



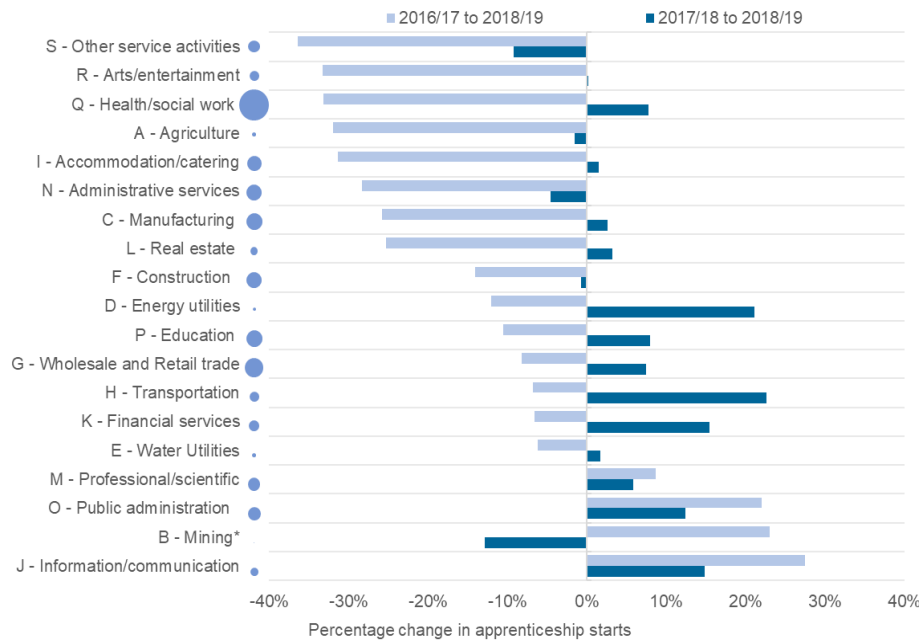
# Apprenticeships in England by Industry Characteristics 2018/19 Academic Year

12 March 2020

Experimental Statistics

**Most sectors have fewer apprenticeships starts in 2018/19 compared to 2016/17, before the apprenticeship levy was introduced**

## Percentage change in apprenticeship starts by sector<sup>1</sup>



In 2018/19, most sectors still have fewer apprenticeship starts compared to 2016/17, before the levy was introduced - with 'Other Service Activities' 36% below 2016/17 levels.

The only sectors with more starts compared to 2016/17 were 'Mining and Quarrying', 'Information & Communication', 'Professional/Scientific'<sup>2</sup>, and 'Public Administration'<sup>3</sup>.

However, most sectors saw an increase in starts between 2017/18 and 2018/19, with 'Transportation & Storage' (23%) and 'Energy Utilities'<sup>4</sup> (21%) seeing the biggest increases.

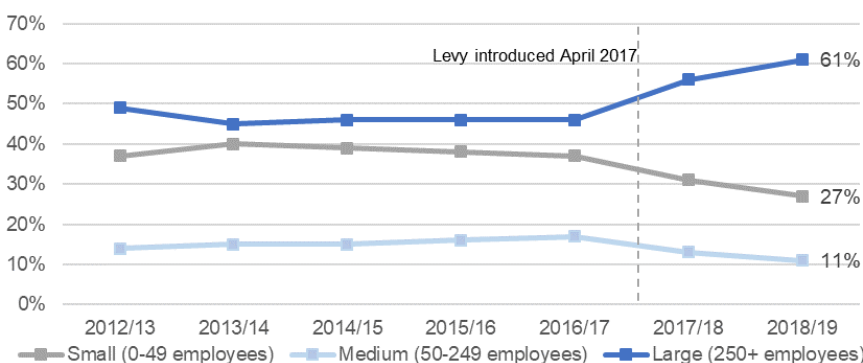
Source: ILR-IDBR matched data

\* Number of apprenticeship starts in these sectors were very low (below 200)

● Refers to volume of starts in 2016/17 relative to other sectors

## Apprenticeships were most likely to occur in large employers (250+ employees)

### Apprenticeship starts by employer size, 2012/13 to 2018/19



In 2018/19, 61% of apprenticeship starts were with larger employers, those with 250 more employees.

This is an increase from 46% in 2016/17, whereas small businesses saw a decrease from 37% to 27%.

This is largely due to falls in the number of starts amongst small (down 40%) and medium sized employers (down 45%), and a small increase in those amongst large employers (up by 8%).

Source: ILR-IDBR matched data

<sup>1</sup> Codes in chart refer to SIC 2007 codes

<sup>2</sup> Full title of SIC code is 'Professional, Scientific & Technical Activities'

<sup>3</sup> Full title of SIC code is 'Public Administration & Defence; Compulsory Social Security'

<sup>4</sup> Full title of SIC code is 'Water Supply; Sewerage, Waste Management & Remediation Activities'

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## About this release

This statistical release provides information on apprenticeship starts in England. These experimental statistics have been produced using Individualised Learner Record (ILR) and Apprenticeship Service Account data matched to the Office for National Statistics (ONS) Inter-Departmental Business Register (IDBR) data. The statistics are experimental as the underlying matched data source is new and the methodology to create it may be improved.

The source data and matching process for this publication followed a similar approach to that detailed on pages 7 to 15 of the [BIS Research Report: Estimating the impact of publicly funded training on industry and firm-level outcomes](#).

The publication includes figures from the 2012/13 academic year to the 2018/19 academic year.

