

Article

Construction statistics, Great Britain: 2018

A range of statistics on the construction industry, including value of output, new orders by sector, number of firms and total employment.

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1 . Main points

- The value of construction new work in Great Britain continued to rise in 2018, reaching its highest level on record at £113,127 million; this was driven by growth in public sector work of £2,697 million and to a lesser extent growth in the private sector of £750 million.
- Construction new orders fell by 13.2% in 2018, the first annual decline in growth seen since 2011; this represented a decline of £9,335 million.
- The number of construction firms operating in the construction industry has continued to rise – reaching its highest level on record – with 325,736 registered firms operating in Great Britain in 2018, increasing by 11,146 (3.5%) compared with the previous year.
- There were 16,578 new company insolvencies across the 10 industries with the most insolvencies in 2018; of these, the construction sector made up 3,202 insolvencies, which is the highest of any sector in 2018 and a 14.7% increase on the 2,792 insolvencies seen in 2017.
- Construction-related employment in Great Britain increased by 2.8% in 2018, reaching the highest level on record, with the South East, London and the East of England contributing 41.1% of total employment.
- The number of permanent new dwelling completions in the UK grew by 2.1% in 2018 to 198,930, remaining some way short of the government's target of building [300,000 new homes per year](#).
- Average weekly earnings in the construction industry in Great Britain continued to recover from a fall in 2016, increasing to £635.66 per week in December 2018, second only to the finance and business services sector.
- [Labour productivity](#), as measured by output per hour, fell by 4.8% in construction in 2018 compared with the previous year.
- The UK trade deficit in construction materials and components was £10,574 million in 2018, with imports being more than double the value of exports as all three components of building materials saw a trade deficit.
- In [comparison with the wider European Union \(EU\)](#), the UK construction industry continues to see the strongest performance in the EU, but growth was slower in 2018 in comparison with recent years.

2 . Things you need to know about this release

Great Britain construction output statistics and construction new orders are designated as [National Statistics](#), in accordance with the [Statistics and Registration Service Act 2007](#) and signifying compliance with the [Code of Practice for Statistics](#).

The construction statistics annual publication brings together a wide range of statistics currently available on the construction industry from a variety of sources. Data from the Office for National Statistics (ONS) as well as other government departments are used to provide an overview and analysis of the construction industry as a whole.

The construction industry is categorised as section F of the [UK Standard Industrial Classification \(SIC\) 2007](#), specifically SIC divisions 41, 42 and 43, which are defined below.

- 41: Construction of buildings
- 42: Civil engineering
- 43: Specialised construction activities

This 2019 edition of the Great Britain construction output statistics, which analyses the calendar year of 2018, includes updated figures in Tables 2.4, 2.5, 2.6, 2.8, 2.9, 3.1, 3.3, 3.4 and 3.5, which were included in the previous [Construction statistics annual tables](#). Following feedback from data users, this edition again contains Table 3.6, which further breaks down the number of construction firms by turnover size band. It is worth noting that all data published in this release are in current prices and, unless otherwise stated, non-seasonally adjusted.

This release also marks the second annual publication in which Value Added Tax (VAT) data have been used to estimate construction output. VAT data have been incorporated from 2016 onwards in Tables 2.4, 2.8 and 2.9.

All other Tables that were previously contained in the annual construction statistics publication are no longer collated and published by the ONS. Where these data tables are no longer published, links have been provided in [Section 10](#) of this publication to enable users to obtain the relevant data from external sources.

All data in the release are correct as of time of publication. These estimates are therefore consistent with the monthly [Construction output in Great Britain](#) release published on 10 October 2019 and consistent with the 2019 Blue Book publication. Owing to the various revisions policies of the different statistics used in this publication, these may change.

3 . Construction output

The Office for National Statistics (ONS) publishes monthly statistics on construction output in Great Britain, which can be found in the monthly [output in the construction industry statistical bulletin](#) and associated datasets. It is worth noting that while the monthly construction release focuses mainly on volume, seasonally adjusted data, this annual publication focuses mainly on current price, non-seasonally adjusted value data.

This annual publication release contains five tables:

- Table 2.4a shows the value of construction output by type of work in the public sector
- Table 2.4b shows the value of construction output by type of work in the private sector
- Table 2.4c shows the value of construction output by type of work in the public sector and private sector combined
- Table 2.8 shows the value of work done by trade of firm and type of work
- Table 2.9 shows the value of work done by size of firm and type of work

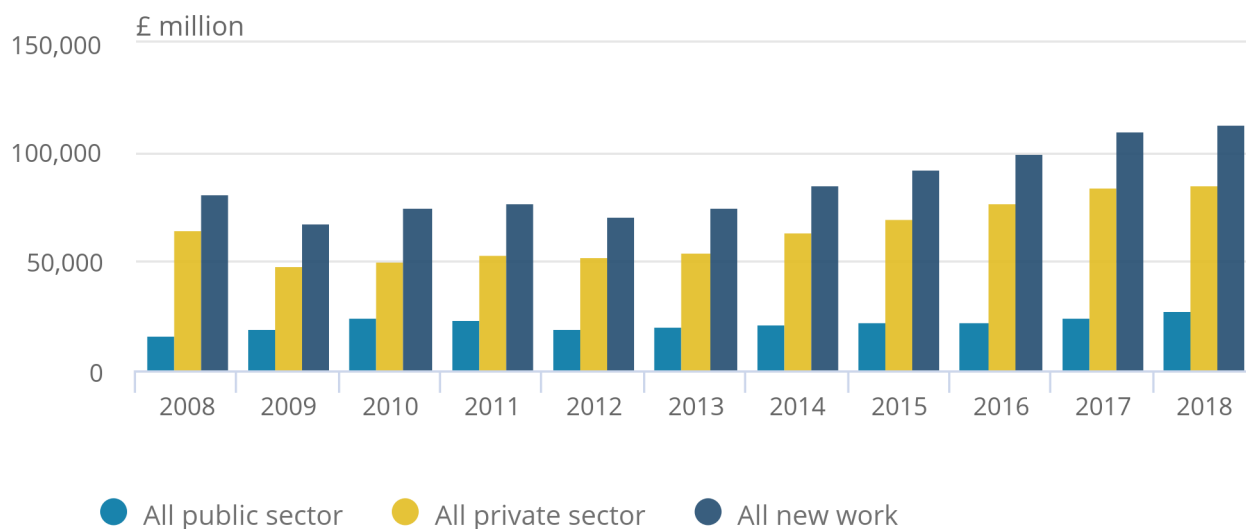
Figure 1 depicts the split of new work – split into public and private sector work – between 2008 and 2018, taken from Table 2.4c of this release. As shown in Figure 1, public sector work has consistently been smaller in value compared with private sector work, with the private sector accounting for approximately three-quarters of all new work. As a result, fluctuations in the value of all new work are predominantly driven by movements in the private sector.

Figure 1: Growth in new work slowed in 2018 owing to sluggish increases in private new work

Current prices, non-seasonally adjusted, Great Britain, 2008 to 2018

Figure 1: Growth in new work slowed in 2018 owing to sluggish increases in private new work

Current prices, non-seasonally adjusted, Great Britain, 2008 to 2018



Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 2.4a, Table 2.4b and Table 2.4c)

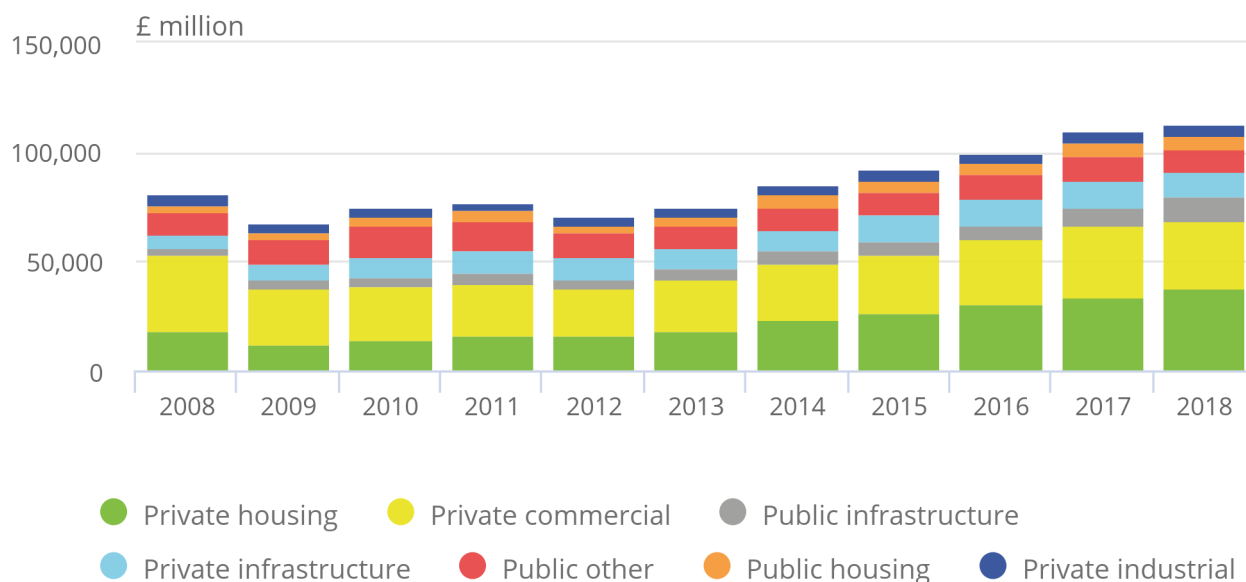
The value of all new work increased by 3.1% in Great Britain in 2018, growing to £113,127 million; this is the highest level in this series since records began. However, this represents the lowest annual growth in new work since 2012, which saw a year-on-year decline of 7.9%. The growth seen in 2018 was driven primarily by increases in public new work, which increased by 10.8%, the fastest growth rate of public new work since 2010 when it grew by 24.6%. The £2,697 million increase in public new work compares with a £750 million (0.9%) increase in private new work; this is the weakest growth of private new work since 2012 when it fell by 3.4%.

