

Statistical bulletin

Capital stocks and fixed capital consumption, UK: 2024

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, annual estimates.

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1. Main points

- The volume of the UK's net capital stock grew by 1.2% in 2023, revised down from an initial estimate of 1.5%, compared with a rise of 1.5% in 2022.
- Net capital stock volumes of other buildings and structures, and dwellings both rose by 1.0%; a slower rate of growth when compared with 2022.
- Machinery, equipment and weapons systems volumes grew by 2.0% in 2023, accounting for 21.2% of the UK's net capital stock growth; this is the fastest rate of growth since 2017.
- Central government net capital stock volumes rose by 5.1% in 2023, following a rise of 4.7% in 2022; this represents the sector's largest annual growth since 2004.

2. UK net capital stock in 2023

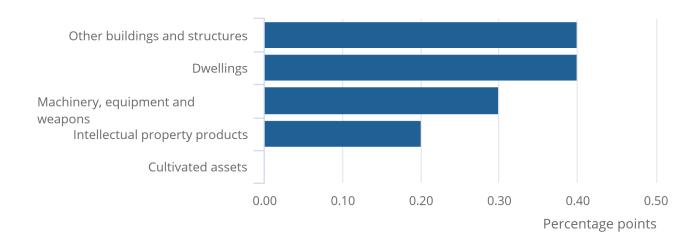
The UK's net capital stock, in chained volume measures, grew by 1.2% in 2023, revised down from initial estimates of 1.5%, reaching an estimated £5.5 trillion.

Figure 1: UK net capital stock grew 1.2% in 2023

Contributions to the UK's net capital stock growth by asset, chained volume measures, 2023

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Contributions to the UK's net capital stock growth by asset, chained volume measures, 2023



Source: Capital stocks estimates from the Office for National Statistics

Notes:

- 1. The components of net capital stock growth do not always add to the total because of rounding or because chained volume measures data are not additive until the reference year.
- 2. Individual contributions may not sum to the total because of rounding.

Figure 1 shows the contributions to the 1.2% growth in the UK's net capital stocks in 2023.

The main contributors to the increase were growth in other buildings and structures, and dwellings, each contributing 0.4 percentage points. Other buildings and structures accounted for 40.4% of the UK's net capital stock in 2023, while dwellings made up 39.6%.

Machinery, equipment and weapons systems grew by 2.0%, its fastest rate since 2017; this contributed 0.3 percentage points to the growth in the UK's net capital stocks volumes and led to a second consecutive year of positive growth.

Intellectual property products grew by 2.4% in 2023, recording its lowest contribution to annual growth since 2009 when excluding the coronavirus (COVID-19) pandemic year of 2020.

Figure 2: Growth in the UK's net capital stock slowed in 2023

Contributions to the UK's net capital stock growth by asset, chained volume measures, 1996 to 2023

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Source: Capital stocks estimates from the Office for National Statistics

Notes:

- 1. The components of net capital stock growth do not always add to the total because of rounding or because chained volume measures data are not additive until the reference year.
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Figure 2 shows that the UK's net capital stock volumes grew at a slower rate in 2023 compared with the 1.5% increase in 2022, and remain below the pre-coronavirus (COVID-19) pandemic growth rate of 1.7% in 2019.

While other buildings and structures, and dwellings continued as the largest contributors to growth in 2023, their slower growth compared with 2022 offset the increased growth in machinery, equipment and weapons systems. This limited overall growth to 1.2%.

3. Selected breakdowns

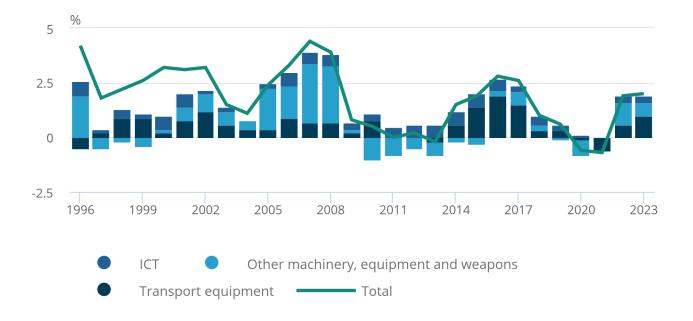
Machinery, equipment and weapons systems

