

Statistical Bulletin





Workplace employment by industry in Wales, 2001 to 2018

31 Oct 2019 SB 48/2019

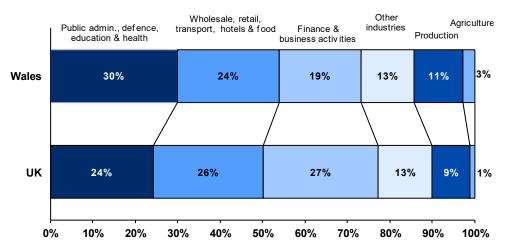
Main points

- In 2018, there were 1.45 million jobs in Wales. This is the highest level since the series began.
- Compared to 2017, total workplace employment in Wales increased by 28,000 (2.0 per cent). The corresponding UK figure increased by 0.7 per cent.
- This represents an acceleration in growth in Wales following a few years in which the UK grew faster.

Compared with the UK

- Employment in Wales was proportionately higher in the public administration, defence, education & health sector (which is **not** the same as the public sector); production; and agriculture, forestry & fishing.
- Employment in Wales was proportionately lower in the wholesale, retail, transport, hotels & food sector and in finance & business activities. Proportions in other sectors were similar.

Chart 1: Share of workplace employment by industry, Wales and the UK, 2018¹



^{1.} The construction and arts, entertainment and recreation sectors have been included in the other industries sector.

About this bulletin

This statistical bulletin uses a range of data sources to estimate workplace employment in Wales, or the total number of filled jobs. The data in this bulletin are measured on a workplace basis by industry sector for the UK, Wales and local areas within Wales up to the year ending December 2018.

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Information

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Introduction

This statistical bulletin shows the distribution and trends of workplace employment by industry in the UK, Wales and areas within Wales between 2001 and 2018.

The industrial sectors 'Public administration, defence, education & health' overlap, but should **not** be regarded as identical to the public sector. This is because these industry sectors include private sector activity in education and health (and social services) and don't include public sector activity in other sectors (e.g. finance). The official estimates of public sector employment can be found on the ONS website.

Methodology and sources

These workplace employment estimates are derived using data from the following three sources:

- Employee jobs data, together with self-employed jobs and government supported trainees data from the Annual Population Survey (APS);
- Business Register and Employment Survey (BRES);
- Survey of Agriculture and Horticulture.

Reference should be made to the key quality information section when interpreting these estimates which starts on page 13

Section 1: Workplace employment for Wales and the UK

In 2018, there were 1.45 million jobs in Wales and 33.1 million in the UK. These are the highest levels of workplace employment since comparable records began. When comparing the latest year with 2001, workplace employment has increased at a similar rate in Wales and the UK (15.9 per cent and 16.0 per cent respectively). In the latest year workplace employment increased more quickly in Wales than the UK (2.0 per cent compared with 0.7 per cent).

Chart 1.1: Workplace employment between 2001 and 2018, Wales and the UK¹ (2001=100)

- Between 2001 and 2008, Wales saw greater growth in workplace employment than the UK, up by 9.9 per cent over the seven years compared with 6.2 per cent for the UK.
- During the recession between 2008 and 2010 Wales saw a greater fall than the UK, down
 3.3 per cent compared with 1.2 per cent for the UK.
- Between 2010 and 2018 Wales saw less growth than the UK, growing by 9.1 per cent over the eight years compared with 10.6 per cent for the UK.

^{1.} See key quality information for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see key quality information for details of the methodology used in deriving these estimates and details of the coverage of these estimates.

Section 2: Workplace employment for Wales and the UK by industry

In 2018, the industries with the highest levels of workplace employment in Wales were human health and social work activities and wholesale and retail trade; repair of motor vehicles and motorcycles. The UK had the same top two industries for levels of workplace employment, but in reverse order. The industry with the lowest levels of workplace employment in both Wales and the UK was mining and quarrying.

