

Statistical bulletin

# Capital stocks and fixed capital consumption, UK: 2019

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.



Contact:  
Kris Johannsson  
capstocks@ons.gov.uk  
+44 (0)1633 455341

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# 1 . Main points

- Net capital stock reached £4.0 trillion in 2018, increasing at an average rate of 1.8% per year since 2010, which compares to an average increase of 2.4% per year from 1996 to 2008.
- The Blue Book 2019 introduced a number of improvements to our estimates of capital stocks, reducing the net capital stock by £0.7 trillion in 2017.
- Since 2010, there has been strong growth in the net capital stock within the energy industry, which has grown on average by 5.9% annually.
- There has been relatively slow annual growth in the net capital stock of financial and insurance services (0.5%), with reductions in other buildings.

## 2 . Things you need to know

Capital stock is a measurement of physical capital within an economy at a point in time. Physical capital includes any non-financial assets that are used in the production of goods and services with a lifespan of greater than a year (for example, buildings and machinery). Capital stock produces a flow of capital services into the production process. Net capital stock is therefore related to the amount of goods and services that an economy can produce.

Changes in net capital stock from one period to another consist of increases in capital stock from investment and the reduction in capital stock from retirement, depreciation, revaluation and other changes in volumes. Capital stock estimates are produced for net capital stock, gross capital stock and capital consumption, which are broken down by institutional sector, industry and asset.

Significant improvements have been made to producing estimates of capital stock, and these have had a considerable impact on capital stock estimates. Details of the methodological improvements can be found in [Changes to the capital stock estimation methods for Blue Book 2019](#). The largest revisions to capital stock estimates are as a result of reductions in the average length for which most assets are used (on average, this accounts for 87% of the change in annual estimates of net capital stock). The impact of shorter asset lives is that assets depreciate faster, resulting in higher estimates of capital consumption and lower estimates of capital stock. Impacts of methodological improvements can be found in [Latest developments and changes to capital stocks to be implemented in Blue Book 2019](#).

All data referred to in this bulletin are annual chained volume measures (CVMs) unless otherwise specified. Data in CVMs within this bulletin have had the effect of price changes removed (in other words, the data are deflated) and are referenced to 2016. Components of capital stock and consumption of fixed capital may not always sum to totals because of rounding or because CVM data cannot be added together before the reference year. Compound annual growth rates are used to calculate annual growth rates.

During the quality assurance of data, we identified an issue with the chaining of capital consumption estimates after the reference year, and we will publish [Consumption of fixed capital experimental dataset](#) with corrected CVMs on 28 November 2019.

## 3 . Net capital stock increased on average by 1.8% each year since the economic downturn

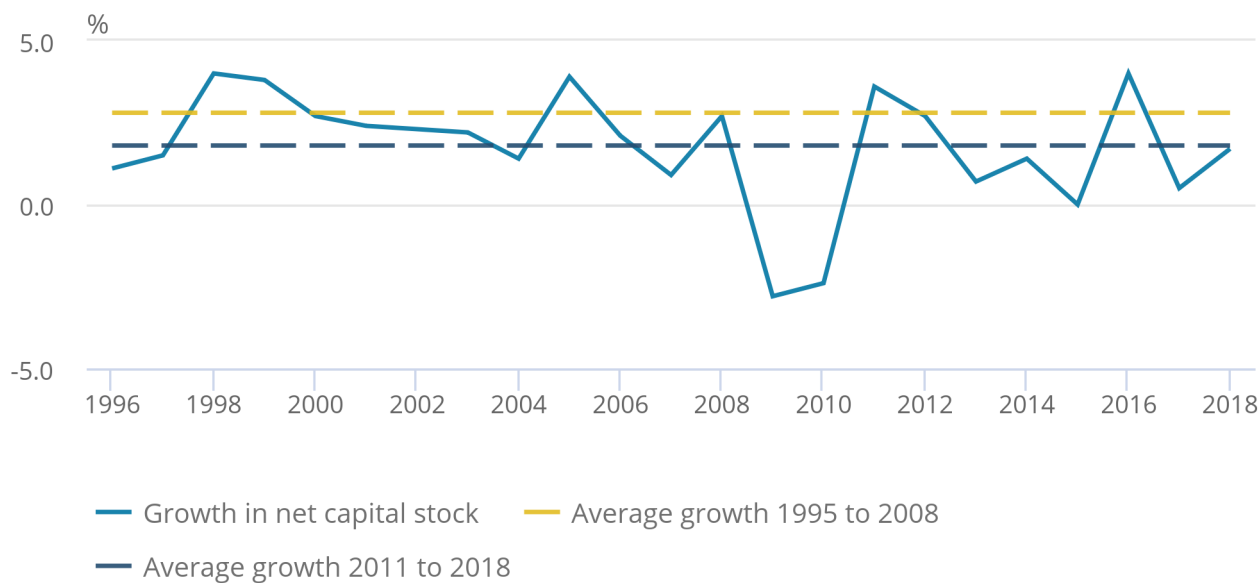
Net capital stock increased at an average rate of 2.8% per year from 1995 to 2008. The economic downturn resulted in a 5.1% fall in net capital stock, from £3.6 trillion in 2008 to £3.4 trillion in 2010. Since the economic downturn, net capital stock increased at an annual average rate of 1.8%, reaching £4.0 trillion in 2018.

