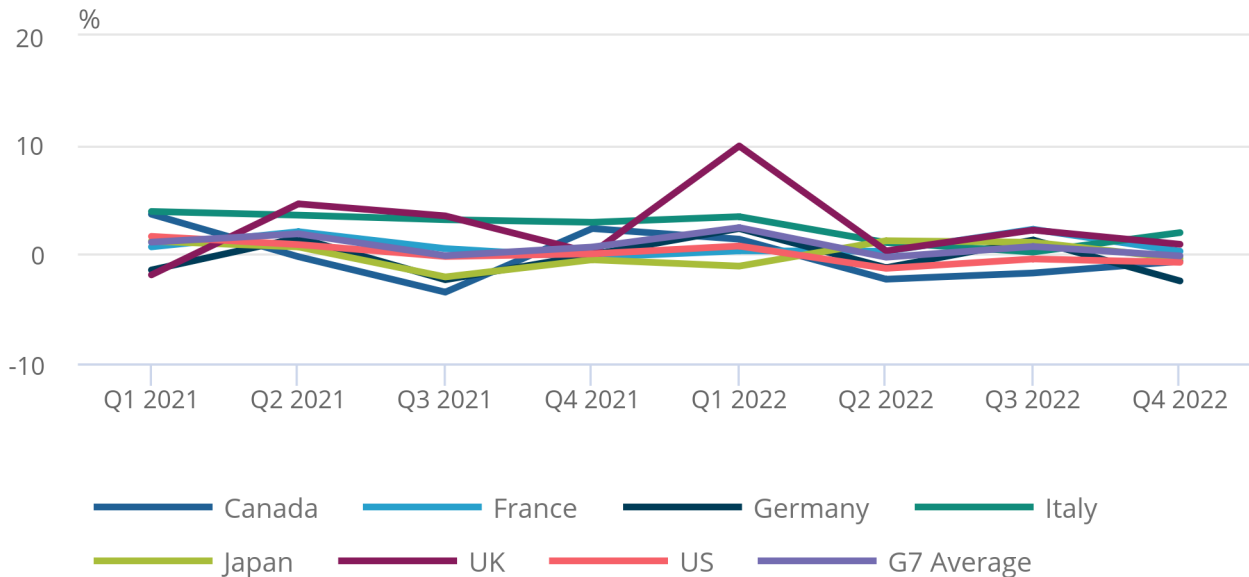
The 9.9% growth experienced in the UK in Quarter 1 2022 is the highest any G7 nation has experienced over the last two years by a margin. It has also experienced the highest growth rate in two other quarters over the past two years, and the second highest growth rate in an additional two quarters. These numbers show the UK has experienced strong current price growth relative to the other G7 nations over the two-year period highlighted.

## Figure 4: Quarterly UK growth of gross fixed capital formation (GFCF) compared with the G7 nations

G7 nations quarter-on-quarter growth of GFCF, current price, seasonally adjusted, Quarter 1 (Jan to Mar) 2021 to Quarter 4 (Oct to Dec) 2022

### Figure 4: Quarterly UK growth of gross fixed capital formation (GFCF) compared with the G7 nations

G7 nations quarter-on-quarter growth of GFCF, current price, seasonally adjusted, Quarter 1 (Jan to Mar) 2021 to Quarter 4 (Oct to Dec) 2022



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

#### 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 at the time of production of this bulletin, including provisional data, which may subsequently be revised.

## 5 . Business investment data

### [Gross fixed capital formation – by sector and asset](#)

Dataset | Released 31 March 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 31 March 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 formation by industry and asset](#)

Dataset | Released 28 October 2021

Annual estimates of gross fixed capital formation (investment) by industry and asset, in current prices and chained volume measures, consistent with the UK National Accounts.

## 6 . Measuring the data

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

### Revisions

In line with the National Accounts Revisions Policy, the earliest period open in this publication is Quarter 1 (Jan to Mar) 2022.

### 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 4 (Oct to Dec) 2022, the Quarterly Acquisitions and Disposals of Capital Assets Survey (QCAS), one of the largest data sources for gross fixed capital formation (GFCF) and business investment, had a response rate of 62.4% for estimates used in the provisional release, and 81.3% for estimates used in this revised release. This compares with an average response rate of 80% during 2020, and 87.5% for 2019.

The bias adjustment of £1.8 billion that was in place at the provisional release has now been removed.



## 7 . Related links

### [Quarterly national accounts UK: October to December 2022](#)

Dataset | Released 31 March 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.

### [The national balance sheet and capital stocks, preliminary estimates, UK: 2022](#)

Bulletin | Released 5 May 2022

Preliminary annual estimates of the nation's net worth, by type of financial and non-financial asset for the UK. Includes estimates of produced assets used in the production process and their loss of value over time.

## 8 . Cite this statistical bulletin

Office for National Statistics (ONS), released 31 March 2023, ONS website, statistical bulletin, [Business investment in the UK: October to December 2022 revised results](#).