Chart 2.1: Workplace employment by industry in Wales, 2018

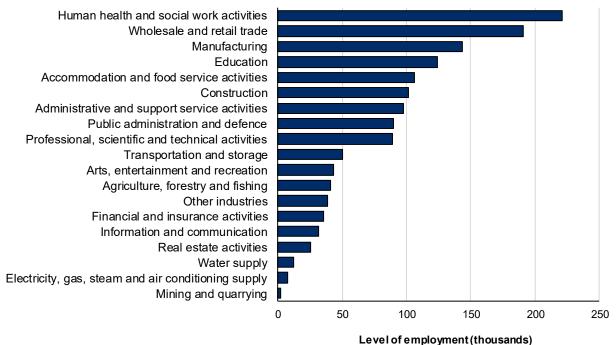
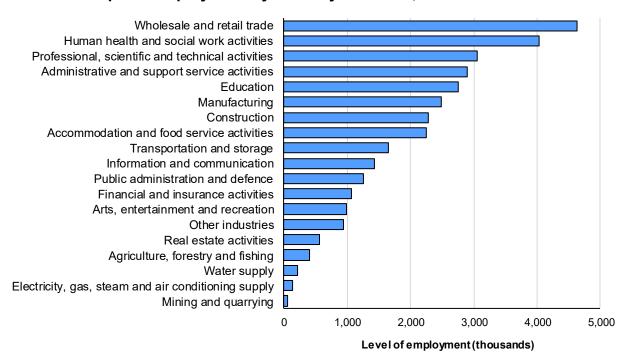


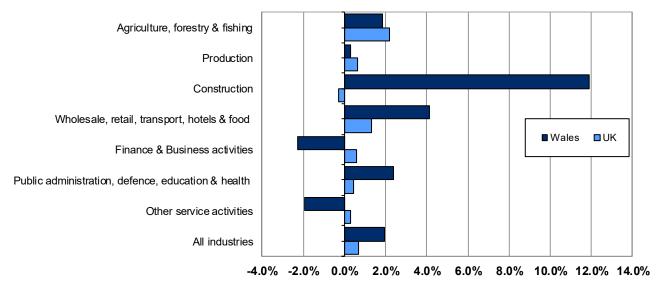
Chart 2.2: Workplace employment by industry in the UK, 2018



Note: Industry names have been shortened on charts - Water supply is Water supply; sewerage, waste management and remediation activities, Wholesale and retail trade is Wholesale and retail trade; repair of motor vehicles and motorcycles, Public administration and defence is Public administration and defence; compulsory social security and Professional, scientific and technical activities is Professional, scientific and technical activities; administrative and support service activities

These industries can be combined into the seven sectors shown below. In Wales, five of the seven sectors had an increase in workplace employment in the latest year and two decreased. In comparison, six of the seven sectors saw increases in workplace employment in the UK and one decreased.

Chart 2.3: Percentage change in workplace employment by industry between 2017 and 2018



Between 2017 and 2018, the industry with the largest percentage change in workplace employment in Wales was construction (up 11.9 per cent) followed by wholesale, retail, transport, hotels and food (up 4.1 per cent). In the UK, the industry with the largest percentage increase was agriculture, forestry & fishing (up 2.2 per cent).

The industry with the largest decrease in workplace employment in Wales was finance & business activities (down 2.3 per cent). The only industry with a decrease in the UK was construction, down 0.3 per cent.

Chart 2.4: Change in workplace employment in Wales and the UK between 2001 and 2018 (2001=100)

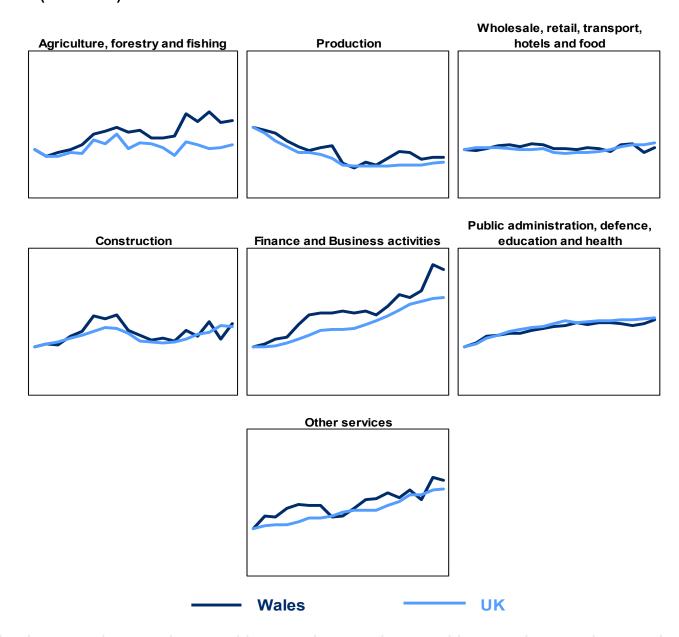


Chart 2.4 shows the relative change in workplace employment since 2001 in Wales and the UK. Short term changes appear more volatile for Wales than the UK, likely reflecting the smaller underlying samples.