**Figure 1: Growth in net capital stock is slower than before the economic downturn**

Growth in net capital stock, chained volume measures, UK, 1996 to 2018.

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Growth in net capital stock, chained volume measures, UK, 1996 to 2018.



Source: Office for National Statistics – Capital stocks and fixed capital consumption

## 4 . Financial corporations and households have experienced relatively weak net capital stock growth since the economic downturn

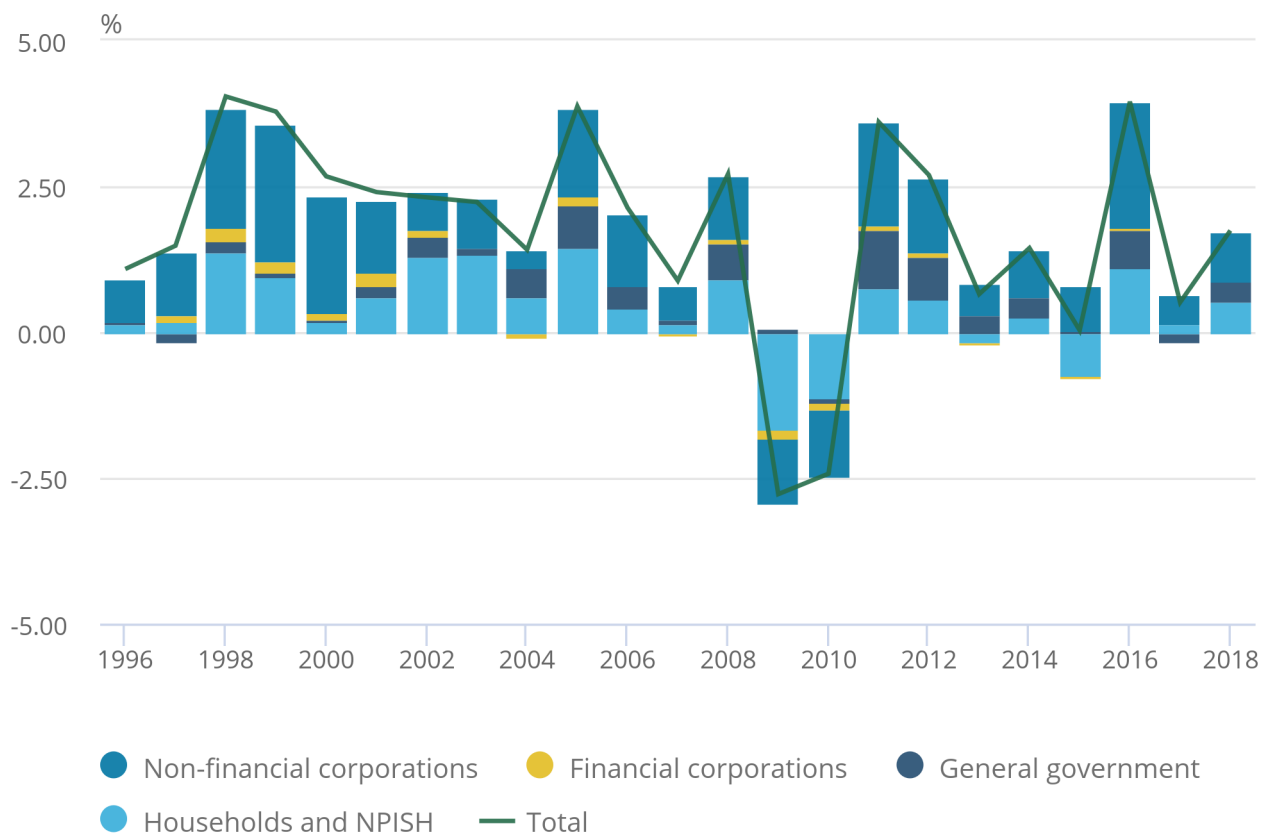
Since the economic downturn, there has been relatively weak growth for financial corporations and households. The net capital stock held by general government has grown at a faster rate after the economic downturn.