A research factsheet [Apprenticeships in England by industry sector 2014/15](#) has previously been published on this subject.

## In this publication

The following tables are included in this statistical publication:

[Apprenticeship starts in England by industry sector: 2012/13 to 2018/19 \(Excel .xls\)](#)

## Feedback

We are changing how our releases look and welcome feedback on any aspect of this document at [Karen.Woolgar@education.gov.uk](mailto:Karen.Woolgar@education.gov.uk)

# 1. Introduction

The Department for Education's Individualised Learner Record (ILR) and the Office for National Statistics Inter-Departmental Business Register (IDBR) have been matched together to allow information about apprentices to be linked to business information relating to the apprentice's employer, covering:

- Learner characteristics: age and gender
- Apprenticeship information: level and subject studied
- Employer characteristics: industry sector, size (number of employees), region, local authority and parliamentary constituency.

For the first time in this publication, data has also been matched in from the Apprenticeship Service to enable the presentation of apprenticeship starts by whether they were supported by levy funds from an Apprenticeship Service Account (ASA).

The matched ILR-IDBR dataset covers seven academic years between 2012/13 and 2018/19.

This publication uses the resulting linked education and business dataset to produce estimates for volumes of apprenticeship starts by employer characteristics. Work will continue to improve the statistics as knowledge of the underlying data source develops. The source data and matching process in this publication followed a similar approach to the one used in [BIS Research Report No.177](#), where pages 7 to 15 provide further information on the datasets, matching process and quality assurance.

ONS have supplied the Inter-departmental Business Register data used in this publication, but they bear no responsibility for the further analysis or interpretation of that data contained here.

## Background and context

Apprenticeships are paid jobs that include an off-the-job programme of learning.

The UK-wide apprenticeship levy came into force on 6 April 2017 requiring all UK public and private sector employers with an annual pay bill of £3 million or more to invest in apprenticeship training. As of May 2017, reforms have been made to how apprenticeship funding works, including the introduction of the apprenticeship levy and apprenticeship service. The profile of apprenticeship starts changed significantly since the introduction of the levy which, along with the introduction of apprenticeship standards (that are replacing frameworks), has impacted on the number and nature of apprenticeship starts. Care should be taken in comparing and interpreting data presented in this release.

The use of the term 'employers' in this publication refers to an enterprise in the IDBR i.e. 'a business under autonomous and single control, usually producing a single set of accounts'. The employer's size, however, refers to the number of employees in the *enterprise group* to which the enterprise belongs (an enterprise group consists of several enterprises under common ownership). All other employer characteristics are those belonging to the enterprise wherever possible. The geographical information refers to the workplace of the apprentice except for Ministry of Defence apprenticeships, where the training provider's location is used. The employer's industry sector is based on the [Standard Industrial Classification of economic activities SIC 2007](#).

In 2018/19 there were 393,400 apprenticeship starts in England, of which 93% (366,200) were matched to an employer in the IDBR database. These matched apprenticeship starts took place within 79,400 employers in England. The match rate has steadily increased since the first match in 2012/13.

## Number of matched apprenticeship starts in all academic years

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Total apprenticeship starts <sup>5</sup>	510,200	440,400	499,900	509,400	494,900	375,800	393,400
Matched starts	450,700	388,600	445,900	457,000	449,800	346,900	366,200
Match rate	88%	88%	89%	90%	91%	92%	93%

Source: ILR-IDBR matched data

These statistics only reflect *matched* apprenticeship starts and so are different from those published in the [FE and Skills Statistical Release](#).

## 2. Apprenticeship starts by industry characteristics<sup>6</sup>

The following analysis is based only on apprenticeship starts which were matched to the IDBR database.

### Industry sector (Table 1)

The highest incidence of apprenticeship starts was in the 'Human Health and Social Work Activities' sector, accounting for 22% of all matched starts in 2018/19, a decrease from 27% in 2016/17 before the levy was introduced. The next largest sector was the 'Wholesale and Retail Trade' with 11% of all matched starts and 'Education' and 'Public Administration' both with 8%.

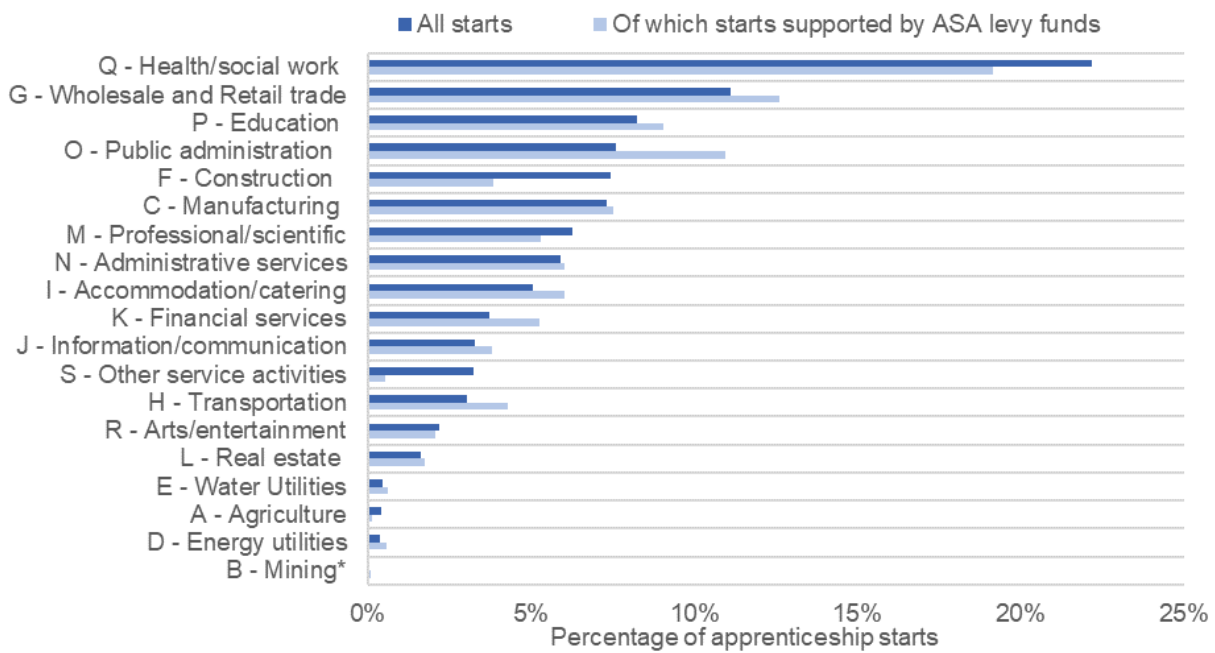
Over half (51%) of matched apprenticeship starts were supported by Apprenticeship Service Account (ASA) levy funds in 2017/18, rising to 58% in 2018/19. The highest proportion of starts supported by ASA levy funds in 2018/19 was in 'Human Health and Social Work Activities' at 19%.