There were increases in all sectors in Wales and the UK since 2001 apart from in production, where there was a fall to 2010 and a modest recovery since. Growth in Wales was stronger than for the UK over the long term in agriculture, forestry and fishing and finance and business activities. The UK as a whole had slightly higher growth than Wales in wholesale, retail, transport, hotels and food, though the overall change is small. In the other sectors long term trends were similar across Wales and the UK.

Section 3: Workplace employment by local authority

We now look at workplace employment at a local authority level in Wales. At this level sample sizes are small and, consequently, the estimates are subject to a greater degree of uncertainty. This can be seen in the volatility of some of the estimates, particularly over short periods of time. We therefore recommend that estimates at this level be regarded as indicative only.

In 2018, the local authority with the highest level of workplace employment was Cardiff (267,000). This was followed by Swansea (124,000) and Newport (80,000). The three local authorities with the lowest levels of workplace employment were Blaenau Gwent (20,000), Isle of Anglesey (27,000) and Merthyr Tydfil (28,000).

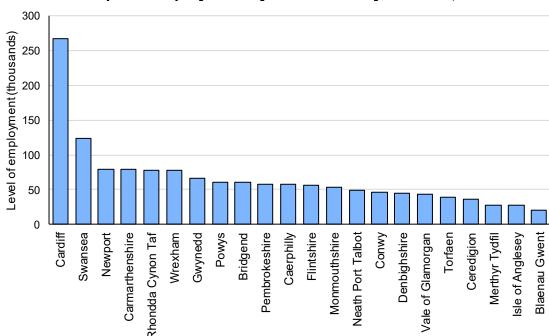
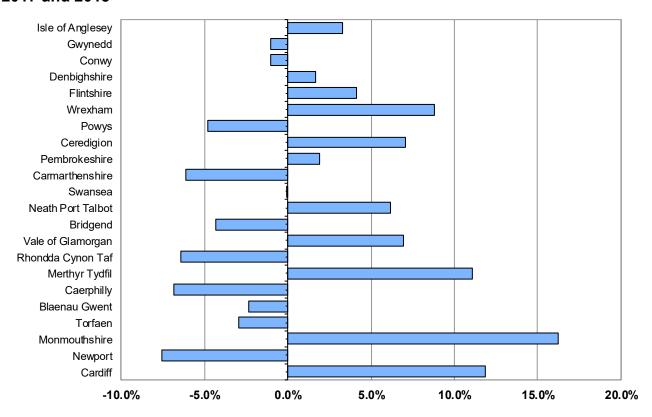


Chart 3.1: Workplace employment by local authority in Wales, 2018

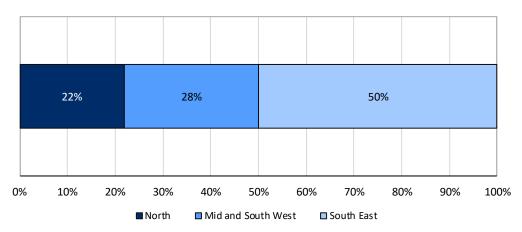
Chart 3.2 below shows the percentage change in workplace employment between 2017 and 2018 by local authority. Of the 22 local authorities in Wales, half of them experienced increases in workplace employment and half of them experienced decreases. The local authority with the largest percentage increase in workplace employment was Monmouthshire, up 16.2 per cent. This was followed by Cardiff (up 11.9 per cent) and Merthyr Tydfil (up 11.1 per cent). The local authority with the largest decrease was Newport (down 7.6 per cent) followed by Caerphilly (down 6.8 per cent). These annual changes should be considered alongside longer term trends as small sample sizes can cause volatility over short periods.