**Figure 2: Net capital stock growth for households and non-profit institutions serving households has been relatively slow in recent years**

Contributions to annual net capital stock growth by sector, UK, 1996 to 2018.

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Contributions to annual net capital stock growth by sector, UK, 1996 to 2018.



Source: Office for National Statistics – Capital stocks and fixed capital consumption

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.

## 5. Growth in net capital stock of dwellings since the economic downturn remains relatively weak

The net capital stock of dwellings was £1.6 billion in 2018, which is slightly lower than it was in 2008.

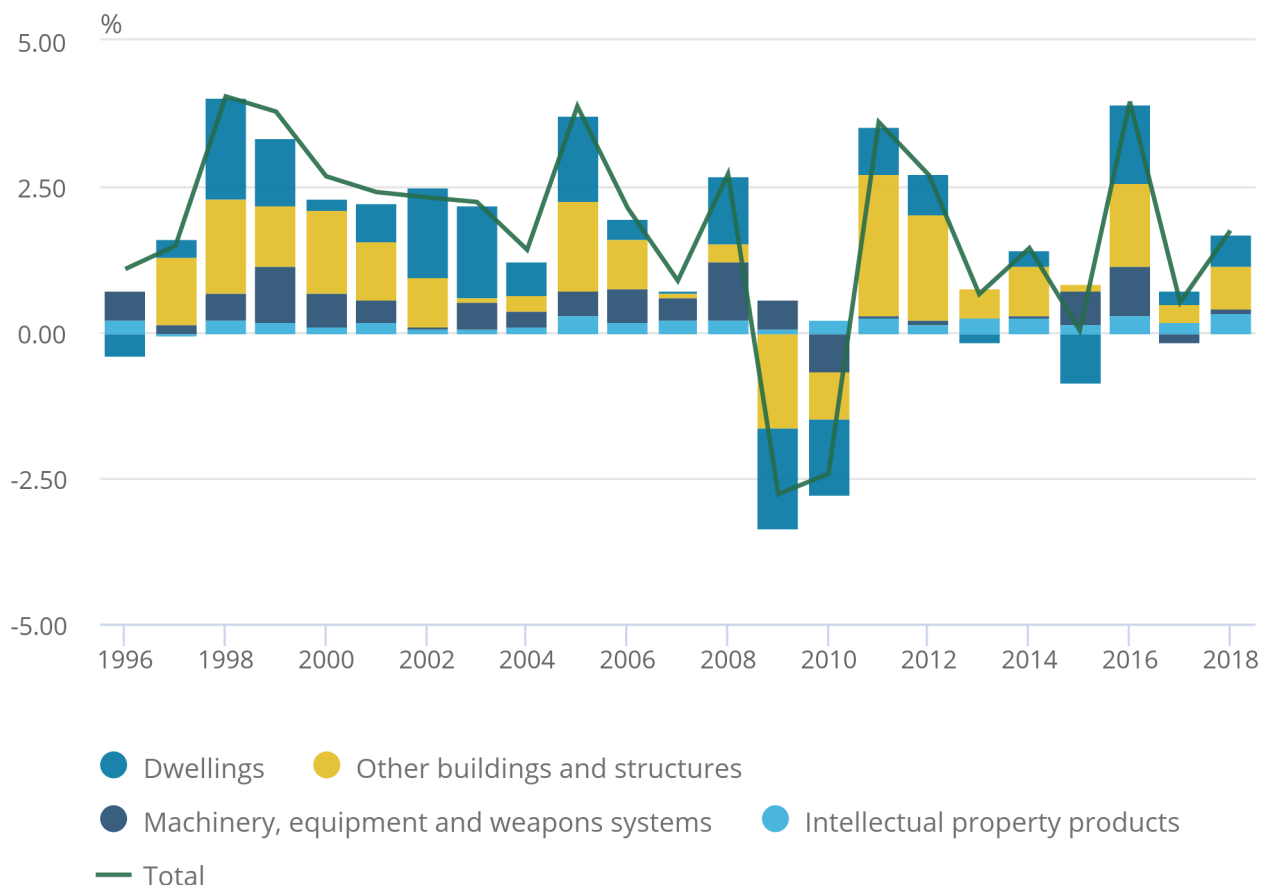
There was strong growth in the net capital stock of other buildings and structures after the economic downturn. However, from 2015 to 2018, the rate of increase in net capital stock has returned to rates similar to before the downturn.

