

Statistical bulletin

# Capital stocks and fixed capital consumption, UK: 2017

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:  
Dan Groves  
capstocks@ons.gsi.gov.uk  
+44 (0)1633 455341

Release date:  
22 November 2017

Next release:  
August 2018

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# 1 . Main points

- The UK's net capital stock was estimated at £4.4 trillion at the end of 2016, increasing by 1.5% compared with 2015.
- Net capital stock grew by an average of 1.5% per year between 1998 and 2016.
- Prior to the economic downturn, net capital stock increased on average by 2.0% per year, slowing to an average of 0.8% per year since 2010.
- At the end of 2016, services industries held an estimated 75.9% of total net capital stocks, construction 9.6% and manufacturing 5.8%; other production industries accounted for the remaining 8.6% of net stocks held.
- In 2016 consumption of fixed capital for the UK was estimated at £236 billion, an increase of 2.0% compared with 2015.

## 2 . Things you need to know about this release

This release includes estimates of gross capital stocks, net capital stocks and consumption of fixed capital. The estimates are available by institutional sector, asset and industry. Information on these classifications can be found in our publication of [concepts, sources and methods](#). Further information is available in an accompanying [quality and methodology information \(QMI\) paper](#). The QMI document is currently undergoing a review and will incorporate additional information, explaining these terms in more detail. It will also include additional information such as a glossary of terms which is also available on request.

All data referred to in this bulletin are annual estimates of chained volume measures (CVM) unless otherwise specified. Data in chained volume measures within this bulletin have had the effect of price changes removed (in other words, the data are deflated) and are referenced to 2015. Components of capital stock and consumption of fixed capital may not always add to totals due to rounding or because CVM data cannot be added together before the reference year.

## 3 . Capital stock in the wider economy

Capital stock is defined as the total physical capital within the economy at any given time. Capital assets are already-produced, durable goods or any non-financial asset that is used in the production of goods or services. The larger the net capital stock of a nation, the more goods and services it will be able to produce.

The capital stock of the UK is closely related to the level of investment within the economy. Annual growth in gross fixed capital formation (GFCF) has been slowing consistently since 2014. Quarter on same quarter a year ago growth averaged 7.1% in 2014, fell to 2.8% in 2015 and fell further to 1.3% in 2016. Business investment has remained broadly unchanged since Quarter 3 (July to Sept) 2015, experiencing two quarters of slightly negative growth (negative 0.1%) in 2016. For more information, please see [Business investment in the UK](#).

In its most recent [inflation report](#), the Bank of England states that the current level of investment “remains low relative to the size of the capital stock”. The report then continues that the lower investment will weigh on the capital stock and affect potential supply side growth in the future. Lower levels of investment seen since 2008 have contributed to the slowing of average net capital stock growth from an average of 2.0% before the financial crisis, to an average of 0.8% per year since 2010.

The capital stock is also closely related to the level of productivity in the economy. Productivity growth has been subdued since the onset of the global financial crisis, and is barely above its pre-crisis peak a decade ago. The Bank of England inflation report cites one of the reasons for this slow growth as the relatively slow growth in the capital stock relative to the amount of hours worked. The report then goes on to state that total factor productivity (TFP) – the efficiency with which labour and capital are put to use – fell sharply during the financial crisis and has since remained weak. It also notes that the weakness in TFP is a global phenomenon. However, as mentioned in this bulletin (Figure 8), net capital stock per employee in the UK returned to positive growth in 2016 for the first time since 2011. For a more detailed summary of current productivity levels within the UK, please see the bulletin on [Labour productivity](#).

## **4 . Capital stocks and consumption of fixed capital in detail**

Capital stocks are recorded as accumulated balances and the estimated consumption of fixed capital is based on the capital stocks. Therefore, estimates of capital stocks and the consumption of fixed capital tend to follow a relatively smooth path. Nevertheless, in cases where the asset price or gross fixed capital formation (GFCF) have changed significantly, changes in the rate of increase or decrease in the capital stock can be observed.

### **Gross capital stocks growth averages 1.7% per year**

Gross capital stocks tell us how much the economy's assets would cost to buy again as new, or their replacement cost.

Gross capital stocks were estimated at £7.5 trillion at the end of 2016 (Figure 1), an increase of 35.1% since 1998 and equivalent to 1.7% growth per year. In the period up to the economic downturn (1998 to 2007), gross capital stocks increased on average by 2.2% per year. This slowed to 1.6% per year during 2008 and 2009, and to 1.2% per year during the period 2010 to 2016, remaining below rates seen prior to the downturn (Table 1).

### **Net capital stocks increase by 28% since 1998**

Net capital stocks show the market value of fixed assets. They account for the depreciation in assets, so both the level and the rate of increase in the net capital stock will be lower compared with gross capital stock.