Chart 3.2: Percentage change in workplace employment by local authority between 2017 and 2018



In 2018, South East Wales had the largest proportion of workplace employment of the three Welsh economic regions. South East Wales accounted for 50.0 per cent of all workplace employment in Wales, Mid and South West Wales had a proportion of 28.1 per cent and North Wales accounted for 21.9 per cent. The split of workplace employment is very similar to 2001 with South East Wales increasing by 1.4 percentage points, Mid and South West Wales decreasing by 0.5 percentage points and North Wales decreasing by 0.9 percentage points.

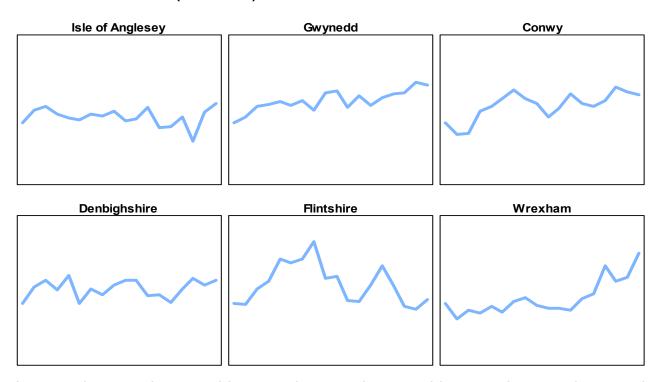
Chart 3.3: Proportion of workplace employment of the Welsh economic regions, 2018



Charts 3.4 - 3.6 show the change in workplace employment between 2001 and 2018 (indexed to 2001) by local authority. Between 2001 and 2018, all of the local authorities in Wales saw growth in workplace employment, apart from Blaenau Gwent and Ceredigion.

North Wales saw the smallest increase in workplace employment of the three Welsh economic regions between 2001 and 2018, up 11.4 per cent (33,000 jobs). There were differences in the trends observed across the six North Wales local authorities over the period, particularly around the 2008 – 2010 recession. The largest overall increase was in Wrexham, up 13,000 (19.9 per cent).

Chart 3.4: Change in workplace employment by local authority in North Wales between 2001 and 2018 (2001=100)



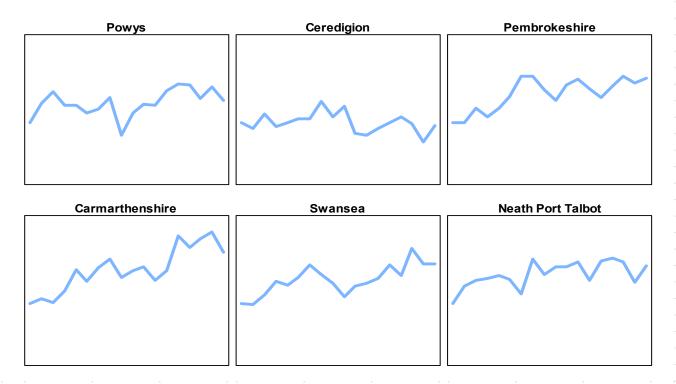
South East Wales had the largest proportional increase in workplace employment of the three Welsh economic regions since 2001, up 19.2 per cent (117,000 jobs). Cardiff had by far the largest increase of all local authorities in Wales, up 46.0 per cent (84,000 jobs). The only fall in South East Wales was in Blaenau Gwent (down 11.5 per cent or 3,000 jobs). There are some marked differences in the trends across the South East Wales local authorities. For example, in Blaenau Gwent there was a large fall in jobs between 2006 and 2009, with relatively little change since. Cardiff has seen fairly consistent growth, including a fairly sharp increase in the latest year.

Chart 3.5: Change in workplace employment by local authority in South East Wales between 2001 and 2018 (2001=100)