**Figure 3: Growth has primarily been driven by other buildings and structures since the economic downturn**

Contributions to annual net capital stock growth by asset, UK, 1996 to 2018.

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Contributions to annual net capital stock growth by asset, UK, 1996 to 2018.



Source: Office for National Statistics – Capital stocks and fixed capital consumption

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.

## 6 . Net capital stock has grown strongly in the energy industry since 2006

The net capital stock held within the electricity, gas, steam and air conditioning industry fell between 1995 and 2005. Since 2006, the net capital stock within the the electricity, gas, steam and air conditioning industry has increased on average by 5.6% per year.

Professional, scientific and technical activities have seen large increases in the net capital stock they hold between 1995 and 2018. Prior to the economic downturn, net capital stock increased on average by 5.3% a year, which has slowed to an average rate of 4.2% a year after the downturn. After the downturn, growth in professional, scientific and technical activities has been driven by an annual average increase of:

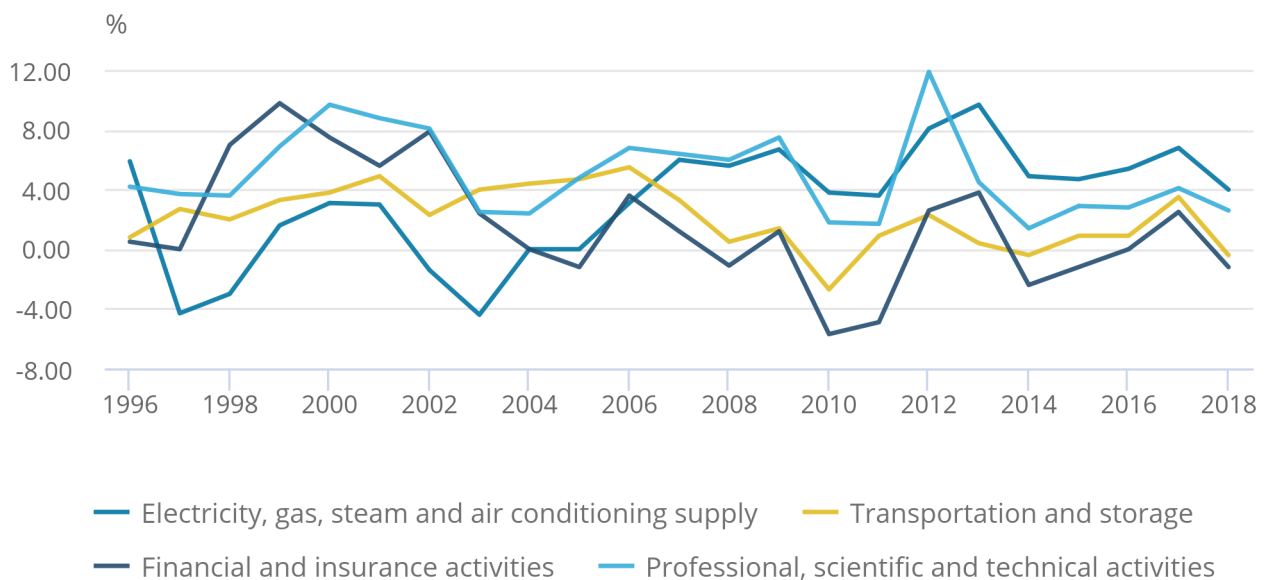
- 8.3% in the net capital stock held by architectural and engineering activities
- 6.9% in the net capital stock held by legal and accounting activities, and activities of head offices, management; consultancy activities

**Figure 4: Net capital stock in the energy industry has grown strongly since 2006**

Growth in net capital stock for selected industries, UK, 1996 to 2018.