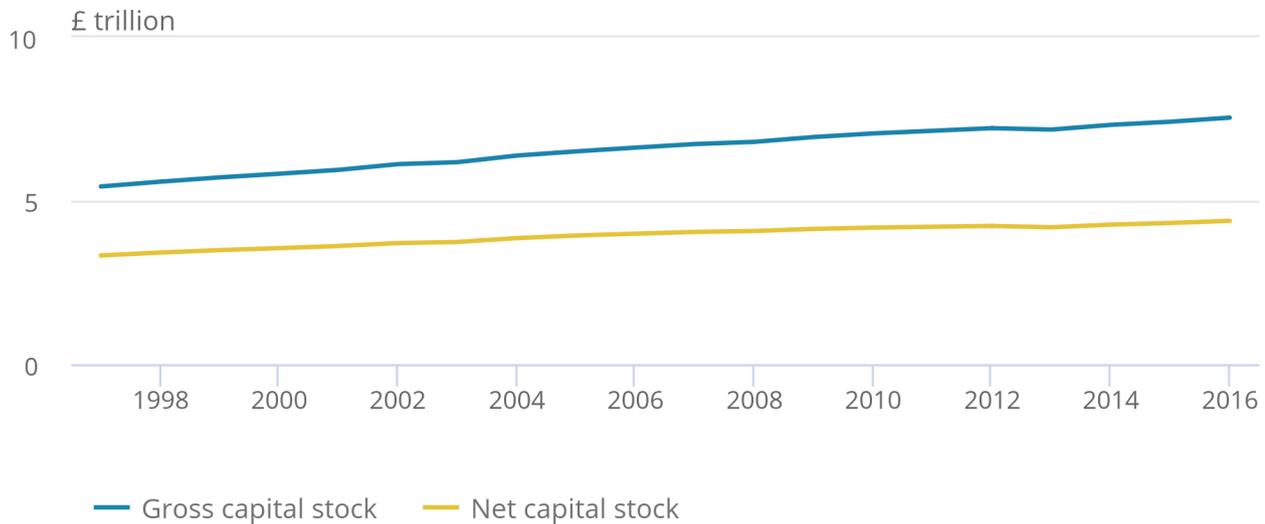
Net capital stocks were estimated at £4.4 trillion at the end of 2016 (Figure 1), an increase of 28.4% since 1998 and equivalent to 1.5% growth per year. The average annual growth in net capital stocks slowed between 2010 and 2016 to 0.8%, compared with 2.0% prior to the downturn (Table 1). Lower growth since 2010 has been driven by a slowdown in both dwellings and other buildings and structures.

**Figure 1: Gross and net capital stocks, 1997 to 2016**

Reference year: 2015 - Coverage: UK

**Figure 1: Gross and net capital stocks, 1997 to 2016**

Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

**Table 1: Average annual growth in capital stocks and consumption of fixed capital**

Reference year: 2015 Coverage: UK

Chained volume measures (%)	1998 to 2007	2008 to 2009	2010 to 2016	1998 to 2016
Gross capital stock	2.2	1.6	1.2	1.7
Net capital stock	2.0	1.2	0.8	1.5
Consumption of fixed capital	2.9	-2.0	1.9	2.0

Source: Office for National Statistics

## Consumption of fixed capital growth 2% between 2015 and 2016

The consumption of fixed capital is the decline in the value, or depreciation, of fixed assets in the economy over a time period.

In 2016, the consumption of fixed capital was estimated at £236 billion, an increase of 42.5% since 1998. Growth between 2015 and 2016 was 2.0%, matching the average growth since 1998. This was mainly due to transfer costs (costs associated with the buying and selling of dwellings) and transport equipment both growing strongly between 2015 and 2016; between 2010 and 2016, transfer costs had an average annual growth rate of 9%.

In contrast with the gross and net capital stock estimates, capital consumption decreased during the economic downturn.

Up to 2007 consumption of fixed capital increased year on year, to £216 billion but fell to £207 billion in 2009, decreasing by 4.1% between 2007 and 2009. The main contributor to this decline was a sharp fall in household transfer costs (costs associated with buying and selling dwellings) of 75% over the 2008 to 2009 period because of the downturn in the housing market.

Growth in the consumption of fixed capital subsequently picked up, albeit at a slower rate compared with the pre-downturn period, surpassing 2007 in 2012 (£218 billion). In 2016, the level of the consumption of fixed capital was 9.0% (£20 billion) higher than the 2007 peak (Figure 2).

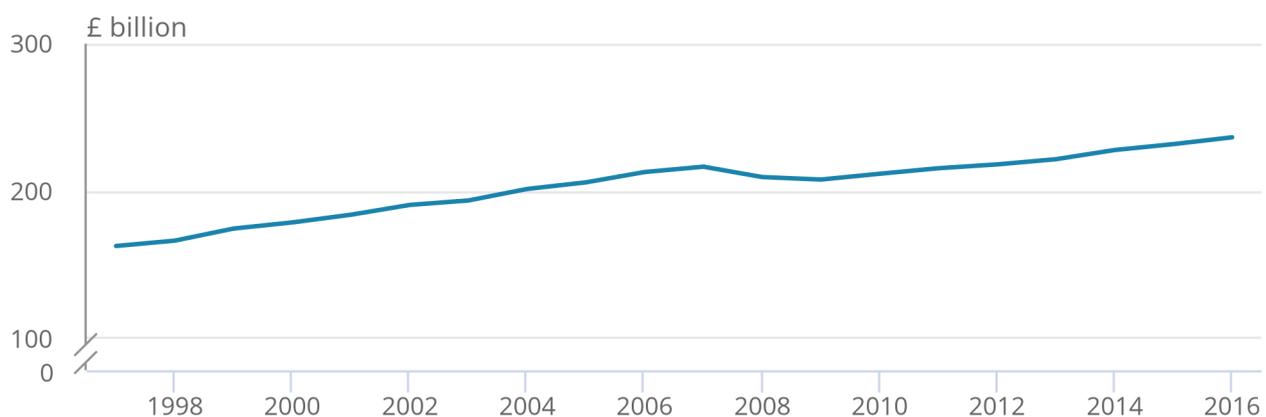
Improvements to the methodology of transfer costs, costs associated with the buying and selling of property have been introduced this year and have resulted in estimates for transfer costs reducing by 32% between 1997 and 2015. We use the House Price Index (HPI) as part of the calculation of transfer costs and the overall impact has been to reduce the level of transfer costs from 1997 to 2017, though growth has remained broadly the same.

## Figure 2: Consumption of fixed capital estimates, 1997 to 2016

Reference year: 2015 - Coverage: UK

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Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

## 5 . Institutional sectors' share of capital stocks remain stable

Net capital stocks estimates have been used for this analysis as they are a measure of the market value of fixed assets (what these assets were worth at the time).