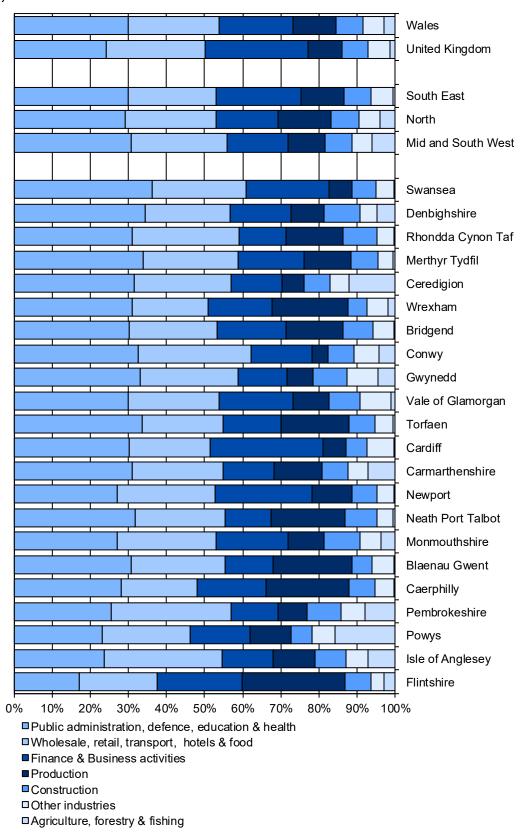
Mid and South West Wales saw the second largest increase of the three Welsh economic regions, up 14.0 per cent (50,000 jobs). The largest proportional increases since 2001 were Carmarthenshire (up 20.6 per cent) and Pembrokeshire (up 17.8 per cent). The only decrease was in Ceredigion, down 1.3 per cent since 2001.

Chart 3.6: Change in workplace employment by local authority in Mid and South West Wales between 2001 and 2018 (2001=100)



There are clear differences in the profile of jobs in the different local authority areas, with higher proportions of jobs in the agriculture, forestry and fishing sector in the more rural areas, and higher proportions of jobs in the production, construction and service sectors in the more urban areas. This is shown in Chart 3.7 which illustrates the shares of workplace employment in each of the 7 broad industry sectors for each of the Welsh local authority areas in 2018.

Chart 3.7: Percentage of workplace employment by industry and Welsh local authority, 2018 $^{\rm a,\,b}$



a. See key quality information for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see key quality information for details of the methodology used in deriving these estimates and for details of the coverage of these estimates.

b. Finance & Business activities includes Information & communication, financial & insurance activities, real estate activities, professional, scientific & technical activities and Administrative & support service activities.

Key quality information

Relevance

The main purpose of this bulletin is to provide workplace employment estimates, or estimates of total jobs, for Wales and its sub-regions, disaggregated by broad industry grouping.

The Business Register and Employment Survey (BRES – formerly the Annual Business Inquiry (ABI)) conducted by the ONS has long provided the means for disaggregation of employee jobs into industry groupings and detailed geographical breakdowns. However, BRES is more suited to cross-sectional analysis than it is for comparisons over time, and it covers employee jobs and working proprietors only.

By comparison, this bulletin provides estimates of total jobs over time by both industry and local authority in Wales.

In deriving estimates of workplace employment by industry for Wales and its sub-regions, this bulletin makes use of a number of data sources, predominantly the APS (previously the Local Labour Force Survey or LLFS), and also BRES and the Survey of Agriculture and Horticulture.

The industry breakdowns are based on the Standard Industrial Classification (SIC) 2007. The industry sectors used at the sub-Wales level are less detailed than the sectors reported on for Wales as a whole in order to ensure that the data presented are robust. There are 19 industry sectors shown for Wales and these are combined to make 7 larger and less detailed sectors for local authority reporting.

The UK estimates of workplace employment by industry within this bulletin have been derived in the same way as the estimates for Wales and its sub-regions to provide a consistent comparator for the Wales estimates of jobs by industry. This means that they differ from the estimates of workforce jobs by industry in the UK and Wales as published by the ONS, which are derived from a different methodology, based mainly on employer sources.

Therefore, the UK estimates should not be used for any purpose other than to provide a comparison with the estimates for Wales presented here. The ONS' estimates of UK workforce jobs can be found on the ONS' website. These should be used in preference to the UK estimates given here unless making comparisons with the estimates for Wales presented here.

The data given in this bulletin are rounded independently to the nearest thousand jobs and so the totals given may not add to the sum of their constituent parts.

Accuracy

As the APS is a survey of only private households, jobs held by residents of communal establishments are not included. The main impact of this is that HM forces jobs where the job-holders are usually resident on a base or ship are not covered, although forces jobs where the job-holders live in private households are included. It is not possible to identify whether HM forces personnel live on bases or ships from the data readily available from the Ministry of Defence.