Figure 4: Net capital stock in the energy industry has grown strongly since 2006

Growth in net capital stock for selected industries, UK, 1996 to 2018.



Source: Office for National Statistics – Capital stocks and fixed capital consumption

The net capital stock held by financial and insurance services has increased on average by 0.5% since the 2008 economic downturn. Since 2005, there has been a 38% fall in other buildings held within the financial and insurance services industry, which is likely to reflect closures of bank branches. There have been increases in the net capital stock of other machinery and software and databases, demonstrating that there has been a shift in the mix of assets that financial and insurance services are using.

Weak growth in the net capital stock does not necessarily mean that this is the case for capital inputs. A switch from mainly investing in assets with long asset lives (for example, buildings) to those with short asset lives (for example, software) will lead to lower growth in the net capital stock and higher growth in capital input in the short term. Capital input measured using the [volume indices of capital services](#) (VICS) has increased by 5.9% for financial and insurance services after the 2008 economic downturn, compared to a 3.8% increase in net capital stock. Therefore, capital input has grown at a faster rate than net capital stock, but increases in VICS for financial and insurance services are still lower than for most other industries.

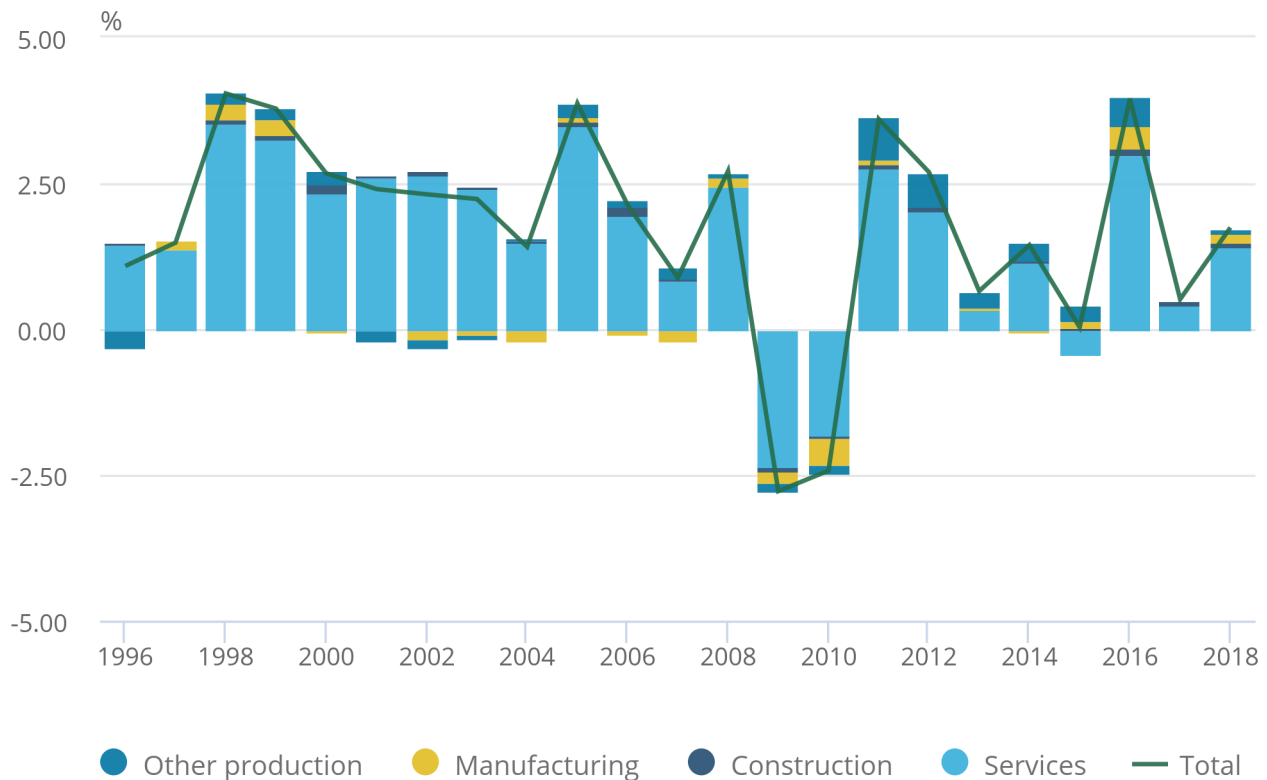
The growth in net capital stock in the transportation and storage industry has been much lower since the downturn, growing at an average rate of 0.8% per year, compared with 3.2% prior to the downturn.