Figure 2: Increases in all new work are being driven by private housing and public infrastructure

Current prices, non-seasonally adjusted, Great Britain, 2008 to 2018

Figure 2: Increases in all new work are being driven by private housing and public infrastructure

Current prices, non-seasonally adjusted, Great Britain, 2008 to 2018



Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 2.4a and Table 2.4b)

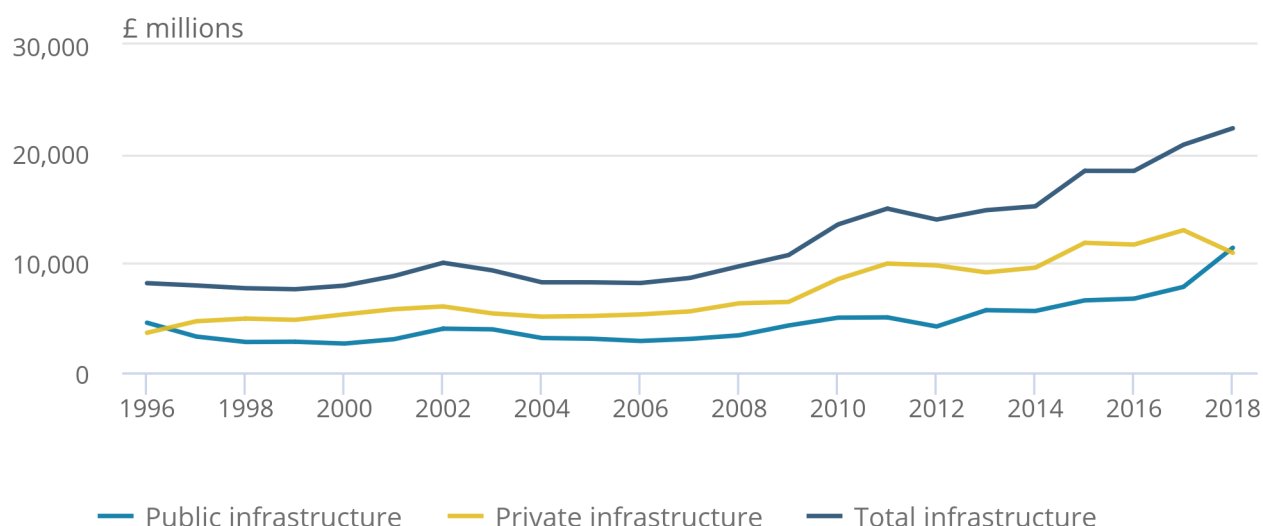
Over the last decade, private housing has driven much of the growth in new work. However, it was public infrastructure output that saw the greatest percentage growth between 2008 and 2018 with a 236.1% increase (£8,011 million), compared with the 107.3% (£19,469 million) growth seen in private housing output. The only sector that has declined since 2008 is private commercial new work, which has shrunk by 11.1% (£3,910 million).

Figure 3: Public infrastructure outvalues private infrastructure for the first time in 22 years

Current prices, non-seasonally adjusted, percentage share of infrastructure, Great Britain, 2008 to 2018

Figure 3: Public infrastructure outvalues private infrastructure for the first time in 22 years

Current prices, non-seasonally adjusted, percentage share of infrastructure, Great Britain, 2008 to 2018



Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 2.4a and Table 2.4b)

Public infrastructure has seen significant gains in value of new work in 2018 growing by 45.7% (£3,579 million) – the largest annual growth rate of public infrastructure in this series since records began in 1980 – with the value of new private infrastructure performing the worst since 1981, falling by 15.9%. Conversely, public infrastructure made up 51.0% of total infrastructure in 2018, outvaluing private infrastructure for the first time since 1996, when public infrastructure came to 55.6% of the total value.

4 . Construction new orders

The Office for National Statistics (ONS) publishes [construction new orders](#) data quarterly, using data sourced from [Barbour ABI](#). The ONS construction new orders provide an indication of both the current confidence and future health of the construction industry. Total construction new orders data can be broken down into two main sectors: all new housing and all other new work.

This release contains two new orders data tables:

- Table 2.5 shows value of new orders for construction by sector
- Table 2.6 shows value of new orders for construction by type of work

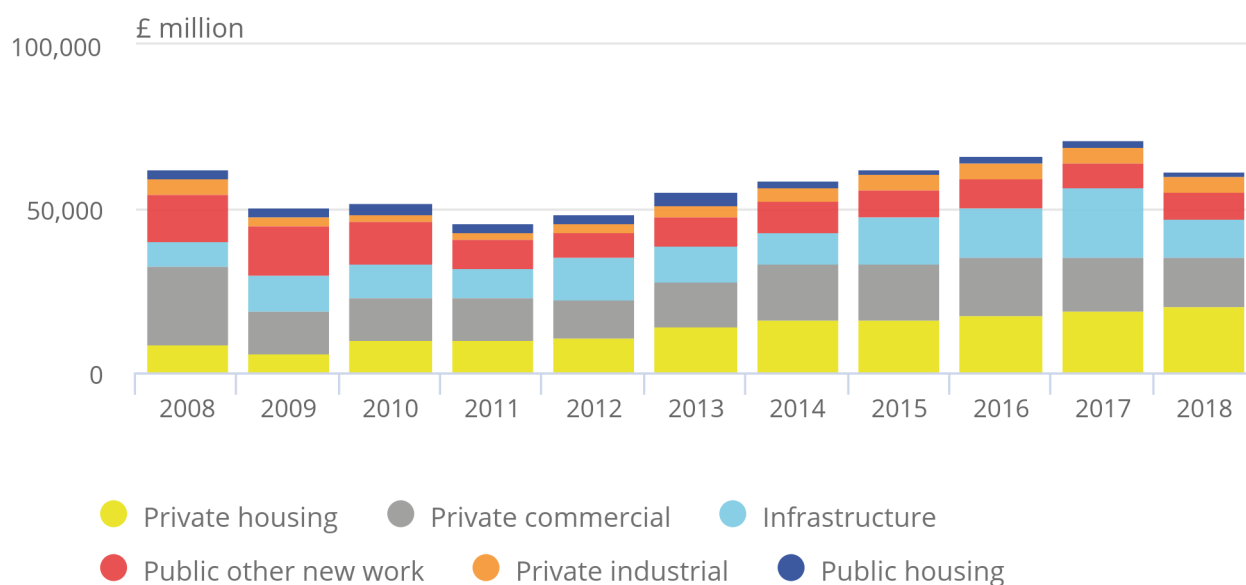
The lower-level sector split in the value of new orders is illustrated in Figure 4, between public housing, private housing, infrastructure, public other new work, private industrial and private commercial work from 2008 to 2018. Between 2011 and 2017, the value of all new work has shown consistent year-on-year increases, predominantly driven by the rise in infrastructure new orders, followed by private housing and private commercial new orders.

Figure 4: New orders fall in 2018 for the first time since 2011

Current prices, non-seasonally adjusted, Great Britain, 2008 to 2018

Figure 4: New orders fall in 2018 for the first time since 2011

Current prices, non-seasonally adjusted, Great Britain, 2008 to 2018



Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 2.5)

The highest new orders value on record occurred in 2017, at £70,987 million. This was because of the awarding of several high-value contracts relating to High Speed 2 (HS2). This is evident from the large value of infrastructure relative to the other series, contributing to a record quarter-on-quarter growth of 54% in Quarter 3 (July to Sept) 2017. As such, infrastructure coming back down from this value was the largest contributor to the £9,335 million (13.2%) overall fall in value of construction new orders in 2018 compared with 2017. Infrastructure new orders fell by £9,447 million (45.0%), with a lesser contribution to the fall from private commercial and public housing with both falling by £1,432 million (24.6%) and £429 million (8.6%) respectively. Private housing made the largest positive contribution to new orders, increasing by £1,060 million (5.5%), with public other and private industrial new work orders also increasing £724 million (9.7%) and £189 million (3.9%) respectively.

5 . Structure of the industry

The Office for National Statistics (ONS) produces an array of data on the structure of the construction industry, including breakdowns on employment, trade, size and number of firms using data from the ONS [Inter-Departmental Business Register \(IDBR\)](#). This publication includes five tables on industry structure:

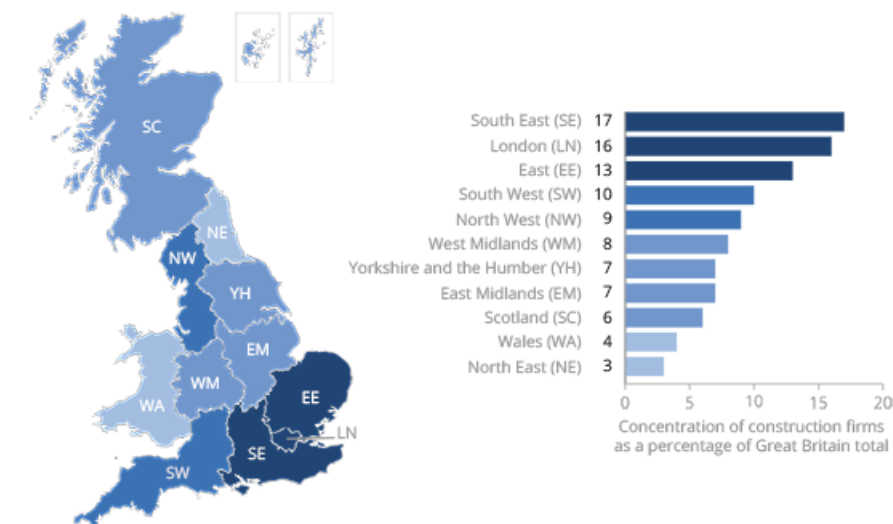
- Table 3.1a shows the number of construction firms by size of firm
- Table 3.1b shows the number of construction firms by trade of firm
- Table 3.1c shows the number of construction firms by region of registration
- Table 3.3a shows the total employment in construction firms by size of firm
- Table 3.3b shows the total employment in construction firms by trade of firm
- Table 3.3c shows the total employment in construction firms by region of registration
- Table 3.4a shows the number of construction firms by size and trade of firm (main trades and civil engineering)
- Table 3.4b shows the number of construction firms by size and trade of firm (allied trades)
- Table 3.5 shows the number of firms by size and region of registration
- Table 3.6 shows the number of firms by turnover size band

Number of firms

Figure 5 shows the concentration of construction firms as a percentage by region in Great Britain. The South East and London were the most common areas for construction firms to be registered in 2018, with 16.9% and 16.5% of all firms registered there, followed by East of England with 12.9%. Users should note that data in Figure 5 relate to where individual firms are registered on the IDBR and therefore despite representing a good indicator of where construction firms are operating, construction firms may carry out work across wide geographical areas, not just in the region in which they are registered.