Between 1998 and 2016 the percentage share of net capital stocks owned by the institutional sectors remained relatively stable. At the end of 2016, 42.5% of net capital stock was held by 'non-financial corporations' (NFCs), totalling £1.9 trillion. The 'households and NPISH' (non-profit institutions serving households) sectors followed at 36.6% (£1.6 trillion).

Although both 'NFCs' and 'households and NPISH' increased between 1998 and 2016 (£361 billion and £248 billion respectively) their percentage share fell, largely because of the growth in general government (£331 billion), which increased its percentage share by 4.6 percentage points to 18.1%.

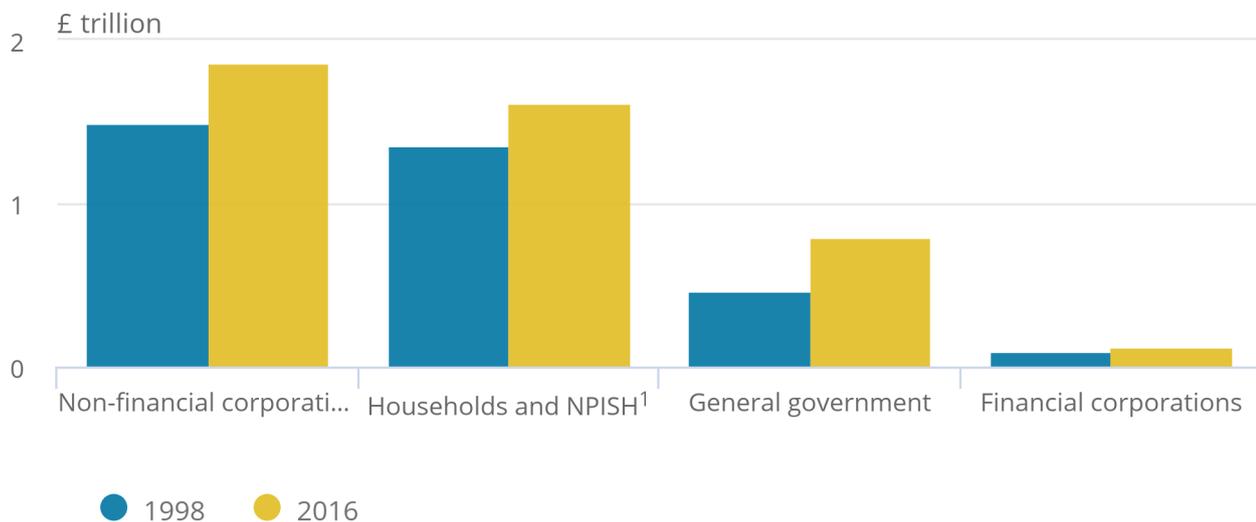
Of the assets held by 'NFCs', more than half, 57% were held in 'other buildings and structures', valued at £1.05 trillion. 'Households and NPISH' held most of their assets, 97%, in 'dwellings' (excluding land), valued at £1.5 trillion.

**Figure 3: Net capital stocks by institutional sector, 1998 and 2016**

Reference year: 2015 - Coverage: UK

### Figure 3: Net capital stocks by institutional sector, 1998 and 2016

Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

Notes:

1. NPISH stands for non-profit institutions serving households, such as universities and charities.

Figure 3 and Table 2 show that all institutional sectors experienced growth in net capital stocks between 1998 and 2016, albeit at different rates. In percentage terms, general government was the sector that experienced the strongest growth at 71.6% (equivalent to 3.0% on average per year), followed by non-financial corporations (NFCs) at 24.0% (equivalent to 1.3% on average per year) and financial corporations at 21.9% (equivalent to 1.3% on average per year). Households and NPISH increased by 18.3% (equivalent to 1.0% on average per year).

Table 2 shows that the economic downturn during 2008 and 2009 affected the growth of net capital stock to varying degrees by institutional sectors. Growth in net capital stock held by NFCs was adversely affected by the downturn, falling from 1.8% on average per year in the pre-downturn period, to zero growth in 2008 and 2009. In contrast, growth in net capital stock held by general government increased during the downturn to 5.7% on average per year, returning to a level below its pre-downturn rate in the following years, at 1.9%.

In the period 2010 to 2016, only general government has seen the annual growth of net capital stock return to near its pre-downturn level.

**Table 2: Average annual growth in net capital stocks by institutional sector**

Reference year: 2015 Coverage: UK				
Chained volume measures (%)	1998 to 2007	2008 to 2009	2010 to 2016	1998 to 2016
Non-financial corporations	1.8	0.0	1.0	1.3
Households and NPISH <sup>1</sup>	1.7	0.5	0.2	1.0
General government	3.2	5.7	1.9	3.0
Financial corporations	2.2	0.7	0.2	1.3
Total net capital stock	2.0	1.2	0.8	1.5

Source: Office for National Statistics

Notes:

1. NPISH stands for non-profit institutions serving households, such as universities and charities.

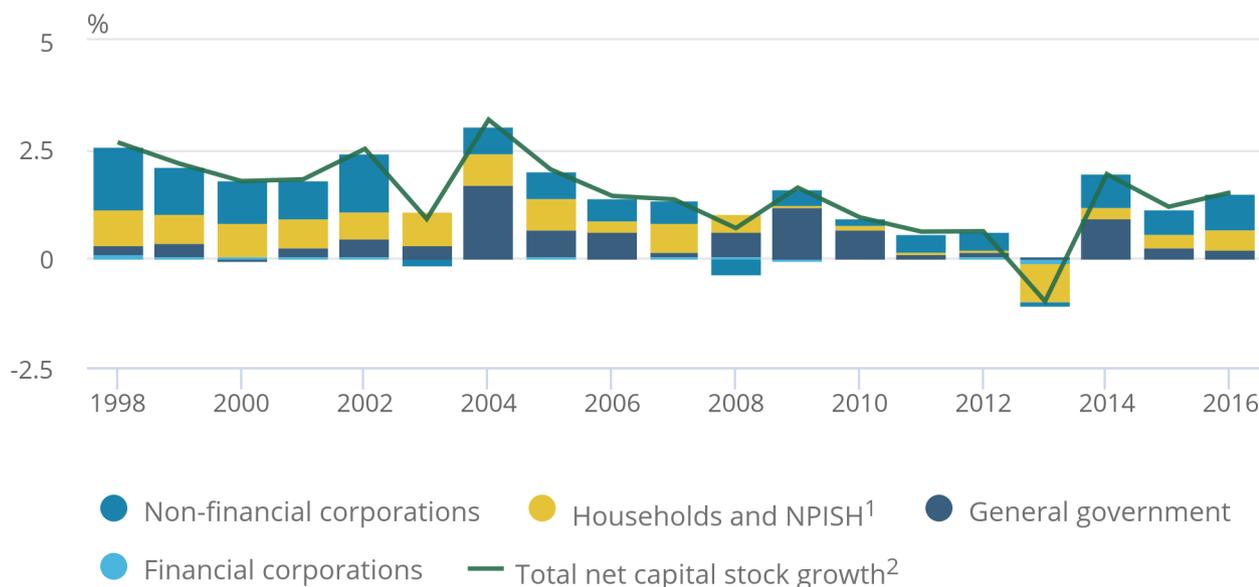
Figure 4 highlights the contribution that each institutional sector made to annual net capital stock growth between 1998 and 2016. During the downturn, a strong rise in general government net capital stock growth partially offset slower net stock growth in all other sectors.

**Figure 4: Contributions to annual net capital stock growth by institutional sector**

Reference year: 2015 - Coverage: UK

Figure 4: Contributions to annual net capital stock growth by institutional sector

Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

Notes:

1. NPISH stands for non-profit institutions serving households, such as universities and charities.
2. The components of net capital stock growth do not always add to the total due to rounding or because chained volume measures data are not additive until the reference year.

## 6 . Majority of assets held in dwellings and other buildings

At the end of 2016, “dwellings” and “other buildings and structures” accounted for almost the same share of assets (39.7% and 39.0%), of total net capital stock, both being valued at £1.7 trillion (Figure 5).

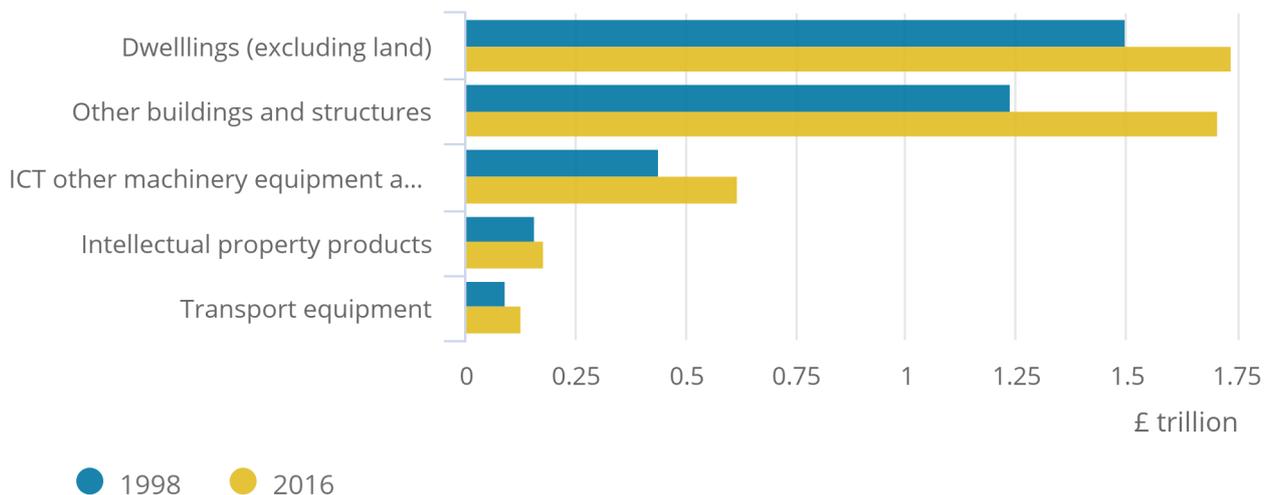
While the value of all assets has increased since 2008, the percentage share held by “dwellings”, despite a 16% growth by value, has fallen by four percentage points. Over the same period “other buildings and structures” has increased its share of assets by nearly three percentage points and “ICT and machinery” by more than one percentage point. All other assets are broadly unchanged. The strongest growth was in “transport equipment” (47.5%) but its share of total assets remained unchanged at 3%.

**Figure 5: Net capital stocks estimates by asset, 1998 and 2016**

Reference year: 2015 - Coverage: UK

**Figure 5: Net capital stocks estimates by asset, 1998 and 2016**

Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

Between 1998 and 2016 the consumption of fixed capital for 'ICT, other machinery, equipment and weapons systems' increased by 58.1% to £51.3 billion. This was equivalent to 22% of all capital consumption in 2016, up from 20% in 1998. "Dwellings" remained the largest component of capital consumption in 2016 at 23%, down from 25% in 1998.

Table 3 shows the economic downturn between 2008 and 2009 affected the pace of net capital stock accumulation by varying amounts across the assets. The 'transport equipment' asset group has shown strong growth post the economic downturn, especially so since 2014. Between 2010 and 2016 its share of net capital stock almost doubled from 2.2% to 3%. 'Dwellings' experienced the weakest average annual growth at 0.2% following the economic downturn, similar to the annual growth rate experienced between 2008 and 2009 but remains the largest asset, ahead of 'other buildings and structures'.