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<sup>5</sup> Source: [Further Education and Skills Statistical Release](#)

<sup>6</sup> Figures in this analysis should not be compared to the figures in the statistical release 'Further Education and Skills in England October 2019' as this publication only reports on apprenticeship starts which were matched to the IDBR.

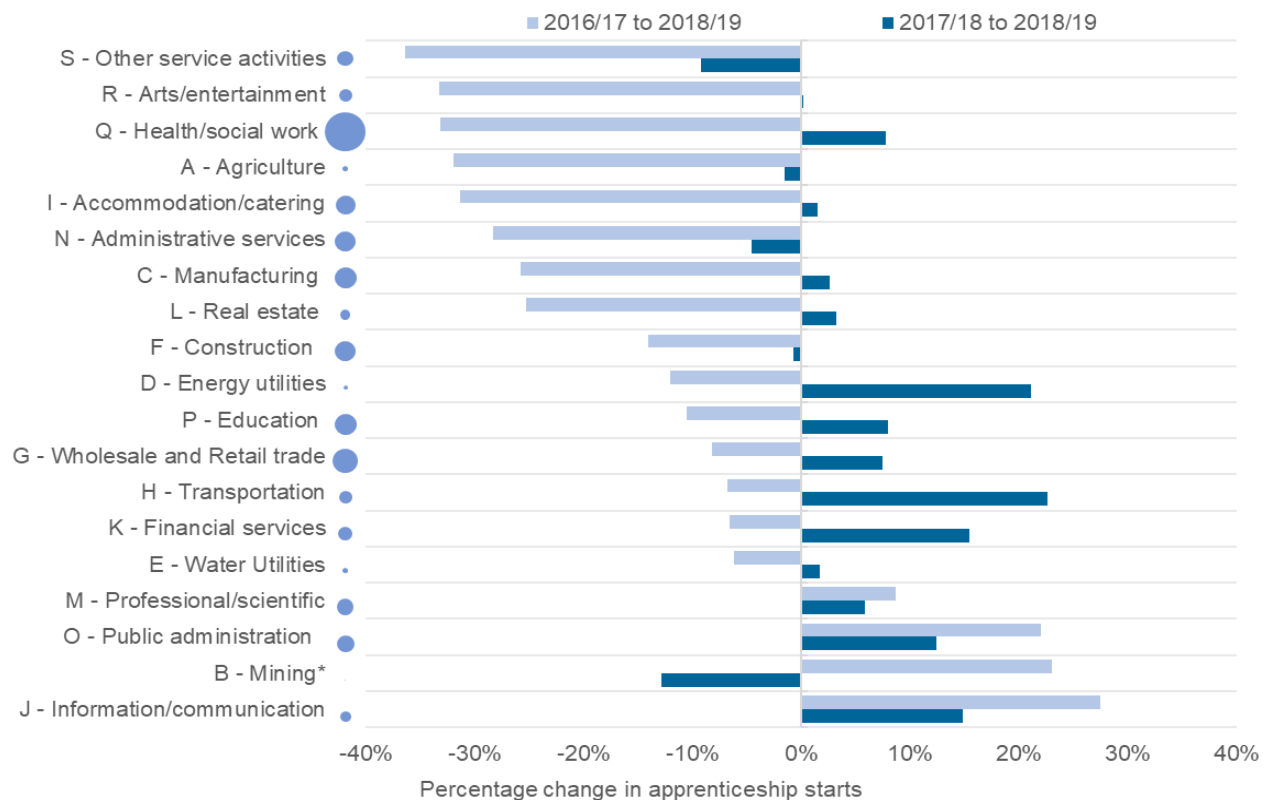
**Figure 1: Apprenticeship starts by sector and levy status, 2018/19<sup>7</sup>**



Source: ILR-IDBR matched data

\* Number of apprenticeship starts in these sectors were very low (below 200)

**Figure 2: Percentage change in apprenticeship starts by sector**



Source: IDBR-ILR matched data

\* Number of apprenticeship starts in these sectors were very low (below 200)