Figure 5: Construction firms were concentrated around both London and the South East in 2018

NUTS 1 regions of the UK



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1 All figures are rounded to 0 decimal places.
Graphic created by ONS Geography

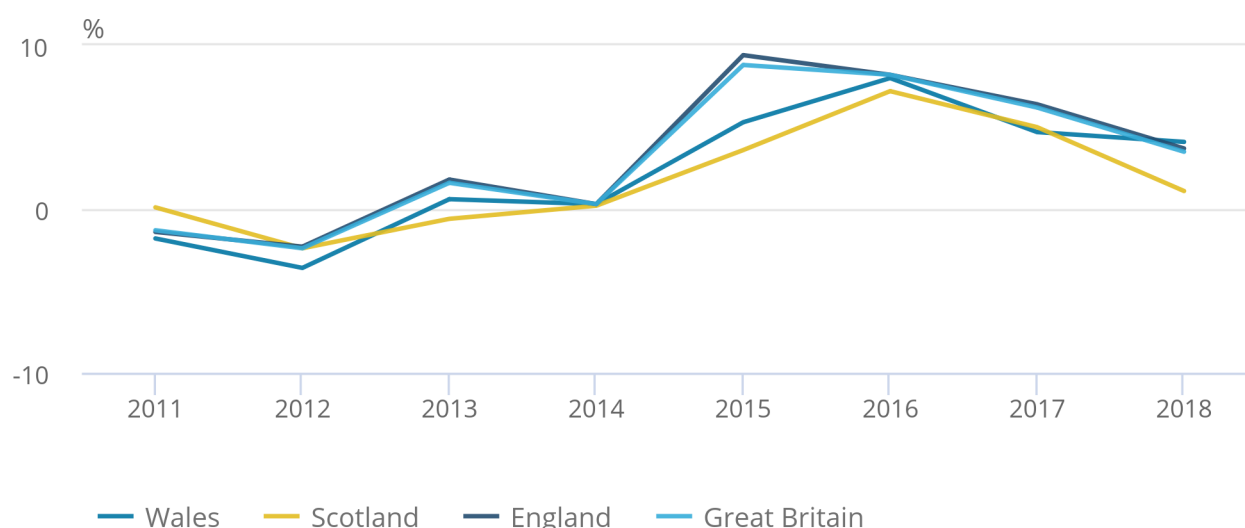
Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 3.1c)

The number of construction firms operating in the construction industry has continued to rise, reaching its highest level on record with 325,736 registered firms operating in Great Britain in 2018. This is an increase of 11,146 (3.5%) firms compared with 2017, with increases across all regions. Figure 6 shows the growth rate of number of registered construction firms in England, Scotland and Wales as well as Great Britain as a whole. Across all these regions, growth in the number of registered construction firms has slowed in recent periods, with Scotland having the smallest increase in 2018 with 516 (1.1%) more registered construction firms. In comparison, growth of construction firms was highest in Wales, with 212 (4.1%) more registered firms, though Wales accounts for a very small proportion of overall construction firms. New construction firms in England accounted for the vast majority of new registered firms in Great Britain, with 10,418 (3.7%) more firms in 2018 compared with 2017.

Within English regions, London and the East of England saw the largest increase in the number of registered construction firms, with 2,956 (5.8%) and 2,444 (6.2%) more registered firms in 2018 compared with 2017. Yorkshire and the East Midlands saw the weakest increases, with 95 (0.4%) and 186 (0.8%) new registered firms respectively.

Figure 6: Growth in the number of registered firms has slowed in recent years in the construction industry

Figure 6: Growth in the number of registered firms has slowed in recent years in the construction industry



Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 3.1c)

Insolvencies

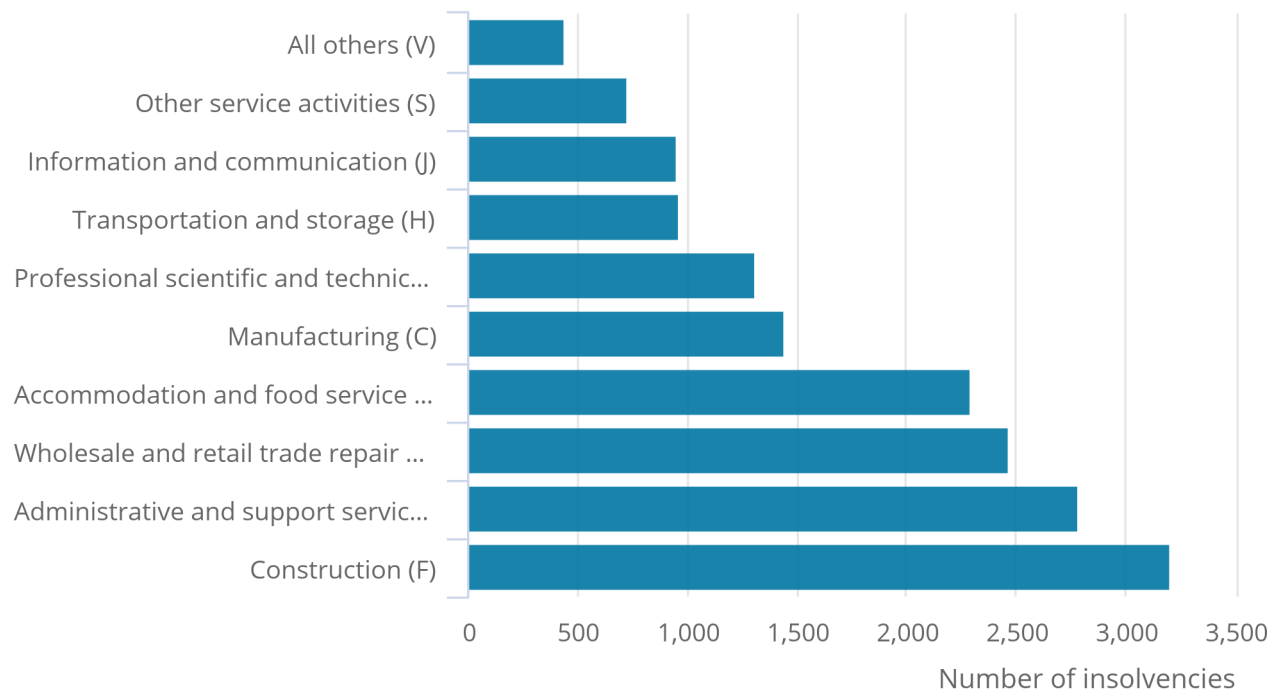
The volatile nature of the construction industry is evident in the number of insolvencies seen within the industry. According to [data from The Insolvency Service](#), there was a total of 16,578 new company insolvencies across the top 10 industries in Great Britain in 2018.

Figure 7: Construction leads the top 10 UK industries in numbers of insolvencies in 2018

Number of firms in insolvency, Great Britain, 2018

Figure 7: Construction leads the top 10 UK industries in numbers of insolvencies in 2018

Number of firms in insolvency, Great Britain, 2018



Source: The Insolvency Service – Insolvency statistics: Industry breakdown Table A1a (England and Wales) and Table A7a (Scotland)

Notes:

- 1. UK SIC 2007 section in brackets.

Figure 7 depicts the total number of new company insolvencies in 2018 across the highest 10 UK Standard Industrial Classification (SIC) 2007 industries by sector. While the number of registered construction firms has risen, so has the number of insolvent firms risen. Of the 18,434 total new company insolvencies, 3,202 occurred in the construction sector. This was the highest total number of insolvencies of any sector in 2018 and a 14.7% increase on the 2,792 insolvencies seen in 2017 in the construction industry.

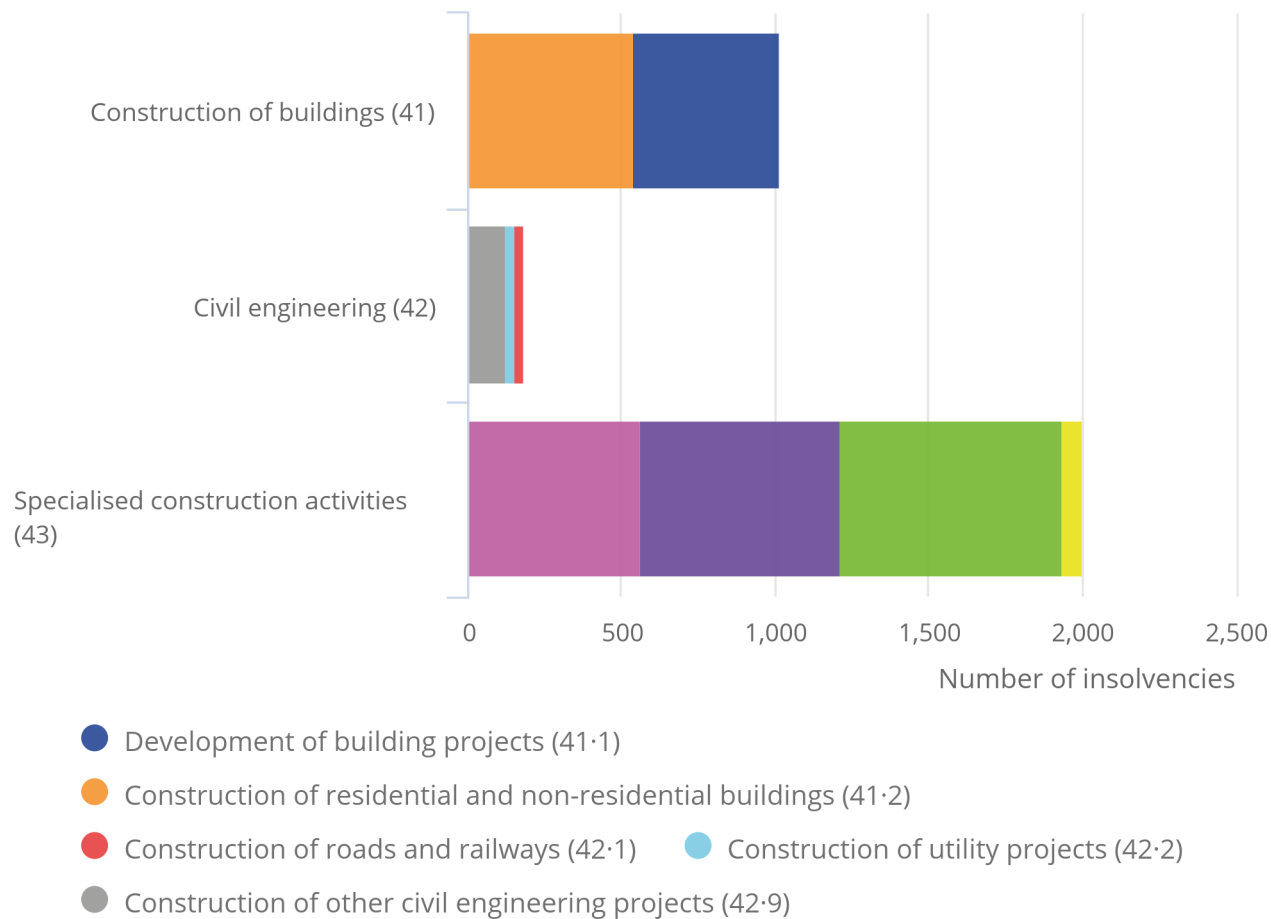
The construction sector has become the highest-ranking sector for insolvencies in 2018, surpassing the administrative and support activities sector activities, which ranked in at number one in 2017. These figures represent companies that are new to insolvency, as opposed to companies that transition between types of insolvencies.