## Figure 5: Other production has grown at a faster rate since the economic downturn

Contributions to annual net capital stock growth by industry, UK, 1996 to 2018.

### Figure 5: Other production has grown at a faster rate since the economic downturn

Contributions to annual net capital stock growth by industry, UK, 1996 to 2018.



Source: Office for National Statistics – Capital stocks and fixed capital consumption

#### Notes:

1. “Other production” includes agriculture; forestry and fishing; mining and quarrying; utilities; and water supply and sewage.
2. 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.

The industry where net capital stock has increased at the fastest rate from 2015 to 2018 is administrative and support service activities, which has grown at an average rate of 9.7% a year. Administrative and support service activities include rental and leasing activities, which have seen large rises in the [transport equipment](#) they hold, with increases in the number of vehicles that are leased to consumers.



Another industry in which growth in net capital stock has been faster from 2015 to 2018 than in previous periods has been in manufacturing. The motor vehicles, trailers and semi-trailers sector accounts for around half of the 2.9% increase in the net capital stock within the manufacturing industry, with increases in other machinery and research and development.

## 7 . Capital consumption has grown at a slower rate following the economic downturn

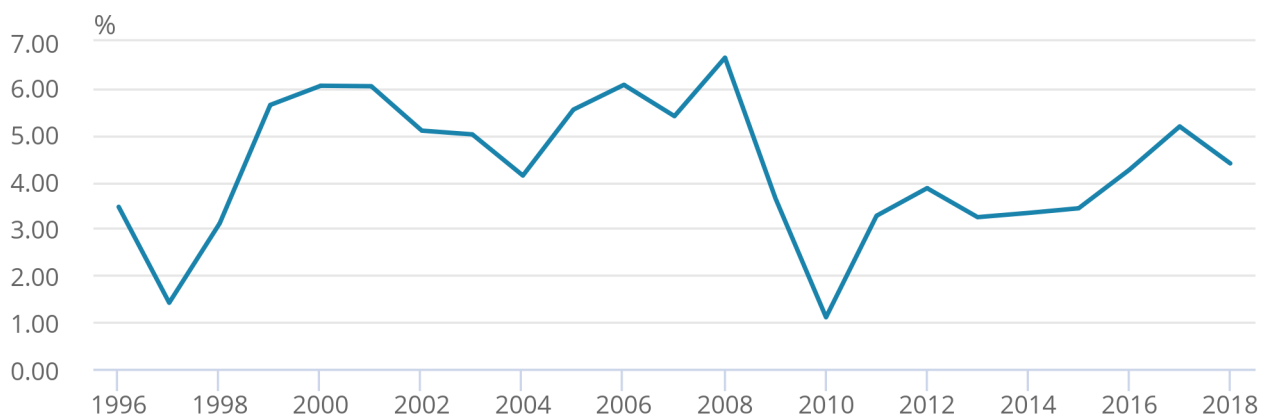
Capital consumption, measured in current prices, has grown at a slower rate following the economic downturn.

### Figure 6: Growth in capital consumption has slowed after the economic downturn

Growth in capital consumption, current prices, UK, 1996 to 2018.

#### Figure 6: Growth in capital consumption has slowed after the economic downturn

Growth in capital consumption, current prices, UK, 1996 to 2018.



Source: Office for National Statistics – Capital stocks and fixed capital consumption

## 8 . Future work plan

We will produce an updated version of the [Capital stocks and fixed capital consumption Quality and Methodology Information \(QMI\) report](#), to take account of the changes detailed in [Changes to the capital stock estimation methods for Blue Book 2019](#).

We are looking to use alternative data sources in order to improve pre-1997 estimates of gross fixed capital for dwellings and to make some further improvements in relation to transfer costs.