● Refers to volume of starts in 2016/17 relative to other sectors

<sup>7</sup> Codes in chart refer to SIC 2007 codes

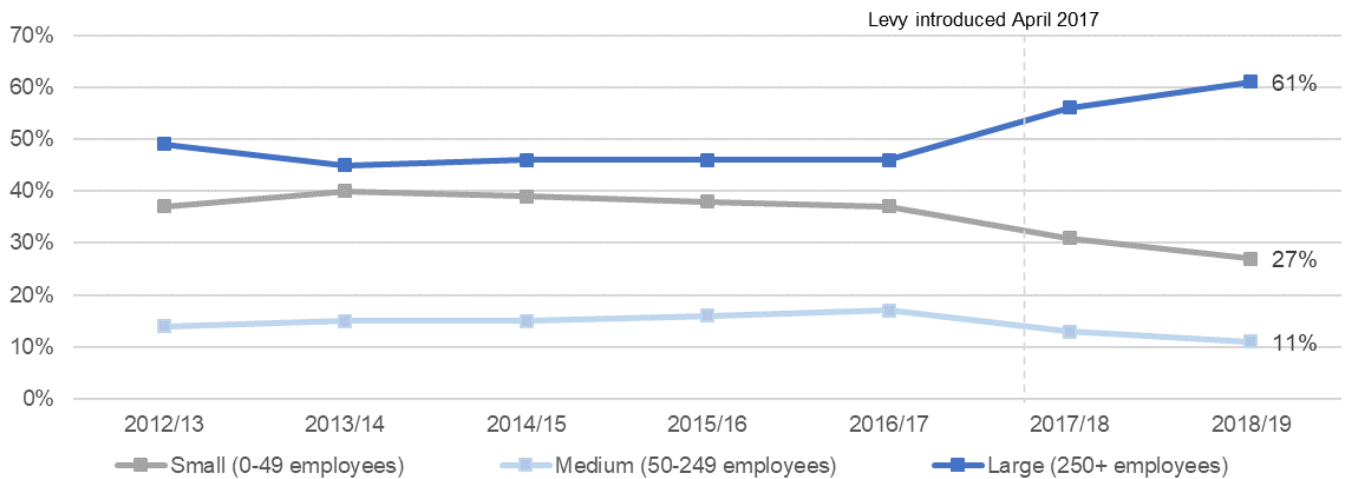
In 2018/19, most sectors still have fewer apprenticeship starts compared to 2016/17, before the levy was introduced - with 'Other Service Activities' at 36% below 2016/17 levels.

The only sectors which saw an increase in starts compared to 2016/17 were 'Information & Communication', 'Mining and Quarrying', 'Professional/Scientific'<sup>8</sup> and 'Public Administration'<sup>9</sup> – which together accounted for just 11% of all apprenticeship starts.

However, most sectors saw an increase in starts between 2017/18 and 2018/19. The three largest sectors in terms of starts in 2017/18 all increased - 'Human Health and Social Work Activities' by 8%, 'Wholesale and Retail Trade' by 7% and 'Education' by 8%.

### Employer size (Table 1)

**Figure 3: Apprenticeship starts by employer size, 2012/13 to 2018/19**



Source: ILR-IDBR matched data

Apprenticeship starts have become more concentrated in large employers, since the introduction of the levy. Apprenticeship starts were most likely to occur in large employers (those with 250 or more employees) at 61% of all starts in 2018/19; however, this proportion rose from 46% of all apprenticeship starts in 2016/17. Small (0-49) employers accounted for 27% of apprenticeship starts in 2018/19, falling from 37% in 2016/17. Apprenticeship starts were least likely to occur in medium-sized (50-249) employers, with these accounting for just 11% of starts in 2018/19. This shift since 2016/17 was largely driven by falls in starts since 2016/17 amongst small (down by 66 thousand, or 40%) and medium sized employers (down by 34 thousand, or 45%), whilst starts in large employers increased just slightly (by 16 thousand, or 8%).

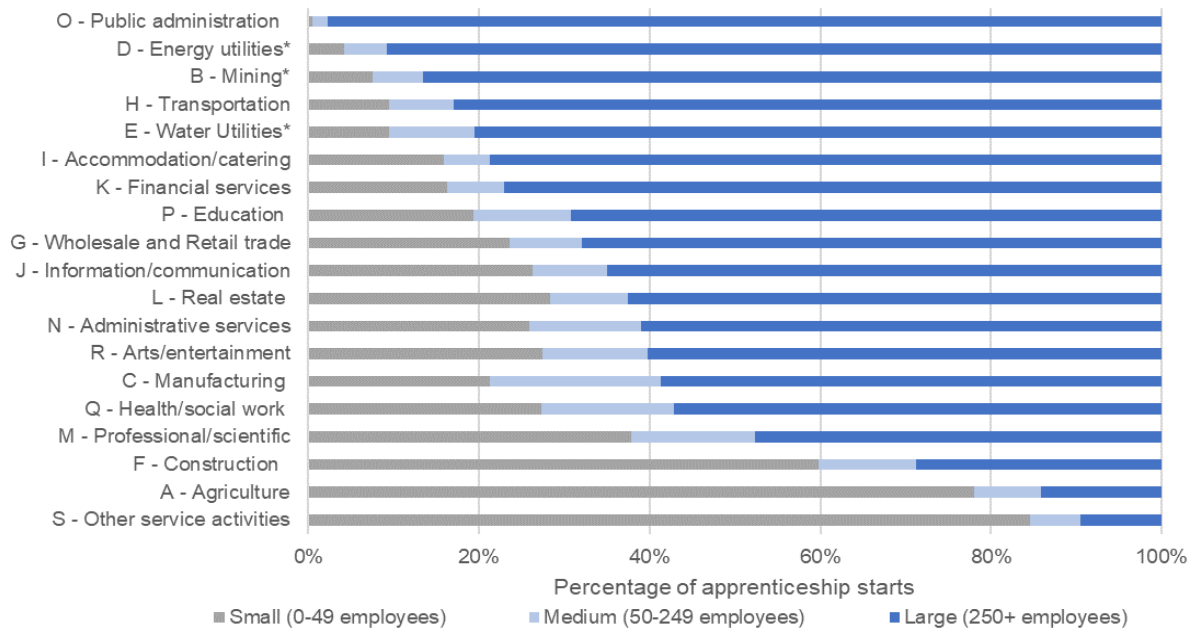
Furthermore, in 2018/19 67% of apprenticeship starts took place in employers with greater than 100 employees, an increase from 55% in 2016/17.