Figure 8: UK SIC 2007 specialised construction activities sees the most insolvencies in the construction industry in 2018

Number of firms in insolvency, Great Britain, 2018

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Number of firms in insolvency, Great Britain, 2018



Source: The Insolvency Service – Insolvency statistics: Industry breakdown Table A1a (England and Wales) and Table A7a (Scotland)

Notes:

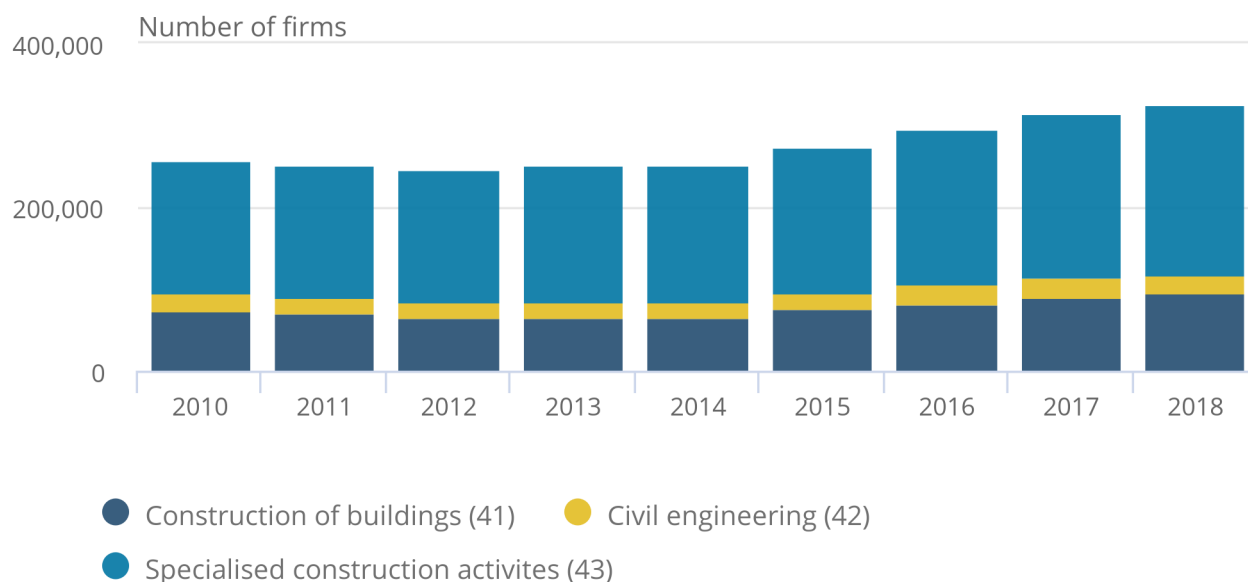
1. UK SIC 2007 division in brackets.

Figure 8 shows the total number of new company insolvencies in the construction sector in Great Britain in 2018, broken down by UK SIC 2007 divisions 41, 42 and 43.

Of the 3,202 new company insolvencies in the construction sector in 2018, 2,003 (62.6%) of the insolvent firms operated in SIC 2007 division 43, Specialised construction activities, mainly comprised of electrical and plumbing installations and building completion and finishing firms. Elsewhere, 1,013 (31.6%) of the insolvent firms operated in SIC 2007 division 41, Construction of buildings, made up of both the development of building projects and building-related construction firms. The remaining 186 (5.8%) worked in the smaller, more stable civil engineering sector, SIC 2007 division 42, which is generally comprised of larger firms. Despite the increase in the total number of insolvencies, the split by SIC of insolvencies is almost identical to that seen in 2017.

Figure 9: Growth in the number of construction firms operating year on year has slowed down since 2015 in Great Britain

Figure 9: Growth in the number of construction firms operating year on year has slowed down since 2015 in Great Britain



Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 3.1b)

Figure 9 shows the number of construction businesses operating in the industry between 2010 and 2018 in Great Britain, broken down into UK SIC 2007 divisions 41, 42 and 43.

In 2018, the industry saw a moderate growth in number of firms, increasing by 3.5% year on year. This was the lowest year-on-year growth seen since 2014, which recorded a 0.3% growth. The growth seen in 2018 was driven by specialised construction activities (43), which grew by 3.1%, and construction of buildings (41), which increased by 5.3%.

6 . Employment and earnings

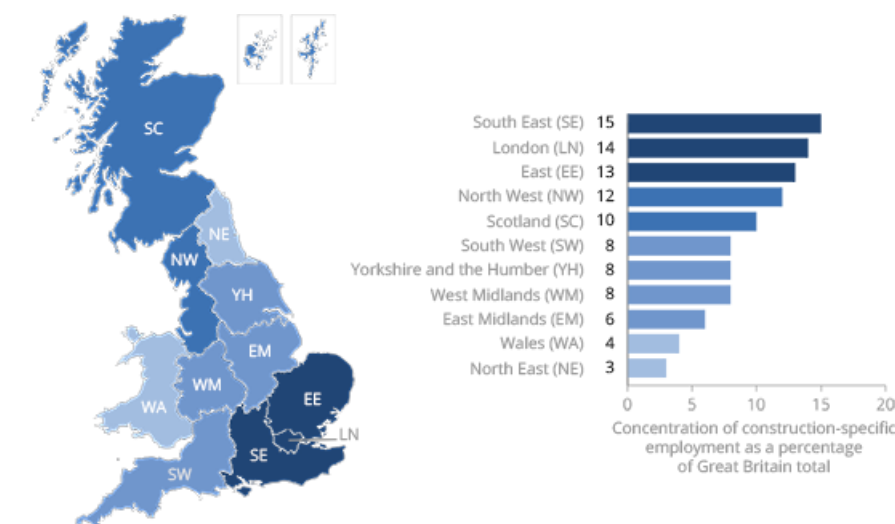
This publication provides three tables on employment within the construction industry:

- Table 3.3a shows employment by size of firm
- Table 3.3b shows employment by trade of firm
- Table 3.3c shows employment by region of registration

Employment in the construction industry has been increasing since 2014, and this has continued in 2018 with construction employment increasing by 2.8% compared with 2017, now totalling approximately 1.36 million workers. This is the lowest percentage increase since 2014, when employment in the construction industry fell by 0.1%. Figure 10 shows the concentration of construction employment as a percentage by region in Great Britain. The South East and London made up the largest proportion of construction employment in 2018, with 14.5% and 13.9% of all construction employment respectively, followed by East of England with 12.7%. The North East and Wales, on the other hand, make up only a small proportion of construction employment with 3.2% and 3.9% respectively.

Figure 10: Despite seeing a decline in share of construction employment in 2018, the South East is the largest region of construction employment in Great Britain

NUTS 1 regions of the UK



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1 All figures are rounded to 0 decimal places.
Graphic created by ONS Geography

Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 3.3c)

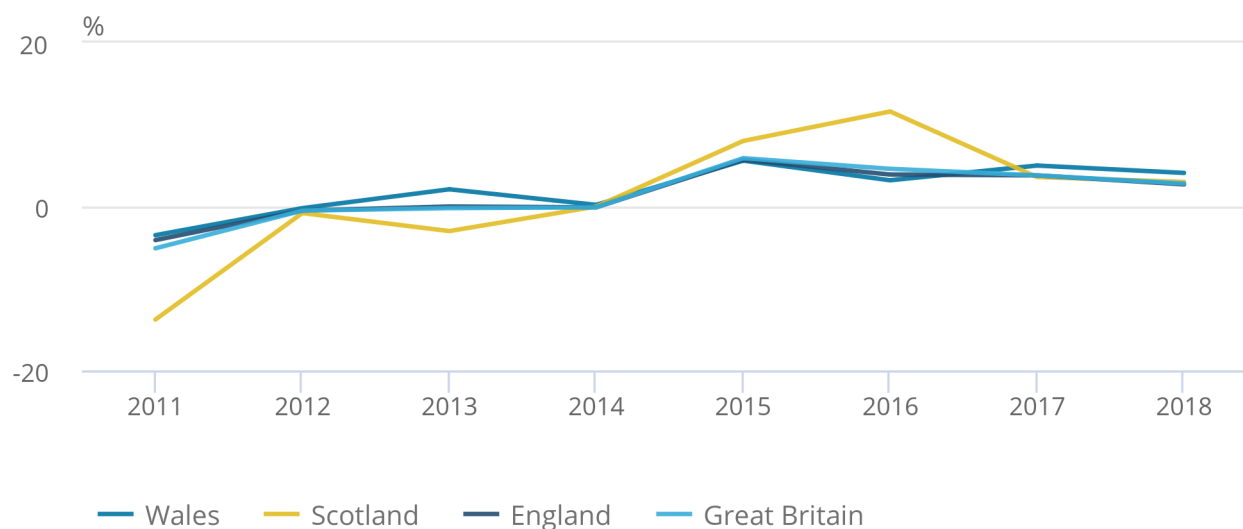
With regards to growth rates of construction employment, all constituent country regions experienced growth in 2018, with Wales increasing by 4.1%, Scotland by 3.0% and England by 2.7%, giving Great Britain an average growth of 2.8%. All English regions apart from the North West, South West and South East experienced growth, with the South East seeing the largest year-on-year decline in employment of 2.6%. By far the strongest growth in construction jobs was 16.1% in the East of England, followed by growth of 4.1% in the North East and 3.6% in London.

Figure 11: Growth in construction employment has slowed across all countries in Great Britain in 2018

Year-on-year growth, Great Britain, 2011 to 2018

Figure 11: Growth in construction employment has slowed across all countries in Great Britain in 2018

Year-on-year growth, Great Britain, 2011 to 2018



Source: Office for National Statistics – Construction statistics, Great Britain: 2018 (Table 3.3c)

Users should note that data in Figure 10, as with Figure 5, relate to where individual firms are registered on the Office for National Statistics (ONS) [Inter-Departmental Business Register](#) (IDBR). Therefore, despite representing a good indicator of where construction firms employ people, construction firms may operate and employ workers across wider geographical areas, not just the region in which they are registered. Figure 5 shows the concentration of construction firms as a percentage by region in Great Britain, while Figure 10 shows the concentration of construction employment by region. In most cases, a higher number of firms in a region tends to mean a higher number of employees in that region. However, this relationship is not linear: East of England and Greater London saw growth of 6.2% and 5.8% respectively in the number of firms in 2018 compared with 2017. When looking at the levels of employment, they saw year on year growths of 16.1% and 3.6% respectively.

Users should also note that the figures published in Figure 10 and Tables 3.3a, 3.3b and 3.3c do not account for self-employment within the construction industry. According to [Self-employment jobs by industry](#) (worksheet named “8. GB totals”) data published quarterly by the ONS, there was an average of 845,000 self-employed construction workers in Great Britain in 2018. This represents a decrease of 15,000 compared with 2017, with self-employment remaining concentrated in UK Standard Industrial Classification (SIC) 2007 divisions 41 and 43, the construction of buildings and specialised construction activities.

Despite the decrease seen, the construction sector continued to be the UK SIC 2007 section with the highest levels of self-employment.

Average weekly earnings

We produce data on [average weekly earnings \(AWE\)](#) in the economy as a whole and by sector on a monthly basis. AWE measures money paid per week, per employee in Great Britain in return for work done. The estimates are not just a measure of pay rises as they do not adjust for changes in the structure of the workforce or the proportion of the workforce who work full- or part-time. This value is calculated before tax and other deductions from pay.