Figure 3: Transport equipment is the main contributor to growth in net capital stocks of machinery, equipment and weapons systems

Contributions to the UK's net capital stock growth of machinery, equipment and weapons systems, chained volume measures, 1996 to 2023

Figure 3: Transport equipment is the main contributor to growth in net capital stocks of machinery, equipment and weapons systems

Contributions to the UK's net capital stock growth of machinery, equipment and weapons systems, chained volume measures, 1996 to 2023



Source: Capital stocks estimates from the Office for National Statistics

Notes:

- 1. The components of net capital stock growth do not always add to the total because of rounding or because chained volume measures data are not additive until the reference year.
- 2. Individual contributions may not sum to the total because of rounding.
- 3. Net capital stocks of machinery, equipment and weapons include: transport equipment, ICT equipment, other machinery and equipment and weapons systems.

Figure 3 shows that net capital stocks in machinery, equipment and weapons systems grew by 2.0% in 2023 to £704 billion in chained volume measures (CVM), marking the largest annual growth since 2017.

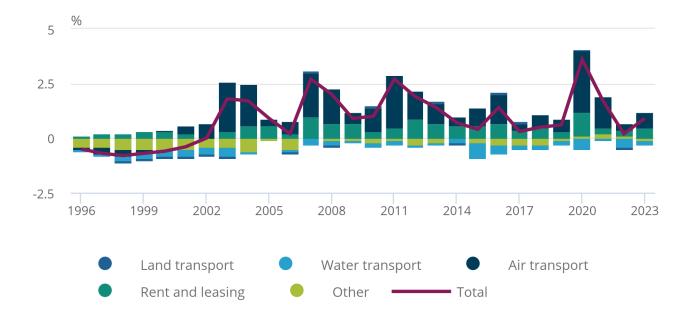
The main contributor to the increase was a 4.6% growth in transport equipment, contributing 1.0 percentage point to the net capital stock growth. Information and communications technology (ICT), and other machinery, equipment and weapons systems grew more slowly when compared with the previous year.

Figure 4: Air transport, and rent and leasing industries are the main contributors to market sector net capital stock growth in transport equipment

Contributions to the UK's net capital stock growth of transport equipment by industry, market sector, constant prices, 1996 to 2023

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Contributions to the UK's net capital stock growth of transport equipment by industry, market sector, constant prices, 1996 to 2023



Source: Capital stocks estimates from the Office for National Statistics

Notes:

1. Individual contributions may not sum to the total because of rounding.

Figure 4 shows the market sector annual growth in net capital stocks of transport equipment in constant prices, which rose by 0.9% in 2023, from 0.2% in 2022.

Air transport's contribution increased from 0.3 to 0.7 percentage points in 2023, while the rent and leasing industry contributed 0.5 percentage points, up from 0.3 percentage points in 2022. These gains were partially offset by declines in other transport sectors, although the falls in land and water transport were smaller compared with 2022.

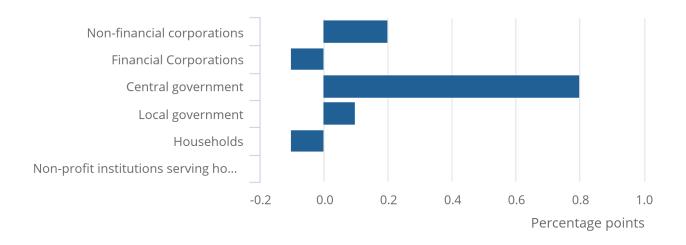
Other buildings and structures

Figure 5: Despite a slowdown in annual growth, other buildings and structures returned as the largest contributor to the UK's net capital stock growth in 2023

Contributions to the UK's net capital stock growth of other buildings and structures by sector, chained volume measures, 1996 to 2023

Figure 5: Despite a slowdown in annual growth, other buildings and structures returned as the largest contributor to the UK's net capital stock growth in 2023

Contributions to the UK's net capital stock growth of other buildings and structures by sector, chained volume measures, 1996 to 2023



Source: Capital stocks estimates from the Office for National Statistics

Notes:

- 1. The components of net capital stock growth do not always add to the total because of rounding or because chained volume measures data are not additive until the reference year.
- 2. Individual contributions may not sum to the total because of rounding.
- 3. Net capital stocks of other buildings and structures include buildings, other structures, and land improvements.