**Table 3: Average annual growth in net capital stocks by asset**

Reference year: 2015 Coverage: UK

<b>Chained volume measures (%)</b>	<b>1998 to 2007</b>	<b>2008 to 2009</b>	<b>2010 to 2016</b>	<b>1998 to 2016</b>
Dwellings (excluding land)	1.5	0.1	0.2	0.9
Other buildings and structures	2.2	3.0	1.1	1.9
ICT, other machinery, equipment and weapons systems	3.1	0.0	1.0	2.0
Intellectual property products	1.4	0.1	0.3	0.8
Transport equipment	0.6	-1.1	5.8	2.3
Cultivated biological resources	-0.8	5.5	0.6	0.4
Total net capital stock	2.0	1.2	0.8	1.5

Source: Office for National Statistics

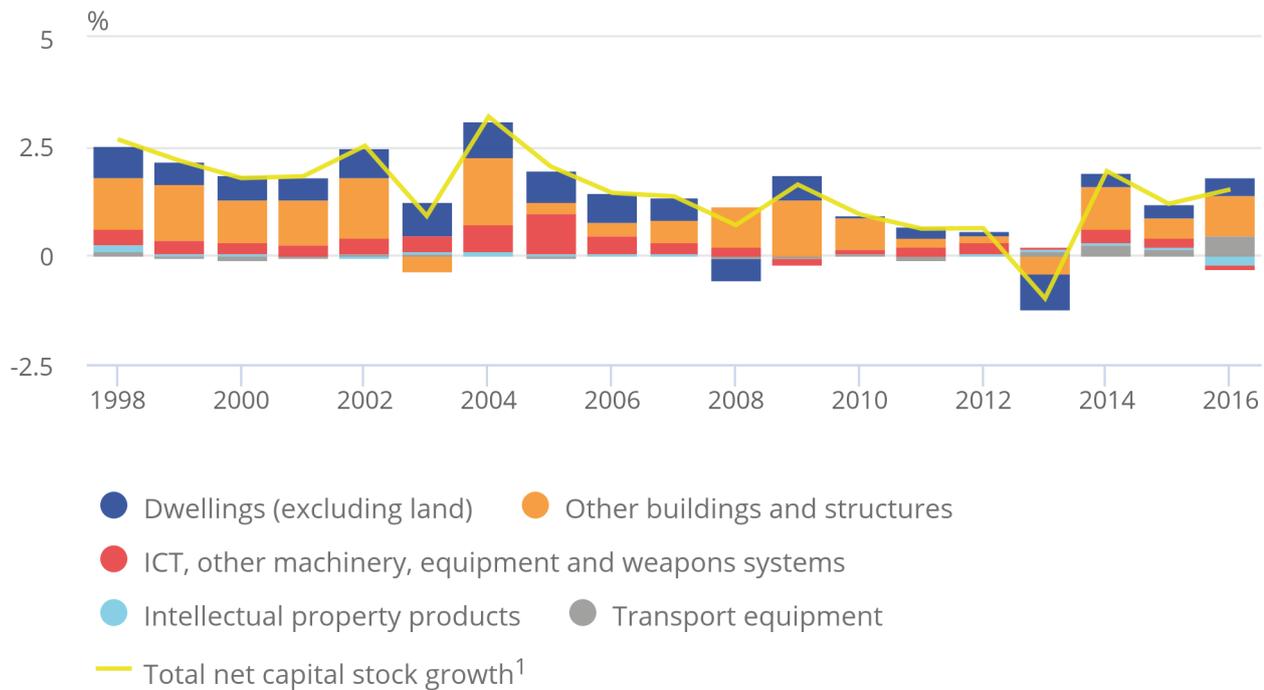
Figure 6 presents annual net capital stock growth between 1998 and 2016, according to the contribution to growth made from the assets (Table 3). Between 1998 and 2016 the largest contribution to net capital stock growth came from 'other buildings and structures'. During the economic downturn, 'other buildings and structures' continued to make positive contributions to annual growth, while the contributions from most of the other assets decreased.

**Figure 6: Contributions to annual net capital stock growth by asset**

Reference year: 2015 - Coverage: UK

Figure 6: Contributions to annual net capital stock growth by asset

Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

Notes:

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

## 7. Manufacturing declines since 1998 while all other industries grow

Estimates of capital stocks and the consumption of fixed capital can be analysed by industry using the [UK Standard Industrial Classification 2007](#).

The share of the net capital stock held by the four broad industry groupings (other production; manufacturing; construction and services) reflects the relative shares of these industries in gross value added (GVA) terms.

Between 1998 and 2016 manufacturing saw a decline in its share of assets while all other assets grew, albeit at different rates (Table 4). Since 1998 manufacturing has seen its share of net capital stocks fall by more than a quarter. While both other production (agriculture, mining, power and water supply) and construction have seen large increases in value their share of assets has not shown similar increases because of the dominance of the service sector.

Between 1998 and 2016 while the value of manufacturing declined by around 10% the other industries all grew in value by around 30%. At the end of 2016 services industries held an estimated £3.3 trillion (75.9%) of total net capital stocks, an increase of more than two percentage points, the largest of all the industrial groups. Construction industries held £442 billion (9.6%); 'other production' industries £377 billion (8.6%) and manufacturing £256 billion (5.8%).