The proportion of starts by employer size varies considerably across industry sectors. For example, in 2018/19 85% of apprenticeship starts in the 'Other Service Activities' sector were with small employers, whereas 98% of starts in 'Public Administration and Defence' were with large employers.

<sup>8</sup> Full title of SIC code is 'Professional, Scientific & Technical Activities'

<sup>9</sup> Full title of SIC code is 'Public Administration & Defence; Compulsory Social Security'

**Figure 4: Apprenticeship starts by employer size and industry sector, 2018/19**



Source: ILR-IDBR matched data

\* Number of apprenticeship starts in these sectors were very low (below 200)

### Region of workplace (Table 2)

The 'Human Health and Social Work Activities' sector had the largest proportion of apprenticeship starts across every region. Apprenticeship starts in the 'Manufacturing' sector were more prevalent in the north and midlands than the south – and starts in this sector also declined the most in the north and midlands between 2016/17 and 2018/19. Across all regions, starts in 'Human Health and Social Work' have declined since the introduction of the levy. The North East, which has seen the biggest fall in apprenticeship starts overall since 2016/17 (at almost a third), saw large falls in apprenticeship starts in some of the largest sectors - the 'Manufacturing' (down by 50%) and 'Construction' (down by 32%) sectors.

## Apprenticeship level (Table 3)

Figure 5: Change in apprenticeship starts by sector and apprenticeship level, 2016/17 to 2018/19



Source: IDBR-ILR matched data

\* Number of apprenticeship starts in these sectors were very low (below 200)

The majority of the overall fall in the number of matched apprenticeship starts since 2016/17 was at intermediate level (level 2) - down by over 100 thousand, or 44%. This was partly offset by a small increase of 38 thousand, or 14% in higher level starts (level 4+).

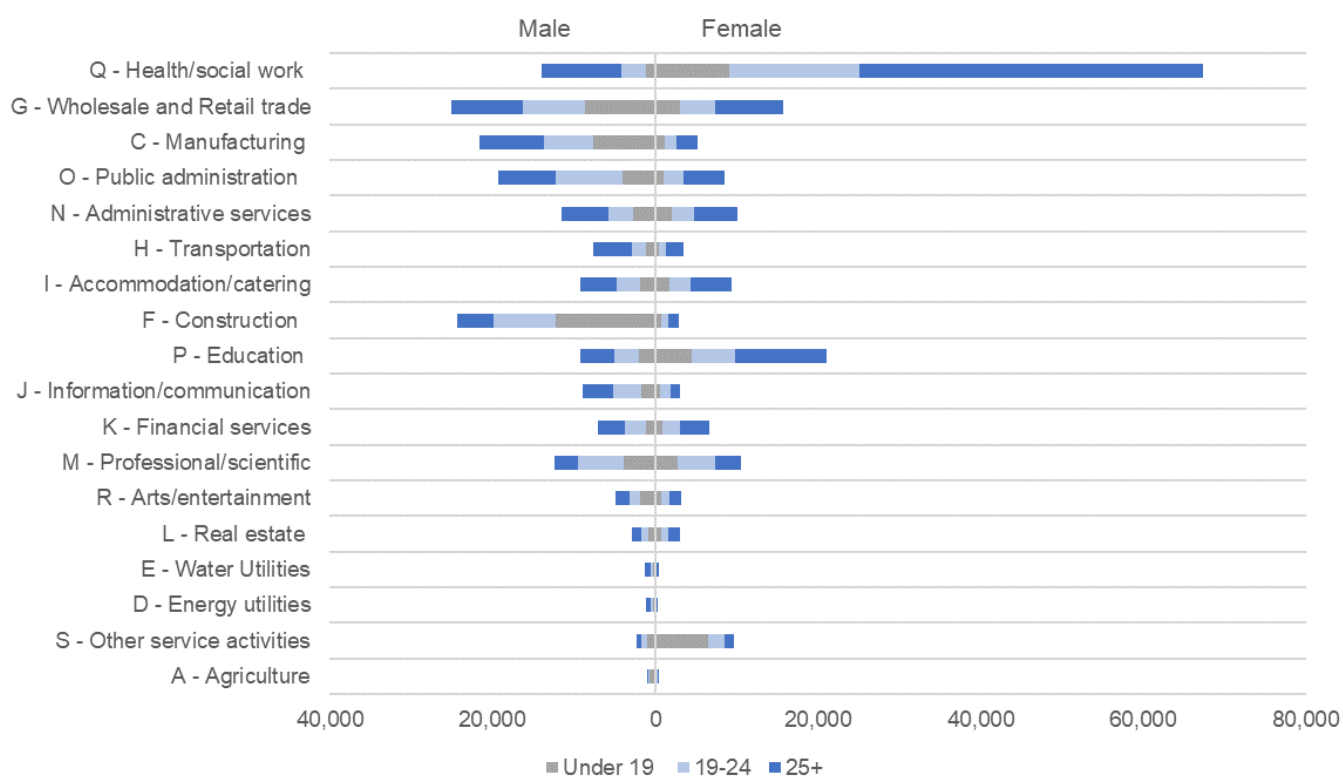
This increase in higher level apprenticeship starts was found across every sector, with 'Transportation and Storage' seeing a 331% increase since 2016/17. Whereas, intermediate level apprenticeships saw a decrease in almost every sector except 'Information and Communication' which saw a 32% increase. Advanced apprenticeships (level 3) saw an overall decrease in starts since 2016/17 (down by 17 thousand, or 9%), however several sectors saw growth and 'Public Administration' saw an increase of 56%.