Figure 5 shows contributions to the UK's net capital stock of other buildings and structures in chained volume measures.

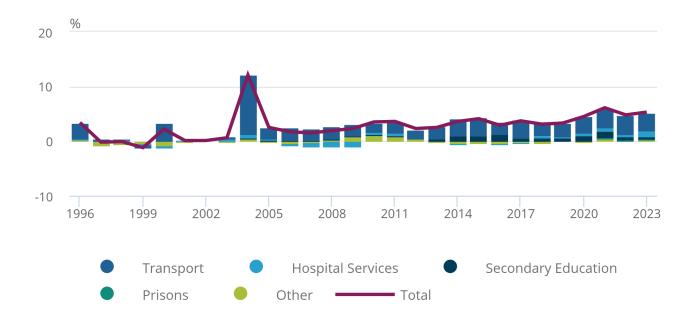
Other buildings and structures grew by 1.0% in 2023 to £2.2 trillion, falling from 1.2% in 2022. The central government sector contributed 0.8 percentage points to this growth, following a rise of 5.0% in 2023.

Figure 6: Growth in other buildings and structures was fuelled by central government in 2023

Contributions to the UK's net capital stock growth of central government by other buildings and structures sub-assets, constant prices, 1996 to 2023

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Contributions to the UK's net capital stock growth of central government by other buildings and structures sub-assets, constant prices, 1996 to 2023



Source: Capital stocks estimates from the Office for National Statistics

Notes:

1. Individual contributions may not sum to the total because of rounding.

Figure 6 shows central government's net capital stocks of other buildings and structures in constant prices. This grew by 5.3% in 2023, up from 4.8% in 2022 and above the pre-coronavirus (COVID-19) pandemic growth rate of 3.3% in 2019.

The main contributor to the increase was higher contributions from hospital services, which rose to 1.2 percentage points in 2023 from 0.5 percentage points in 2022. While contributions from prison services remained flat at 0.2 percentage points, it experienced actual growth of 24.0%.

Although transport remained the largest contributor to growth, its contribution to net capital stock growth fell to 3.2 percentage points from 3.4 percentage points in 2022, limiting overall sector growth.

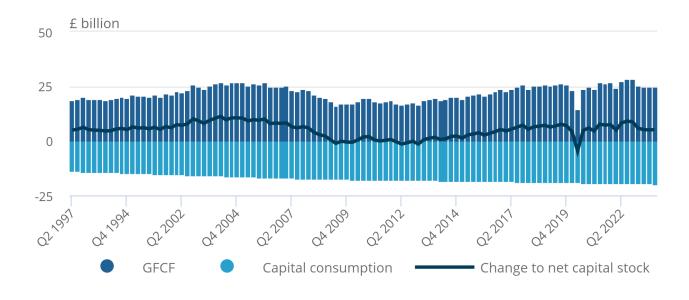
Dwellings

Figure 7: Investment growth in dwellings slowed in 2023

The UK's net capital stock growth of dwellings, constant prices, 1997 to 2023

Figure 7: Investment growth in dwellings slowed in 2023

The UK's net capital stock growth of dwellings, constant prices, 1997 to 2023



Source: Capital stocks estimates from the Office for National Statistics

Figure 7 shows that investment growth in dwellings outpaced capital consumption in 2023, but at a slower rate compared with 2022.

The UK's net capital stock of dwellings grew by 1.0% in 2023, down from 1.5% in 2022. The slowdown in growth between years is because of a decrease in gross fixed capital formation, while consumption of fixed capital remained relatively constant. Despite the slower growth rate and the significant decline in Quarter 2 (Apr to June) 2020, this marks the 11th consecutive annual increase since the last decline in 2012.

4. Data on capital stocks and fixed capital consumption

Capital stocks and fixed capital consumption

Dataset | Released 29 November 2024

Gross and net capital stocks and consumption of fixed capital in the UK, in current prices and chained volume measures, annual estimates.