**Table 4: Volume and percentage of net capital stocks held by broad industry groups, 1998 to 2016**

Reference year: 2015 Coverage: UK

		1998		2016		Change between 1998 and 2016	
Chained volume measures <sup>1</sup>		Net capital stocks (£ billion)	Share of assets held (%)	Net capital stocks (£ billion)	Share of assets held (%)	Net capital stocks (£ billion)	Share of assets held (% points)
ABDE	Other production	280	8.2	377	8.6	96	0.4
C	Manufacturing	285	8.4	256	5.8	-30	-2.6
F	Construction	322	9.4	422	9.6	101	0.2
G to T	Services	2,513	73.6	3,329	75.9	815	2.3
A to T	Total	3,414	N/A	4,384	N/A	970	N/A

Source: Office for National Statistics

Notes:

1. The components of net capital stock do not always add to the total due to rounding or because chained volume measures data are not additive until the reference year.

The types of fixed assets held as stock varies across the industries of the economy (Table 5).

In 2016, services industries held the majority of their total net capital stocks, at current prices, in 'dwellings' (49%) and "other buildings and structures" (31%).

The construction industry held 74% of its assets in 'other buildings and structures' and 22% in 'dwellings'. 'Other production' industries held the majority of their total net capital stocks as "other buildings and structures" (71%) and 'ICT, other machinery and equipment and weapons systems' (23%).

In contrast, the manufacturing industry was the only industry group which held the majority of its capital stocks in 'ICT, other machinery, equipment and weapons systems' (48%), followed by 'other buildings and structures' (38%).

**Table 5: Net capital stocks as a percentage of fixed assets held by asset and broad industry groups, 2016**

Coverage: UK

Current prices (%) <sup>1</sup>	ABDE		C	F	G to T	A to T
	Other production	Manufacturing	Construction	Services	Total	
Dwellings (excluding land)	z	z	z	22	49	40
Other buildings and structures	71	38	z	74	31	39
ICT, other machinery, equipment and weapons systems	23	48	z	3	13	15
Intellectual property products	2	13	z	0	4	4
Transport equipment	2	1	z	1	3	3
Cultivated biological resources	2	z	z	z	z	0
Total fixed assets	100	100	100	100	100	100

Source: Office for National Statistics

Notes:

1. Totals may not sum due to rounding.
2. z denotes where data is not collected, not present or unavailable for an industry or asset.

Apart from services this pattern is repeated in capital consumption (Table 6), although percentages vary. Within services while “dwellings” at 29% is the largest proportion of capital consumption, “Intellectual property” (23%) and “ICT” (19%) both accounted for more capital consumption than “other buildings and structures” (13%).

**Table 6: Consumption of fixed capital as a percentage of fixed assets by asset and broad industry groups, 2016**

Coverage: UK

Current prices (%) <sup>1</sup>	ABDE		C	F	G to T	A to T
	Other production	Manufacturing	Construction	Services	Total	
Dwellings (excluding land)	z	z	21	29	23	
Other buildings and structures	50	16	62	13	20	
ICT, other machinery, equipment and weapons systems	36	43	8	19	22	
Intellectual property products	10	40	3	23	22	
Transport equipment	4	1	6	7	6	
Cultivated biological resources	0	z	z	z	0	
Total fixed assets	100	100	100	100	100	

Source: Office for National Statistics

Notes:

1. Totals may not sum due to rounding.
2. z denotes where data is not collected, not present or unavailable for an industry or asset.

Net capital stocks held by manufacturing industries fell during the economic downturn, by 2.2% on average per year in 2008 and 2009, before continuing to fall by an average of 1.0% per year between 2010 and 2016 (Table 7). In contrast, growth in the net capital stock held by 'other production' industries increased to 2.7% per year during the downturn from 0.5% per year in the pre-downturn period and has increased further in the most recent years to 3.0% per year. 'Electricity, gas, steam and air conditioning supply' was the main contributor to the increase in the average annual growth between 2010 and 2016.

In the construction industry, between 2010 and 2016, the average annual growth was less than half that seen in the pre-downturn period. Over the same period, service industry average annual growth was around a third of that seen in the pre-downturn period.

**Table 7: Average annual growth in net capital stocks by broad industry groups**

Reference year: 2015 Coverage: UK

Chained volume measures (%)	1998 to 2007	2008 to 2009	2010 to 2016	1998 to 2016
ABDE Other production	0.5	2.7	3.0	1.7
C Manufacturing	0.4	-2.2	-1.0	-0.4
F Construction	1.7	2.9	0.7	1.5
G to T Services	2.4	1.1	0.8	1.6
A to T Total net capital stock	2.0	1.2	0.8	1.5

Source: Office for National Statistics

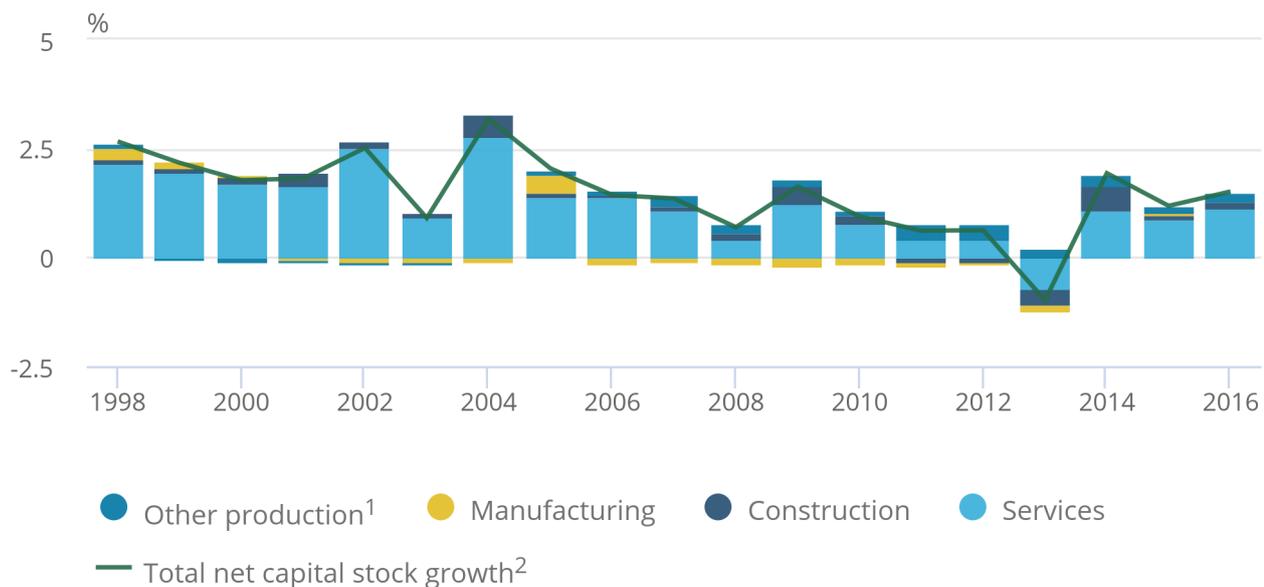
Between 1998 and 2016 the services industries consistently made the largest positive contribution to annual net capital stock growth (Figure 7). The main contributors to the increase in the average annual growth between 1998 and 2016 were the 'real estate activities' and 'transportation and storage' industries.