In 2018/19, the largest proportion of higher apprenticeship starts were in the sectors 'Human Health and Social Work Activities' (27% of higher level starts), 'Professional, Scientific and Technical Activities' (13%) and 'Education' (9%). Whereas for advanced apprenticeship starts, 'Wholesale and Retail trade' (11%) and 'Education' (9%) were the next most prevalent sectors, after 'Human Health and Social Work Activities' (22%). For intermediate apprenticeship starts, the largest proportions were also found in 'Human Health and Social Work Activities' (20%), followed by 'Wholesale and Retail trade' (14%) and 'Construction' (9%).



## Age and gender (Table 4)

**Figure 6: Volume of apprenticeship starts by industry sector and age band, 2018/19**



Source: ILR-IDBR matched data

The 'Other Service Activities' sector was the sector with the highest proportion of under 19 year olds in 2018/19 (under 19's made up 64% of starts in this sector). 'Professional, Scientific & Technical Activities' had the highest proportion of 19-24 year olds (45% of starts in this sector) and 'Human Health and Social work Activities' had the highest proportion aged 25 years and over (64% of starts in this sector).

Apprenticeship starts in 'Construction' were predominately male (89% of starts in this sector in 2018/19), and together with 'Manufacturing' and 'Wholesale and Retail Trade' accounted for 39% of all male apprenticeship starts in 2018/19.

Apprenticeship starts in 'Human Health and Social Work Activities' were predominately female (83%) and accounted for 37% of all female apprenticeship starts in 2018/19.

## Sector subject area (Table 5)

Apprenticeship starts within one industry sector area normally include starts across multiple sector subject areas (SSA). For example, in 2018/19 within the 'Education' industry sector, 75% of apprenticeship starts were by apprentices who were studying 'Education and Training, while 19% were studying 'Leisure Travel and Tourism'. Within the 'Manufacturing' industry sector only 27% of apprenticeship starts were studying 'Engineering and Manufacturing Technologies but 42% were studying 'Science and Mathematics'.

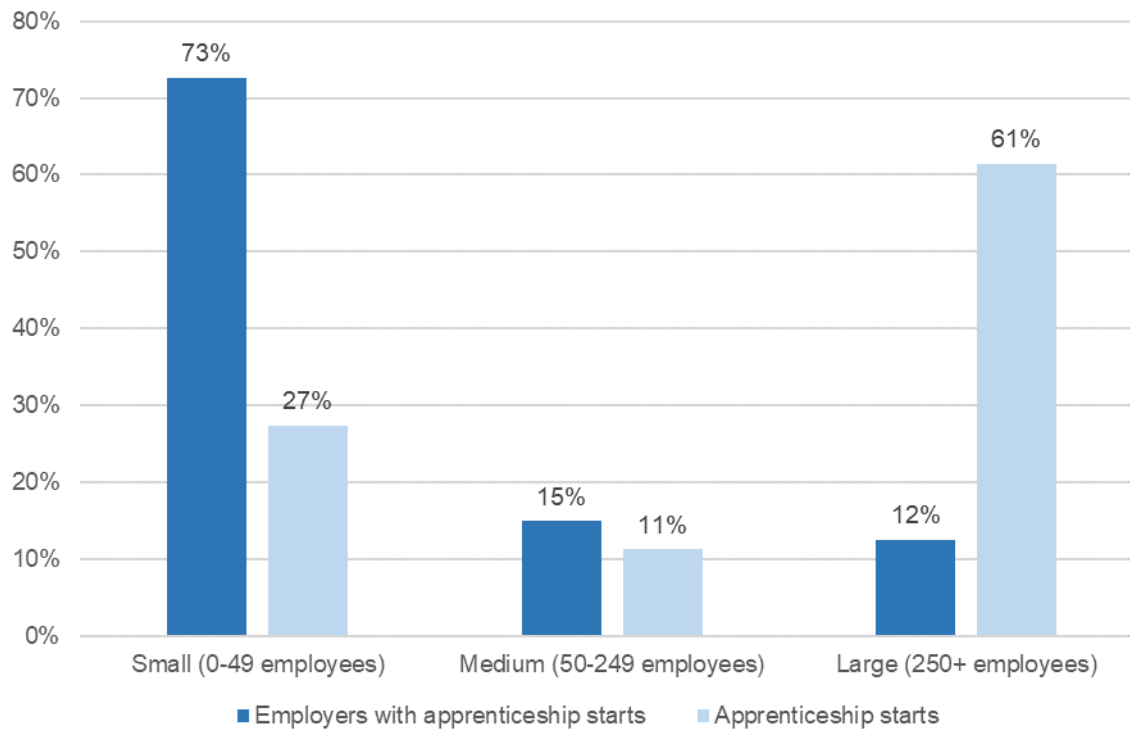
### 3. Profile of Employers with Apprenticeships – detailed analysis

This section considers only those employers which had at least one matched apprenticeship start within the year.