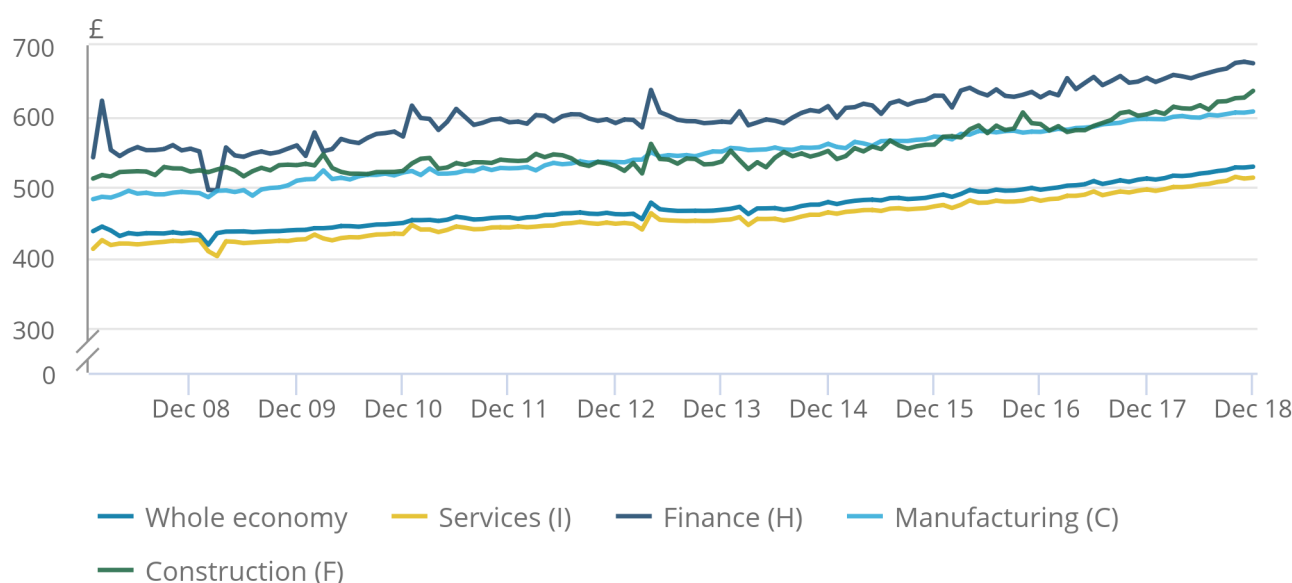
Figure 12 shows AWE by sector between 2008 and 2018. Following the decline in 2009 that followed the economic downturn, the whole economy has experienced steady wage growth. The financial services sector has consistently been ranked the highest earning since mid 2009, with construction and manufacturing showing similar levels of growth in AWE.

Figure 12: Construction sees strong wage growth in 2018 to become the second-highest- earning sector based on AWE data

Average weekly earnings by sector, total pay, seasonally adjusted, current prices, Great Britain, 2008 to 2018

Figure 12: Construction sees strong wage growth in 2018 to become the second-highest- earning sector based on AWE data

Average weekly earnings by sector, total pay, seasonally adjusted, current prices, Great Britain, 2008 to 2018



Source: Office for National Statistics – EARN01: Average Weekly Earnings

AWE growth for the whole economy is 3.3% in December 2018 compared with December 2017. AWE in the construction grew the fastest of any sector in 2018 compared with 2017 with year-on-year growth of 5.5% in December 2018. Construction's AWE growth helped cement its status as the second-highest-earning sector in Great Britain after surpassing manufacturing in 2017, with the gap in AWE between the two sectors the largest it has been since October 2016 and November 2009 before that. Construction's AWE finished the year on £635.66 per week in December 2018.

7 . Output price indices

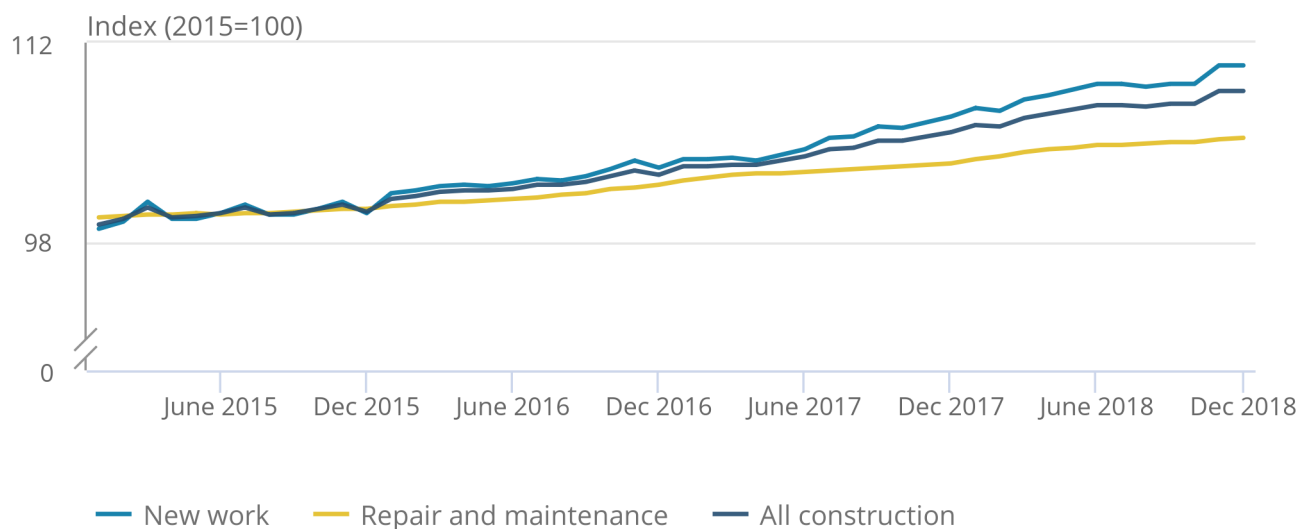
The Office for National Statistics (ONS) produces quarterly data on output price indices, available in the [Construction Output Price Indices \(OPIs\) publication](#). Figure 13 depicts the construction OPI, split by the new work and repair and maintenance. Construction prices have seen gradual increases since 2015 with a broad upward trend driven largely by the increase in the prices of new work.

Figure 13: Growth in new work drives the growth in the construction output price index in 2018

Monthly index, non-seasonally adjusted, Great Britain, January 2015 to December 2018

Figure 13: Growth in new work drives the growth in the construction output price index in 2018

Monthly index, non-seasonally adjusted, Great Britain, January 2015 to December 2018



Source: Office for National Statistics – Construction output price indices

Construction output prices rose across 2018, driven primarily by new work output prices with repair and maintenance output prices also rising but far more steadily. Construction output prices rose throughout the first half of 2018, with broadly flat growth in much of the second half of 2018 and with very strong growth in new work output prices in November 2018 to end the year. Overall, construction prices increased in all but two months (February 2018 and August 2018), where they saw a small 0.1% decline in both months. The annual rate of inflation for all construction was 2.7% in December 2018, down from 2.9% in December 2017 but up from 2.6% in December 2016. Annual growth rates for all three main construction OPIs have remained positive since September 2015, with the output price index for all construction peaking in November 2018 at 108.6; this is the highest level since the ONS began producing construction output price indices in late 2014. The annual rate of inflation for new work in December 2018 was 3.4%, while repair and maintenance in December 2018 was 1.7%.

8 . Comparisons and contributions to the economy

Construction is a naturally volatile industry and is responsive to fluctuations in both consumer and business confidence as well as economic variables, such as interest and exchange rates. The construction industry accounted for 6% of gross domestic product (GDP) in 2018 and influenced some of the main economic indicators including inflation and employment. This section will provide analysis on how the construction industry both compares and contributes to specific areas of the wider UK economy.

Price inflation

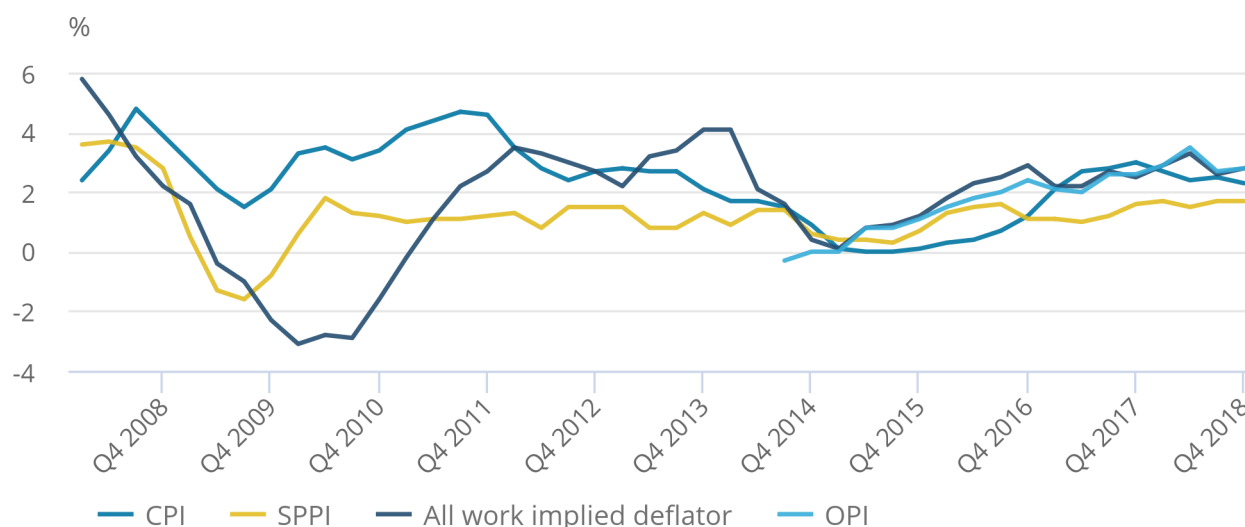
Figure 14 shows the comparison between the [Consumer Prices Index \(CPI\)](#), the [construction output price indices \(OPIs\)](#), [all work implied deflator price indicator \(IDEF\)](#), and the [Services Producer Price Index \(SPPI\)](#) from Quarter 1 (Jan to Mar) 2008 to Quarter 4 (Oct to Dec) 2018.

Figure 14: Construction output price index hits new heights in Quarter 2 (Apr to June) 2018

Annual percentage change, non-seasonally adjusted, 2008 to 2018

Figure 14: Construction output price index hits new heights in Quarter 2 (Apr to June) 2018

Annual percentage change, non-seasonally adjusted, 2008 to 2018



Source: Office for National Statistics – CPI - D7G7, SPPI - K8ZU, IDEF - MVL6 and OPI

The SPPI was at 1.7% in Quarter 4 (Oct to Dec) 2018 compared with 1.6% in Quarter 4 2017. Similarly, the all work implied deflator series increased to 2.8% in Quarter 4 2018 compared with 2.5% a year earlier, with the OPI series also at 2.8% in Quarter 4 2018 compared with 2.6% in Quarter 4 2017. In contrast, the CPI in Quarter 4 2018 fell to 2.3%, down from 3% in Quarter 4 2017 and the lowest value in the quarterly series since Quarter 1 (Jan to Mar) 2017.