**Figure 7: Contributions to annual net capital stock growth by industry**

Reference year: 2015 - Coverage: UK

Figure 7: Contributions to annual net capital stock growth by industry

Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

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 due to rounding or because chained volume measures data are not additive until the reference year.

## 8 . Net capital stock per employee returns to positive growth

The net capital stock per employee is calculated by dividing capital stocks estimates by the number of employees. Net capital stocks are used in this calculation because they provide a better estimate of the value of capital stocks at a point in time compared with gross capital stocks. Estimates of employees are taken from the [Labour Market Statistics: August 2017](#) publication.

**Figure 8: Growth in net capital stock per employee, 1998 to 2016**

Reference year: 2015 - Coverage: UK

Figure 8: Growth in net capital stock per employee, 1998 to 2016

Reference year: 2015 - Coverage: UK



Source: Office for National Statistics

In 2009, the annual growth in net capital stock per employee spikes upwards in response to the sharp fall in employment which occurred over the early part of the economic downturn (Figure 8). As employment recovers in the years following 2009, the ratio begins to fall as the growth in employment becomes greater than the growth of the net capital stock.

The periods of negative growth after 2011 imply that businesses may have shifted their resources away from capital and more towards labour inputs although as employment growth slows in 2016 and growth in capital stock increases net capital stock per employee returns to positive growth.

## 9 . What's changed in this release

### Changes in this release

A number of improvements and changes to the methodology for estimating capital stocks and consumption of fixed capital have been implemented in this publication.

## Overall changes

Table 8, and Figures 9 and 10, show the combined impact of the changes since the previous publication. Both gross and net capital stock increased until 2006 and decreased thereafter at current prices, consumption of fixed capital decreased in every year. Gross and net capital stock increased in every year at chained volume measures, consumption of fixed capital increased until 2002 and decreased each year thereafter. Whilst many of the changes caused decreases, the change in reference year from 2013 to 2015, which only had an impact on chained volume measures, outweighed the other changes.

**Table 8: Range of annual changes to capital stock outputs since previous publication**

Coverage: UK

	Current prices (CP)		Chained volume measures <sup>1</sup> (CVM)	
	£ billion	%	£ billion	%
Gross capital stock	-123 and +41	-2 and +1	111 and 271	2 and 5
Net capital stock	-49 and +27	-1 and +1	96 and 173	2 and 5
Consumption of fixed capital	-7 and -22	-5 and -11	-17 and +12	-7 and +8

Source: Office for National Statistics

Notes:

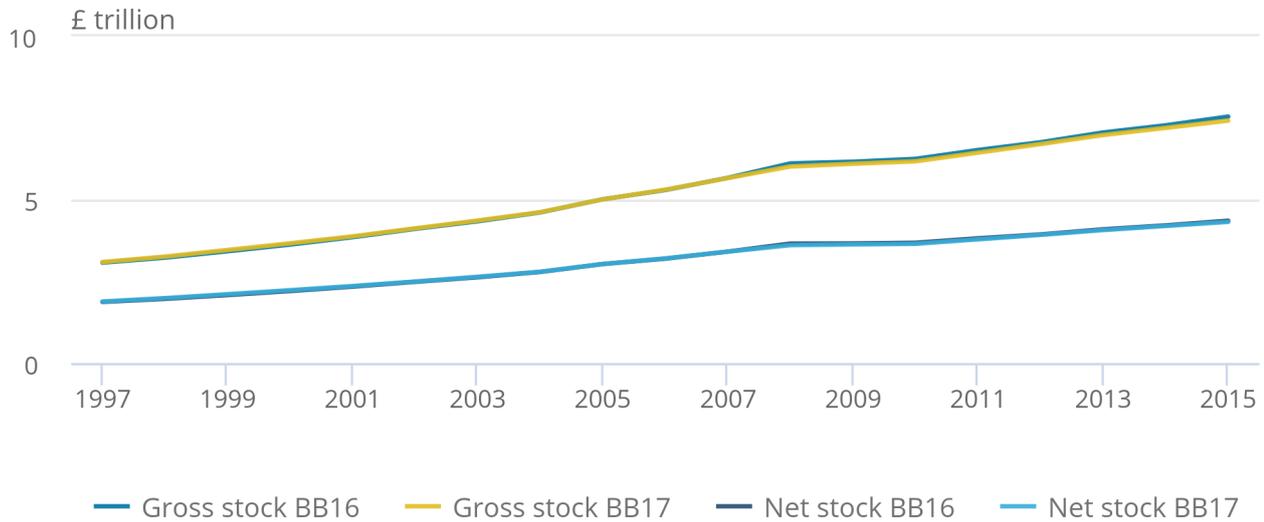
1. CVMs are referenced to 2015.