#### Employer size and industry sector (Table 7)

Whilst the majority of apprenticeship starts occur in large employers, most employers with apprenticeship starts are small (reflecting the general business population). In 2018/19, 73% of employers with at least one apprenticeship start were small (0-49 employees). Although only 12% of employers were large (250+ employees), 61% of apprenticeship starts were with large employers. On average large employers had 22.7 apprenticeship starts in 2018/19, compared to 3.5 for medium employers and 1.7 for small employers.

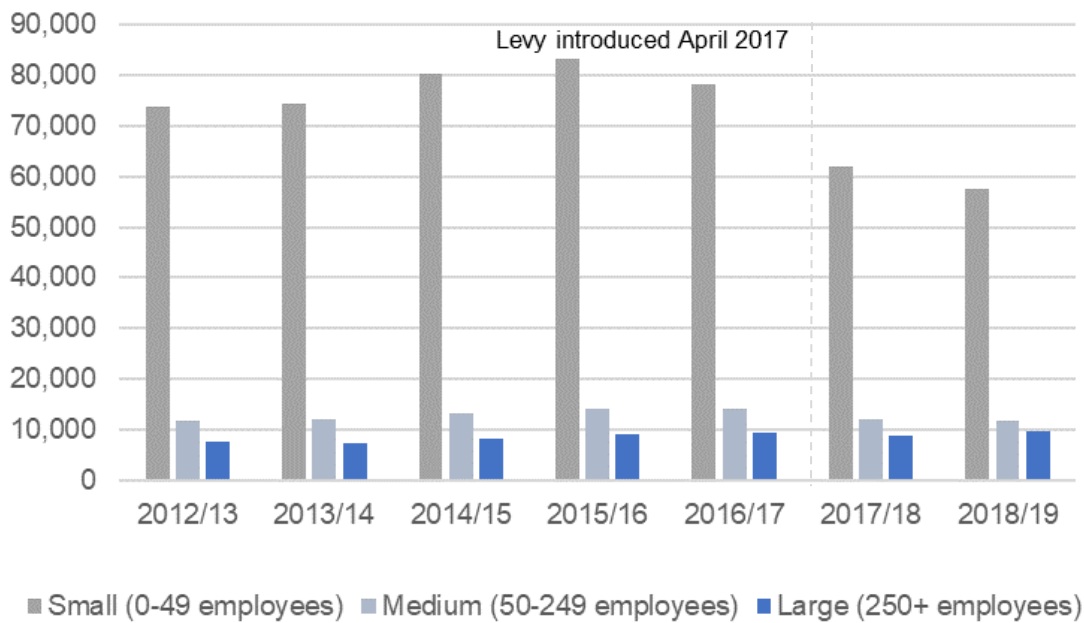
**Figure 7: Apprenticeship starts and employers with apprenticeship starts, by employer size, 2018/19**



Source: IDBR-ILR matched data

In 2018/19, matched apprenticeship starts took place in 79,400 unique employers in England; this was a decrease of 22% from 101,860 since the levy was introduced in 2016/17. Whilst the number of small and medium sized employers fell over this period (by 26% and 17% respectively), the number of large employers increased slightly, by 5%.