Productivity

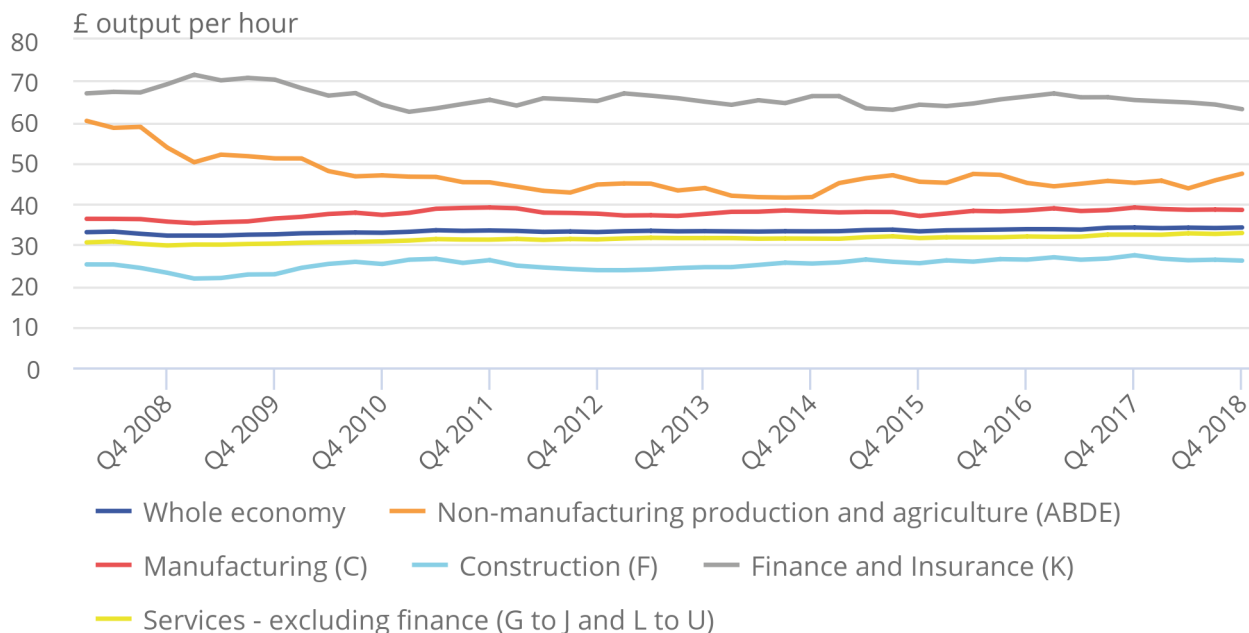
[Labour productivity](#), as measured by output per hour, fell by 4.8% in the construction industry in Quarter 4 2018 compared with Quarter 4 2017. In contrast, there was zero productivity growth (0.0%) within the whole UK economy across the same period, which is still noticeably below the long-term trend observed between 2000 to 2007. This suggests the sustained stagnation in productivity growth, dubbed the “[productivity puzzle](#)”, remains unsolved.

Figure 15: Construction productivity falls in 2018

Output per hour, seasonally adjusted, chained volume measure, UK, 2008 to 2018

Figure 15: Construction productivity falls in 2018

Output per hour, seasonally adjusted, chained volume measure, UK, 2008 to 2018



Source: Office for National Statistics – Labour productivity: Breakdown of contributions

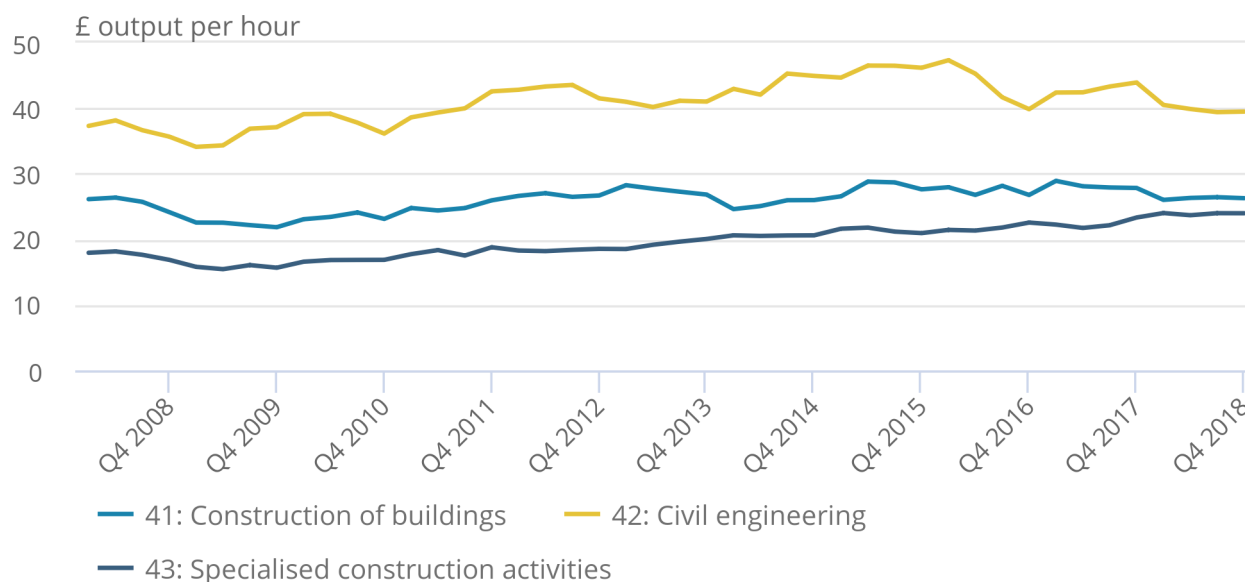
Figure 15 shows labour productivity, measured by output per hour within the whole UK economy, broken down by industry between 2008 and 2018. While whole-economy productivity was flat (0.0%) between Quarter 4 2018 and Quarter 4 2017, productivity declined in several industries, with falls in construction (4.8%), finance and insurance (3.4%), and manufacturing (1.5%). While finance and insurance had a large decline in productivity in 2018, it still remains well above the other industries in terms of productivity. This is shown by the industry recording £63.04 of output per hour in chained volume measure terms in Quarter 4 2018. This is well above the £34.15 of output per hour for the economy as a whole. In the quarter-on-the-same-quarter-a-year-ago series, productivity in the construction industry fell for the first time since Quarter 2 (Apr to June) 2016, to £26.05 of output per hour in Quarter 4 2018. This means construction remains the least productive of these industries in 2018 at 23.7% below the whole-economy Quarter 4 2018 value."

Figure 16: Civil engineering and specialised construction activities show a decline in output per hour in 2018

Output per hour, seasonally adjusted, Current prices, UK, 2008 to 2018

Figure 16: Civil engineering and specialised construction activities show a decline in output per hour in 2018

Output per hour, seasonally adjusted, Current prices, UK, 2008 to 2018



Source: Office for National Statistics – Labour productivity: Industry division

Figure 16 shows a breakdown of the main components of construction output per hour in current prices, seasonally adjusted for the UK between 2008 and 2018. Please note that while Figure 16 uses current price values, Figure 15 uses a chained volume measure, and as such they are not directly comparable. However, this data is available as an indexed chained volume measure in the same worksheet.

Specialised construction activities (UK Standard Industrial Classification (SIC) 2007 division 43) was the only industry that saw average output per hour for Quarter 4 2018 increase compared with Quarter 4 2017, increasing by 2.8%. In contrast, civil engineering (UK SIC 2007 division 42) and construction of buildings (UK SIC 2007 division 41) both showed declines in output per hour with a 10.1% and 5.6% decline, respectively, across the same period. Despite this, civil engineering remains the most productive division within construction with productivity as at Quarter 4 2018 of £39.48 of output per hour, well above specialised construction activities with £23.97 and construction of buildings with £26.27.

9 . Planning applications and local authority expenditure

The Office for National Statistics (ONS) publishes [monthly data](#) on the value of construction work in the housing sector as well as quarterly data on the value of housing [new orders](#) and [investment in dwellings](#). In addition, the Ministry of Housing, Communities and Local Government (MHCLG) provides data on both planning applications and the number of new dwelling completions.

The MHCLG data show a total of 364,000 planning applications were made by district-level planning authorities in 2018; this shows a 4% fall on 2017 in England. Of these, 47,500 were residential developments: 6,400 major developments and 41,100 minor developments, showing a 2% and 5% fall respectively on 2017.

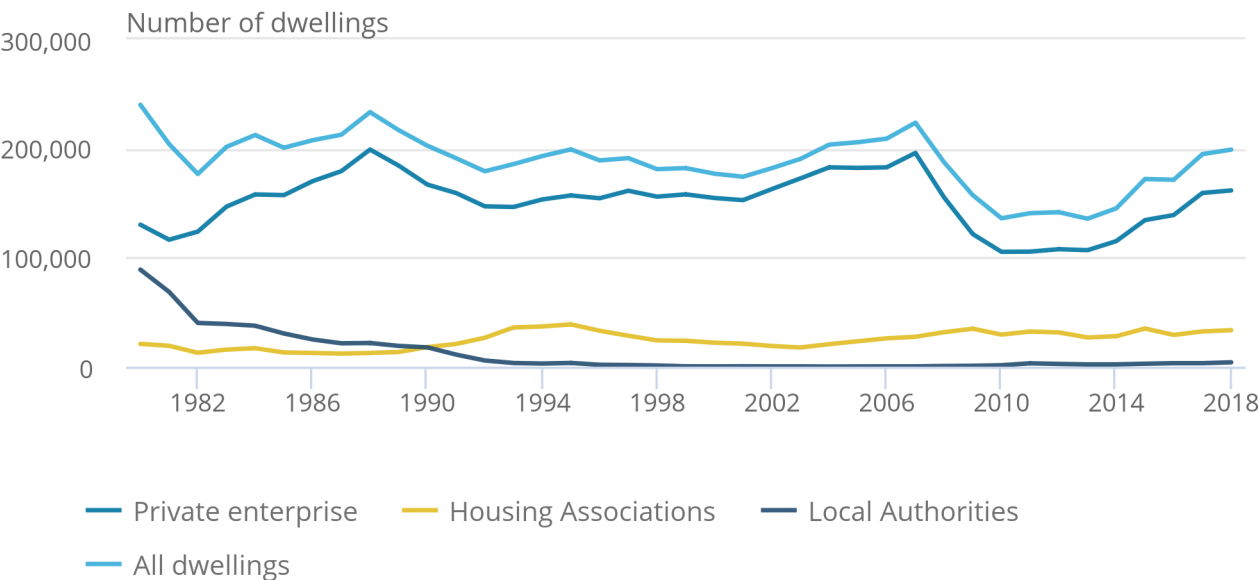
As part of the [Autumn Budget 2017](#), the Chancellor set out his vision for the Homes and Communities Agency over the next coming years. Central to this was the launch of Homes England at the start of 2018, which aims to achieve a quota of 300,000 new homes a year by 2020. [Homes England](#) aims to bring together the existing planning expertise and new land-buying powers to secure land in areas people want to live in and help small and more innovative house builders into the market with the help of newly acquired brownfield sites.

Figure 17: Growth in number of permanent new dwelling completions

Number of permanent new dwelling completions by tenure, UK, 1980 to 2018

Figure 17: Growth in number of permanent new dwelling completions

Number of permanent new dwelling completions by tenure, UK, 1980 to 2018



Source: : Ministry of Housing, Communities and Local Government – Table 211

Notes:

1. From 29 October 2019, the [information in Table 211](#) will be published by the ONS, rather than MHCLG.

The number of permanent dwellings was up by 2.1% in 2018, as shown in Figure 17, compared with the year earlier. While the number of permanent dwellings has increased in 2018, the rate of growth has slowed down in comparison with 2017, which displayed 13.7% year-on-year growth.

Local authority dwelling completions saw a 24.5% year-on-year increase in 2018, which was a significant increase on 2017, which saw flat (0.0%) year-on-year growth. This change is likely a result of changes in planning restrictions freeing up brownfield land for development use.