**Figure 9: Change to gross and net capital stocks since previous publication, 1997 to 2015, at current prices**

Coverage: UK

Figure 9: Change to gross and net capital stocks since previous publication, 1997 to 2015, at current prices

Coverage: UK



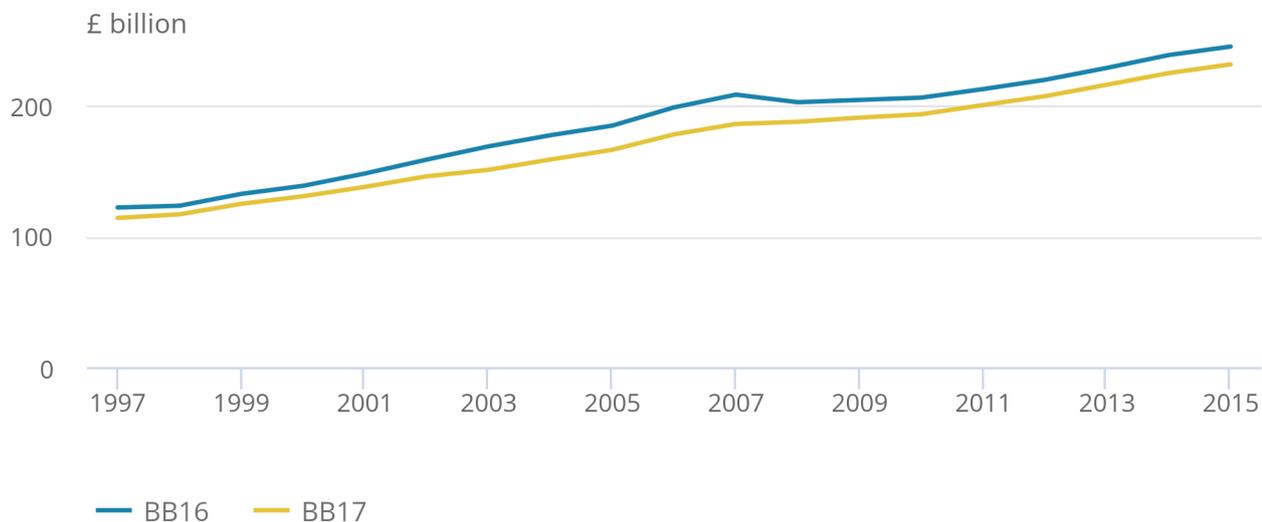
Source: Office for National Statistics

**Figure 10: Change to consumption of fixed capital since previous publication, 1997 to 2015, at current prices**

Coverage: UK

Figure 10: Change to consumption of fixed capital since previous publication, 1997 to 2015, at current prices

Coverage: UK



Source: Office for National Statistics

There have been a number of changes to the estimation of capital stock and consumption of fixed capital since the last publication.

## Gross fixed capital formation (GFCF)

As part of the annual Blue Book update, a number of improvements were made to the estimation of gross fixed capital formation. They resulted in changes to a number of assets and sectors throughout the dataset. Further information about these changes can be found in section 3 of [Business investment in the UK: April to June 2017 revised results](#).

## Reclassification of Housing Association data

The largest change to dwellings in Blue Book 2017 is due to the reclassification of Housing Associations in England from private non-financial corporations to public corporations from Quarter 3 (July to Sep) 2008. This can be seen in the data as an upward revision to public corporations dwellings and a downward revision to private dwellings investment since Quarter 3 2008. This change does not affect the total level of dwellings.

## Revised Annual Business Survey (ABS) data

There have been revisions to Annual Business Survey (ABS) data from 1997, with the largest revisions occurring in the earliest years for gross stock, net stock and consumption of fixed capital.

For total net capital stock, after 2000, the impact of ABS revisions was no greater than 0.1% (around £3 billion) in any year. For total consumption of fixed capital over the same period revisions varied from 0.8% (plus £1 billion) in 2000 to negative 0.1% (negative £123 million) in 2014.

## Transfer costs

Transfer costs, costs associated with the buying and selling of property were reviewed as part of the [National Statistics Quality Review of National Accounts and Balance of Payments](#).

The improvements to methodology have resulted in estimates for transfer costs reducing by 32% between 1997 and 2015. For example, at current prices transfer costs fell from £26 billion to £14 billion in 2003, a reduction of 46%. Between 1997 and 2015 the average current price decrease was £6 billion per year.

## House Price Index

We use the House Price Index (HPI) as part of the calculation of transfer costs. The methodology in the production of the HPI has been improved, which has caused changes back to 1997. The overall impact has been to reduce the level of transfer costs from 1997 to 2017, though growth has remained broadly the same. More information on the change to the HPI can be found in the article [Explaining the impact of the new UK House Price Index: 2016](#).

## Other changes

Other regular changes include moving the reference year for chained volume estimates forward from 2013 to 2015, reviewing the GFCF historic data link factors, reviewing the deflator link factors and the incorporation of new data from survey data sources.

## 10 . Future work plan

### Rail for London

In line with National Accounts standards, Rail for London will be reclassified from Local government to Public corporations at the next Blue book in 2018.

### Housing associations

The changes we have made for Housing associations in England will be replicated for Wales, Scotland and Northern Ireland. This involves reclassifying them from private non-financial corporations to public corporations. This change will not affect the total level of dwellings.

## ICT hardware and telecoms

A change will be introduced to the asset split for ICT, hardware and telecoms. This change will impact on Hardware and Telecoms, Other Machinery and Software.

## 11 . Quality and methodology

The [Capital Stocks Quality and Methodology Information document](#) contains important information on:

- the strengths and limitations of the data and how it compares with related data
- uses and users of the data
- how the output was created
- the quality of the output including the accuracy of the data