**Figure 8: Volume of employers with apprenticeship starts, by size**



Source: IDBR-ILR matched data

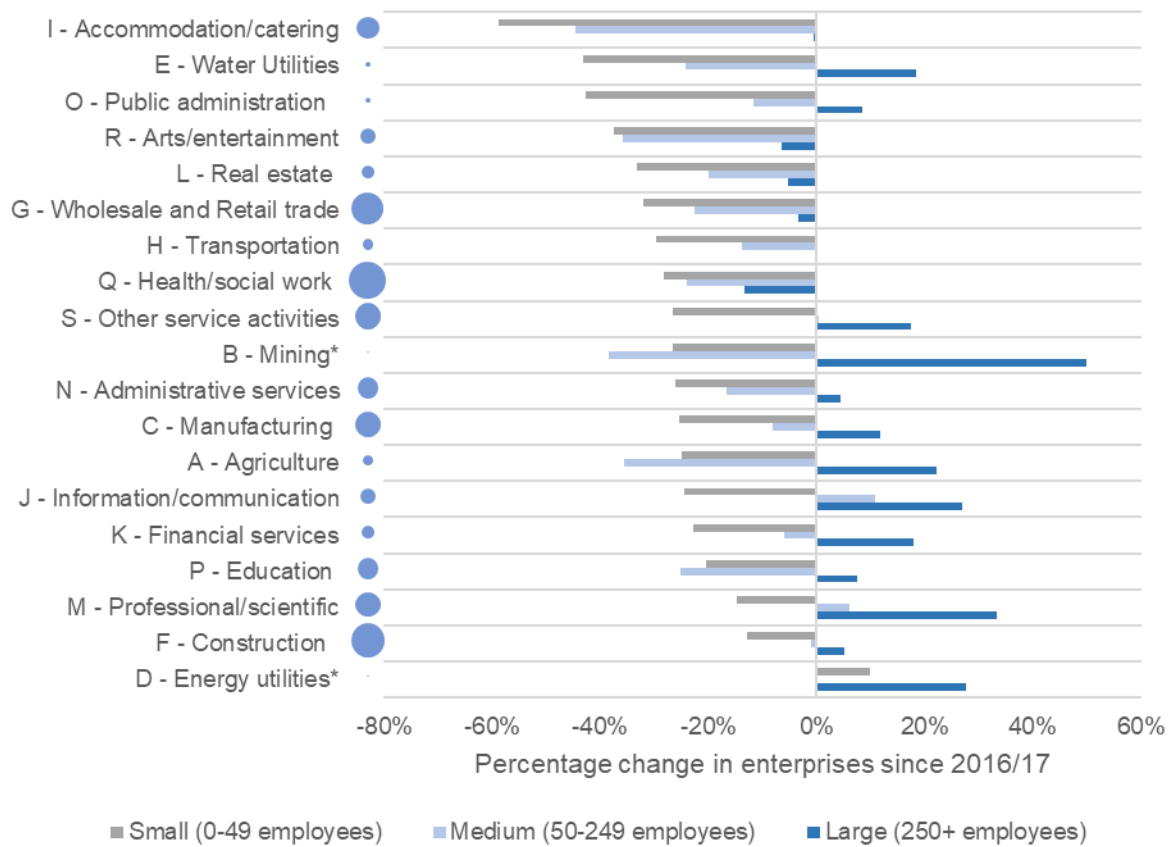
Overall, the average number of apprenticeship starts per employer increased from 4.4 to 4.6 starts between 2016/17 and 2018/19. This was largely driven by falls in the average number of apprenticeship starts per small and medium sized employer.

The 'Public Administration and Defence' sector had the highest proportion of its' apprenticeship starts in large employers (74% in 2018/19). The average number of apprenticeship starts per employer for this sector increased from 51.8 to 65.8, likely due to the decrease in the number of employers in this sector but increasing number of starts in over the same period. A similar pattern is found in the 'Information and Communication' and 'Accommodation and Food Service Activities' sectors.

Employers were primarily in the sectors; 'Human Health and Social Work Activities' (16% of employers with an apprenticeship start in 2018/19), 'Construction' (16%) and 'Wholesale and Retail Trade' (12%).

Most sectors have seen a decrease in the number of employers with apprenticeships since 2016/17 apart from 'Energy Utilities' which has seen a small increase (15%). In general, the number of small and medium sized employers with apprenticeship starts fell, whilst the number of large employers with apprenticeship starts increased since 2016/17. The 'Accommodation and Food Service Activities' sector saw the largest falls for small (down by 59%) and medium sized employers (down by 45%).

**Figure 9: Change in number of employers with apprenticeship starts by sector, 2016/17 to 2018/19**



Source: ILR-IDBR matched data

\* Number of employers with apprenticeship starts in these sectors were very low (below 100)

● Refers to volume of employers in 2016/17 relative to other sectors

## 4. Important policy changes

The UK-wide apprenticeship levy came into force on 6 April 2017 requiring all UK public and private sector employers with an annual pay bill of £3 million or more to invest in apprenticeship training. Since May 2017, funding arrangements for apprenticeships changed to give employers greater control over funding for apprenticeship training. See link below for more information.

<https://www.gov.uk/government/publications/apprenticeship-levy-how-it-will-work/apprenticeship-levy-how-it-will-work#pay-apprenticeship-levy>

A key aspect of these changes was the introduction of the apprenticeship service, an online service to allow employers to choose and pay for apprenticeship training more easily. Levy-payers can register on the apprenticeship service so that they can:

1. receive levy funds to spend on apprenticeships
2. manage their apprentices
3. pay their training provider

## 5. General Footnotes

Age is defined as the age of the learner at the start of their learning.

SIC codes 'T – Household Activities' and 'U - Extraterritorial activities' have been removed from some sector breakdowns due to a very low number of starts.

Note that only matched data is included in this publication, i.e. where a match has been found between the ILR and IDBR data. This is different to the [Further Education and Skills Statistical Release](#) which gives the definitive number of apprenticeship starts.

For further information on different levels of qualifications see <https://www.gov.uk/what-different-qualification-levels-mean>.

The figures presented here may not sum due to rounding. Percentages and percentage point changes are calculated using unrounded data.

## 6. Accompanying Tables

The following tables are available in Excel format on the department's [statistics website](#).

Table	Table description
1 (A-F)	Apprenticeship starts by levy-paying status, industry sector and employer size
2 (A-F)	Apprenticeship starts by levy-paying status industry sector, employer size and region
3 (A-D)	Apprenticeship starts by levy-paying status, industry sector, region and apprenticeship level
4 (A-D)	Apprenticeship starts by industry sector, level, age and gender
5 (A-B)	Apprenticeship starts by levy-paying status, industry sector and sector subject area
6 (A-D)	Apprenticeship starts by local authority, parliamentary constituency and employer size
7 (A-F)	Enterprises with apprenticeship starts by levy paying status, employer size and industry sector

## 7. Technical Information

The source data and matching process used in this publication followed a similar approach to the one used in the BIS Research Report No.177, pages 7-15. The report provides further information on the data sources, their coverage and quality and explains the methodology used in producing the data, including how it is validated and processed. For a more detailed explanation of the specific matched process for this publication please contact the department.

## 8. Get in Touch

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# Department for Education

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