10 . Building materials

Data on both the prices and quantities of building materials used, bought and sold in the UK are published by the Department for Business, Energy and Industrial Strategy (BEIS) in the [monthly statistics of building materials and components](#). The BEIS also publishes information on trade in construction building materials using data from HM Revenue and Customs (HMRC). The data cover three main components: all raw materials, all semi-manufactures, and all products and components.

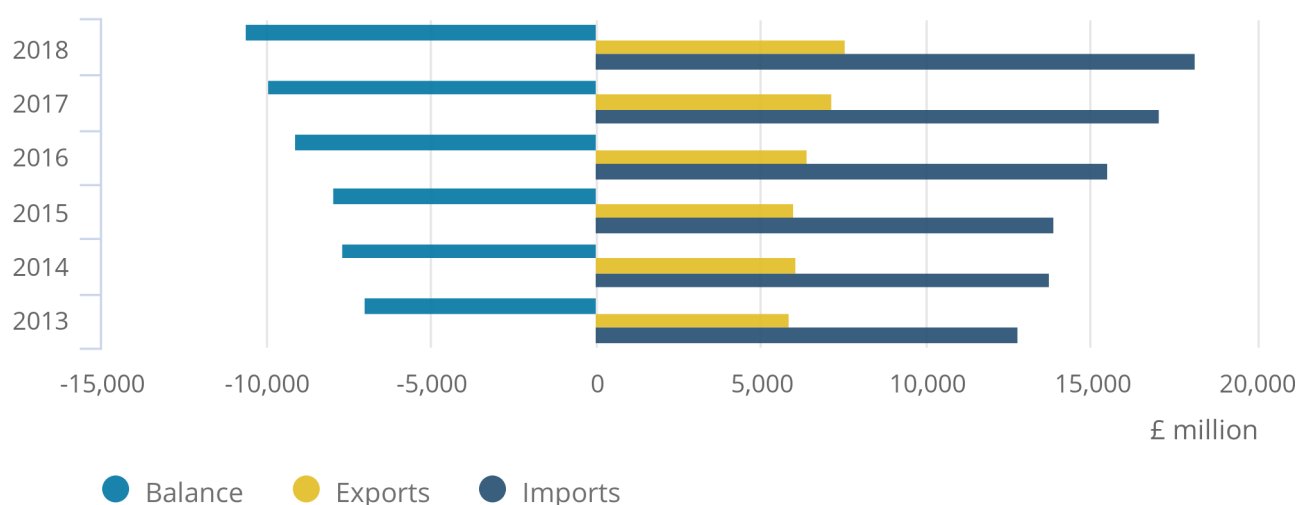
The UK operates a trade deficit for construction goods and components according to the data provided by the BEIS. Figure 16 depicts a widening deficit, which has been driven by consistent increases in the value of imports of building materials and components. The trade deficit in construction materials and components was £10,574 million in 2018, with imports being more than double the value of exports, as all three components of building materials were in deficit.

Figure 18: Trade deficit widens again in 2018 as UK imports see growth

The balance of trade in all building materials and components, current prices, UK, 2013 to 2018

Figure 18: Trade deficit widens again in 2018 as UK imports see growth

The balance of trade in all building materials and components, current prices, UK, 2013 to 2018



Source: Department for Business, Energy and Industrial Strategy – Building materials and components statistics: August 2019

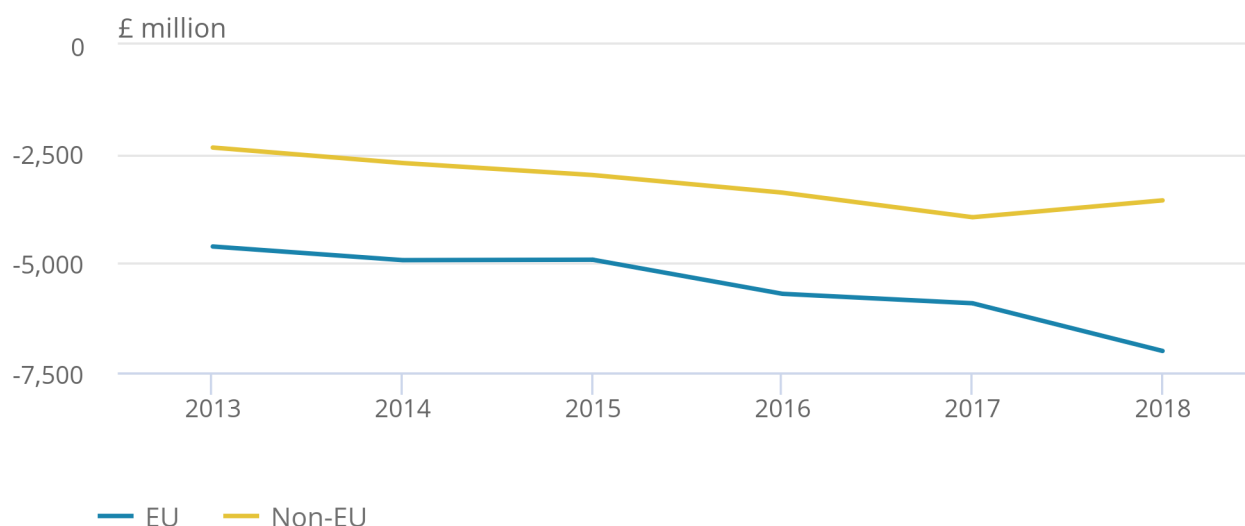
The rate of growth of the deficit has slowed in recent periods, from 15.0% growth in 2016 to 9.2% in 2017 and 6.5% in 2018. This may be in part because of the stabilisation of sterling after the sharp drop in 2016 following the UK's decision to leave the EU in June 2016. Figure 17 shows EU and non-EU balance of trade in construction materials and components, showing that the non-EU trade deficit shrank in 2018 by 9.8%, compared with EU trade, which saw an 18.4% increase. The falling deficit in trade with non-EU countries has been driven by a sharp slowdown in the growth of imports with non-EU countries from 12.9% in 2017 to 1.8% in 2018, while export growth has increased sharply from 2.0% in 2016 to 7.9% in 2017 and 18.3% in 2018.

Figure 19: Trade deficit with non-EU countries narrows while it continues to grow with the EU

The balance of trade in all building materials and components with EU and non-EU countries, current prices, UK, 2013 to 2018

Figure 19: Trade deficit with non-EU countries narrows while it continues to grow with the EU

The balance of trade in all building materials and components with EU and non-EU countries, current prices, UK, 2013 to 2018



Source: Department for Business, Energy and Industrial Strategy

The weaker pound may have increased the total value of exports as well as making imports of building materials and components more expensive and possibly explaining the decrease of 0.7% in EU exports in 2018, down from 12.7% growth in the previous year. Table 1 shows the top five export and import markets for the UK in 2018. The top five export markets accounted for 51% of total construction materials exports in 2018, with the Republic of Ireland the largest single export market, accounting for 16% of all exports of UK construction materials. The top five import markets accounted for 46% of total construction materials imports in 2018, with China the single largest source of imports with 16%. Overall, exports and imports from EU countries remain important as four of five of the top UK export and import markets for construction materials in 2018 were European.

Table 1: Top five export and im port markets for construction materials
UK, £ millions

| Top five export markets | | Top five import markets | |
|-------------------------|------|-------------------------|------|
| Republic of Ireland | 1183 | China | 2831 |
| Germany | 800 | Germany | 2577 |
| USA | 642 | Italy | 1052 |
| France | 613 | Spain | 909 |
| Netherlands | 598 | Netherlands | 907 |

Source: Department for Business, Energy and Industrial Strategy – Building materials and components statistics: August 2019

11 . International comparisons

As part of the [monthly construction output statistical bulletin](#), links are made to [Eurostat's production in construction](#) and the [US Census Bureau construction spending](#) release. Like the Office for National Statistics (ONS), both organisations produce monthly figures on construction output in their respective regions.

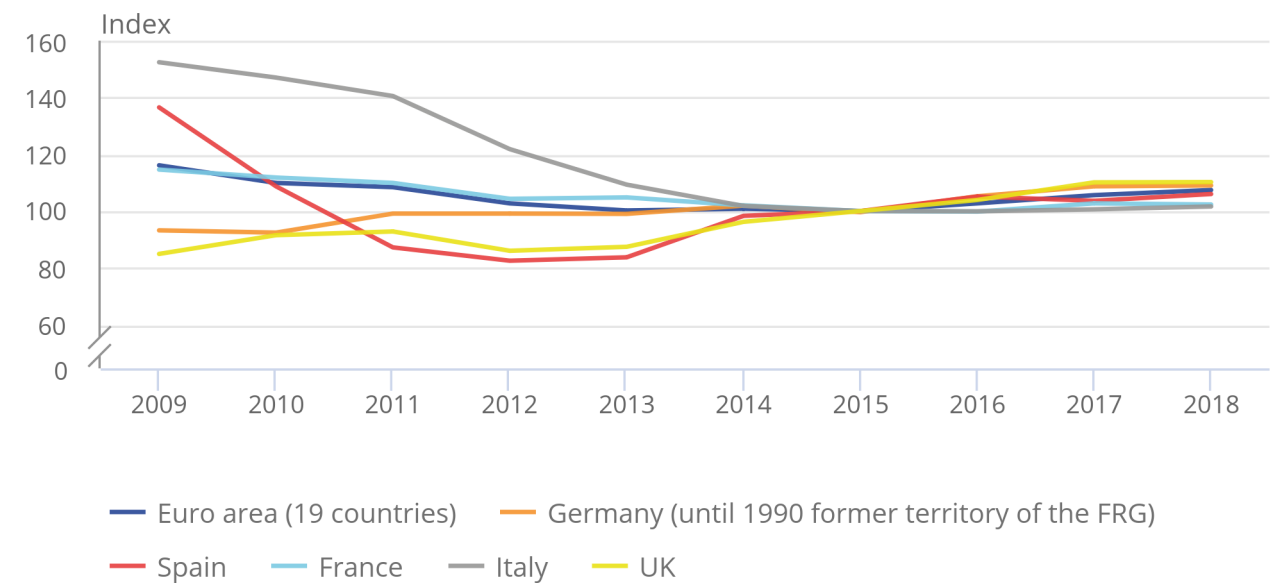
A note about this year's international comparison data from Eurostat is that the [Short-term statistics \(STS\) regulation](#) outlines that member states should rebase their data every five years. Accordingly, this year's data are referenced at 2015=100 in comparison to last year's base of 2010=100.

Figure 20: UK construction outperforms other member states since 2015

UK, Germany, France, Italy, Spain and the Euro area

Figure 20: UK construction outperforms other member states since 2015

UK, Germany, France, Italy, Spain and the Euro area



Source: Eurostat – Production in construction (annual data)

Figure 20 shows a volume growth index of construction from 2010 to 2018 for the UK, Germany, France, Italy, Spain and the Euro area – the 19 EU members that have adopted the Euro as a common currency. It is worth noting that this series covers both new work and repair and maintenance output, as opposed to only new work output seen in Table 2.4.