Perpetual inventory method (PIM) inputs

Dataset | Released 29 November 2024

Input files to the perpetual inventory method (PIM) code. Data are consistent with our Capital stocks and fixed capital consumption dataset released on 29 November 2024.

5. Glossary

Capital consumption

Capital consumption measures the loss of value of assets as they age. It is the decline in the current value of the stock of fixed assets owned and used by a producer as a result of physical deterioration, normal obsolescence or normal accidental damage.

Capital stock

Capital stock is the quantity of produced non-financial assets with a lifespan of more than a year (for example, buildings and machinery), which contribute to the production of goods and services, without being completely used up or transformed in the process. Capital stock produces a flow of capital services into the production process.

It is an important variable in multi-factor productivity, which looks at the efficiency with which an economy can transform inputs, such as labour and capital, into output.

The net capital stock is the gross capital stock (defined as the value of all fixed assets still in use at a point in time), less the consumption of fixed capital accrued up to that point. It takes into account the depreciation of the assets through time as a result of physical deterioration, foreseeable obsolescence or normal accidental damage.

6. Data sources and quality

Capital stock estimates are published in gross and net values. The difference between gross and net stock in a particular period, is consumption of fixed capital.

Capital stocks are also presented in current prices, constant prices (KP) and chained volume measures (CVMs); the latter reflects changes in volumes after removing price effects. Further information about the calculation of CVMs can be found in our methodology article CVMs can be found in our methodology article CVMs can be found in our methodology article CVMs can be found in our methodology article CVMs can be found in our methodology article CVMs can be found in our methodology article CVMs can be found in our methodology article CVMs can be found in our methodology articles.

All CVM values in this bulletin are referenced to 2022. Analysis of contributions to growth of net stocks broken down by gross fixed capital formation (GFCF) and capital consumption are presented in constant prices with 2022 as the base year.

Changes in the real net capital stock from one period to another consist of increases to the net capital stock from GFCF and reductions from capital consumption and other changes in volume (for example, war losses). GFCF includes the acquisition of capital (minus disposals) plus expenditure on non-produced assets that are classified as land improvements.

Annual growth rates are calculated as compound annual growth rates.

References to the pre-downturn period refer to the years 1995 to 2008, while the post-downturn period refer to the years 2011 to 2019 and may also be referenced as the pre-coronavirus (COVID-19) pandemic.

Quality

More quality and methodology information on strengths, limitations, appropriate uses and how the data were created is available in our <u>Capital stocks and fixed capital consumption Quality and Methodology Information</u>.

Strengths and limitations

The capital stocks estimates are an important variable within the accumulation accounts, which show how the value of assets within an economy change over time.

Capital consumption will depend on the average life of each asset type. For assets such as dwellings this means the value of the asset will slowly depreciate, having a weighted life of 50 years. By contrast, investment in software will depreciate more rapidly having a weighted life of five years. Further information on asset lives can be found in our National Accounts article Changes to the capital stock estimation methods for Blue Book 2019.

Values of capital stock and consumption of fixed capital in this release have been revised since final 2023 estimates and the preliminary 2024 estimates.

Current price estimates of net capital stock in 2023 have been revised up by £78 billion (1.4%) compared with those published in the <u>Capital stocks preliminary estimate</u>. Similarly, capital consumption has been revised up by 0.8%, or £3.4 billion, during the same period.

Most of the revisions from the <u>Capital stocks and fixed capital consumption: 2023</u> are caused by revisions to gross fixed capital formation (GFCF). Further details on the revisions to UK estimates of GFCF in <u>Blue Book 2024</u> can be found in our <u>Business investment statistical bulletin</u>.

Accredited official statistics

These accredited official statistics were independently reviewed by the Office for Statistics Regulation 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".

7. Related links

Preliminary capital stocks and fixed capital consumption

Dataset | Released 13 June 2024

Preliminary annual estimates of gross and net capital stocks and consumption of fixed capital in the UK, in current prices and chained volume measures.

Capital stocks and fixed capital consumption, UK: 2023

Bulletin | Released 8 December 2023

Annual estimates of gross and net capital stocks and consumption of fixed capital in the UK, in current prices and chained volume measures.

8. Cite this statistical bulletin

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