Since 2015, the Euro area, Germany and the UK have seen sustained year-on-year growth in the construction industry, with the UK having the highest growth since 2015 at 10.2%, followed by the Euro area and Germany with 7.4% and 9.4% respectively. However, most of UK construction output growth was in years prior to 2018, with year-on-year growth in 2018 at only 0.1% in the Eurostat index of construction; this is the weakest growth of these selected regions.

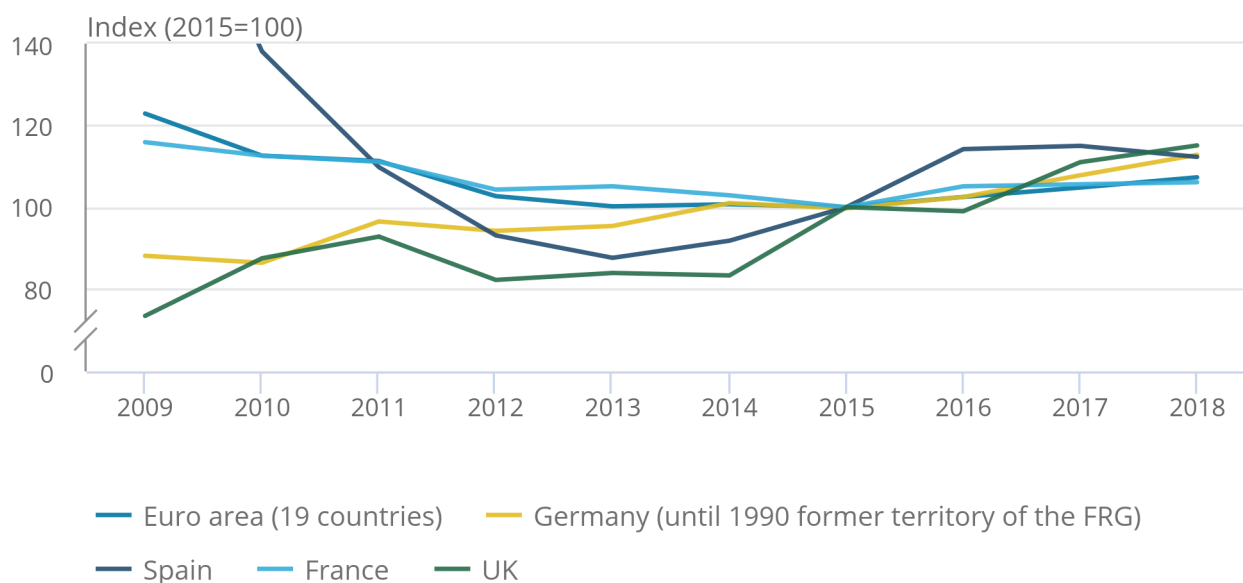
Germany also experienced poor growth at 0.3%, with France being the only region to record a year-on-year decline, shrinking by 0.4%. Spain recorded the strongest year-on-year growth at 2.3% in 2018 to recover from a fall in 2017, and this was followed by the Euro area as a whole with 1.7%."

Figure 21: The UK, Germany and the Euro area see sustained growth in 2018 compared with 2017 in the volume index of construction civil engineering works, whereas Spain sees a fall

Volume index of construction civil engineering works, calendar adjusted, UK, Germany, France, Spain and the Euro area, 2010 to 2018

Figure 21: The UK, Germany and the Euro area see sustained growth in 2018 compared with 2017 in the volume index of construction civil engineering works, whereas Spain sees a fall

Volume index of construction civil engineering works, calendar adjusted, UK, Germany, France, Spain and the Euro area, 2010 to 2018



Source: Eurostat – Production in construction (annual data)

Figure 21 shows a non-seasonally adjusted volume index of construction and civil engineering works over the period of 2010 to 2018 for the UK, Germany, Spain, France and the Euro area. Data for Italy were not available in this index.

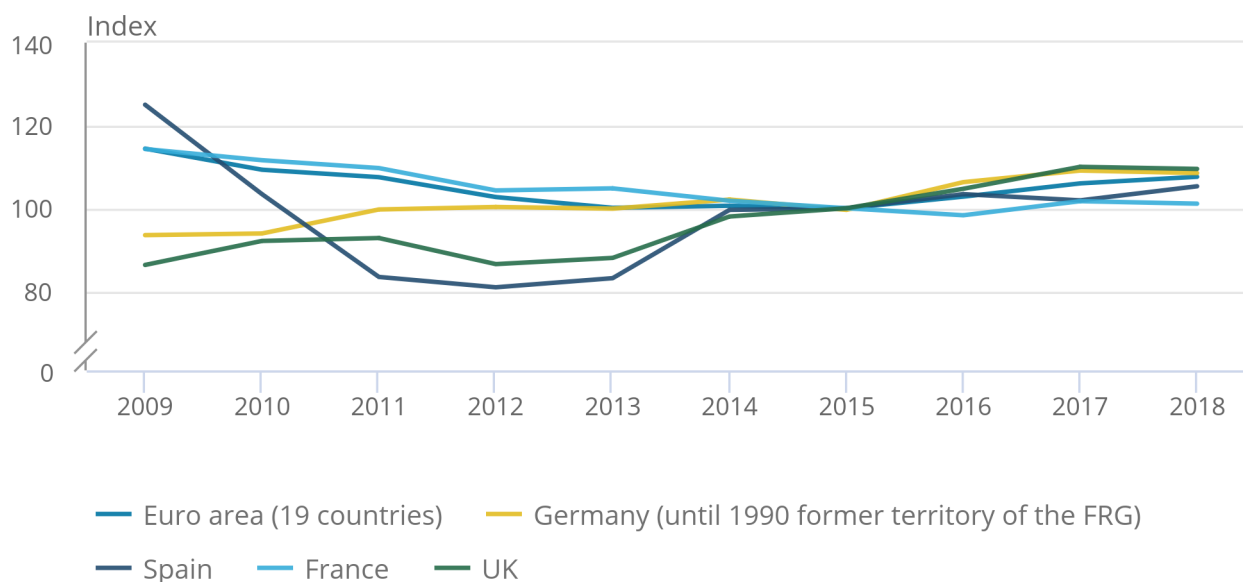
In periods before 2015, there was greater variation in the growth rates between these regions, though in more recent periods growth seen in civil engineering work production has been more consistent. Germany and the UK experienced strong growth in 2018, with growth rates of 4.6% and 3.7% respectively, compared with the Euro area, which had a growth rate of 2.4%. France showed weaker growth of 0.5% and Spain experienced the only decrease out of these regions, declining by 2.3%.

Figure 22: Spain and the Euro area see growth in the volume index of construction buildings in 2018 with slight declines elsewhere

Volume index of construction buildings, calendar adjusted, UK, Germany, France, Spain and the Euro area, 2010 to 2018

Figure 22: Spain and the Euro area see growth in the volume index of construction buildings in 2018 with slight declines elsewhere

Volume index of construction buildings, calendar adjusted, UK, Germany, France, Spain and the Euro area, 2010 to 2018



Source: Eurostat – Production in construction (annual data)

Figure 22 is an annual non-seasonally adjusted volume index of construction of buildings between 2010 and 2018 for the UK, Germany, Spain, France and the Euro area countries. Data for Italy were not available in this index.

As with the previous two indices, there was greater variation in growth rates prior to 2015. Growth rates were lower in 2018 than 2017 for all regions except Spain, with Spain and the Euro area being the only two regions to see positive growth, of 3.3% and 1.5% respectively. Germany and the UK experienced a fall in growth of 0.5%, followed by France, which fell 0.6%. However, since 2015, the UK has experienced the most growth of all regions, at 9.5%, followed by Germany growing by 8.9% over the period.

12 . External data sources and previously published tables

This article previously included the following statistics, now published externally:

- [Annual Business Survey \(employment size and growth\)](#)
- [Department for Communities \(Northern Ireland\): Housing Statistics](#)
- [Construction output statistics \(Northern Ireland\)](#)
- [Insolvency Services Official Statistics](#)
- [Planning applications statistics](#)
- [Reporting of Injuries, Diseases and Dangerous Occurrences Regulations \(RIDDOR \)](#)
- [the Construction Industry Training Board \(CITB\)](#)

Other related data published by the Office for National Statistics:

- [Employees and self-employed by industry](#)
- [Stoppages of work](#)
- [Workforce jobs by industry](#)

[Construction statistics: sources and outputs](#) also provides further links to construction-related data sources.

In addition, the recently published [Migrant labour force within the UK's construction industry](#) article offers further data on the age, country of origin and birthplace of the construction workforce. While not covering 2018, it provides a detailed overview of the UK construction workforce between 2014 and 2016.

As of 5 September 2019, the Office for National Statistics (ONS) is publishing [regional GDP estimates](#) on a quarterly basis at the NUTS1 level, which include construction data.

13 . Quality and methodology

The [Construction output](#) and [New orders in construction](#) Quality and Methodology Information (QMI) reports contain important information on:

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

Value Added Tax (VAT) turnover has been used to estimate the output of small- and medium-sized businesses. In this release, VAT turnover has been used for selected industries previously covered by the Monthly Business Survey from Quarter 1 (Jan to Mar) 2016 to Quarter 4 (Oct to Dec) 2018.

Further information on the use of VAT turnover in construction output estimates and its impact can be found in the following articles:

- [VAT turnover implementation into national accounts](#)
- [VAT turnover data in National Accounts: background and methodology](#)
- [Quality assurance of administrative data \(QAAD\) report for Value Added Tax turnover data](#)

14 . Construction statistics development

As part of the ongoing Office for National Statistics (ONS) Construction Statistics Development Programme, we have worked closely with the Construction Statistics Steering Group. This group provides a forum for the ONS to engage with the main users of construction statistics on the development of ONS-published construction statistics, including other government departments, industry experts and academics, to identify areas for improvement. These improvements have led to the re-designation of construction output, construction output price indices (OPIs) and new orders as National Statistics. A [letter concerning the re-designation](#) is available. Please note: this National Statistics re-designation did not include the [Output in the construction industry: sub-national and sub-sector](#) dataset.

We have also published a series of methodological articles to help communicate recent improvements:

- [Construction output Quality and Methodology Information \(QMI\) report](#) (published 9 August 2019)
- [New orders in construction QMI report](#) (published 9 August 2019)
- [Conceptual and methodological differences between private housing construction output and gross fixed capital formation private sector dwellings](#) (published 31 May 2019)
- [Construction statistics development: improving the understanding of new orders in the construction industry and the gap between output and new orders](#) (published 30 October 2018)
- [Impact of improvements to construction statistics: June 2018 \(implemented as part of Blue Book 2018\)](#) (published 29 June 2018)
- [Improvements to construction statistics: Addressing the bias in early estimates of construction output, June 2018](#) (published 4 June 2018)
- [Construction development: improvements to regional and sub-sector level estimates, June 2018](#) (published 4 June 2018)
- [Construction development: Impact of improvements to construction statistics: September 2017](#) (published 29 September 2017)

15 . Acknowledgements

Authors: Adam Chopdat, Christian Guthrie, David Pervez, Jacob Hamblin-Pyke and Nathaniel Tack.