Although second jobs are covered by the estimates in this bulletin, no account is taken of third and any subsequent jobs that individuals hold, as no such information is available from the APS.

The estimates of workplace employment jobs published here are generated from a number of sources, so it is difficult to calculate direct measures of the quality of the estimates. However, the underlying samples of data are regarded as sufficient for reporting down to the level of local authorities, since local authority samples are a minimum of 600 working aged people in most cases.

The methodology used to derive workplace employment by industry for Wales and its sub-regions (and also the comparable UK estimates) can be listed as a series of distinct steps, as set out below.

- Data for the numbers of first and second employee jobs by Welsh local authority of workplace, and for the UK as a whole, are extracted from the annual LLFS/APS datasets for 2001 onwards. These are added together to give total employee jobs by Welsh local authority of workplace and for the UK as a whole.
- For each area, the employee jobs totals derived above are broken down into industry
 sections by pro-rating the totals using industry level data for each area from BRES (ABI
 prior to 2009). [Note that although agriculture data at a Wales level are complete within the
 BRES dataset, agriculture data at a local authority level are not. Thus figures from the
 Survey of Agriculture and Horticulture for each year have been used to apportion the Wales
 agriculture data between Welsh local authorities to derive a complete BRES dataset by
 industry and local authority.]
- The Welsh economic region totals and Wales totals for employee jobs by industry within the data are derived by summing up the estimates for the relevant local authorities.
- Data for the numbers of first and second self-employed jobs by industry and Welsh local authority of workplace (and for the UK as a whole) are extracted from the annual LLFS/APS datasets for 2001 onwards. These are added together to give total self-employed jobs by industry and Welsh local authority of workplace (and for the UK as a whole).
- Again the Welsh economic region totals and Wales totals for self-employed jobs by industry within the data are derived by summing up the estimates for the relevant local authorities.
- Finally, the small number of government supported trainee figures are extracted from the
 annual LLFS/APS datasets for 2001 onwards for each area and apportioned between
 industries according to the estimates of employee jobs plus self-employment jobs by
 industry for each area. These estimates of government supported trainees are then added
 to the figures for employee jobs by industry and self-employment jobs by industry to give
 workplace employment by industry for each area represented in the data.

In summary, the methodology is based on results from the annual LLFS/APS to provide estimates of all jobs in the economy, broken down by local area in Wales, with mainly BRES data (ABI data prior to 2009) used to break down the employee element of these data by industry. This is consistent with Recommendation 1 in the National Statistics Quality Review of Employment and Jobs Statistics (NSQR Series Report No.44), published by ONS in January

2006, which sets out the appropriate sources to be used in measuring the structure of different aspects of the UK workforce.

Timeliness and punctuality

This is an annual statistical bulletin, published in October each year following publication of the BRES data in September.

Accessibility and clarity

Much of the data behind the tables and charts shown in this bulletin can be found on StatsWales.

Comparability and coherence

i) Headline estimates of employment

There are four main reasons why the workplace employment data published here and the headline measure of persons in employment differ (the headline measure for Wales can be found in the latest <u>ONS labour market release for Wales</u>. These reasons are set out below.

- The data in this bulletin are measured on a workplace basis, that is, the data shows a count of jobs in workplaces located in each area, whereas the headline measure of employment is a count of employed residents in each area. A key difference between a count of jobs on a workplace basis in a given area and a count of employed residents of that area is the effect of commuting between areas.
- As some employed residents have more than one job, the headline measure of workplace employment will be lower than the count of workforce jobs
- The LLFS/APS data used in this bulletin are taken from the annual LLFS/APS datasets. For Wales, these are made up of the relevant quarterly Labour Force Survey datasets (from which the headline measure is taken), plus additional annual samples of households which allow for much more detailed analysis within Wales than would be available from the quarterly datasets alone. The analysis in this bulletin would not be possible without reference to these annual datasets. There are some small differences between estimates derived from the annual datasets and the quarterly datasets probably arising from their different wave structures. Nevertheless, the annual datasets are internally consistent and consistent over time so that comparisons drawn between the different domains within the data are appropriate.
- The headline measure of persons in employment includes around 10,000 unpaid family workers in the APS across Wales. These are not recorded when counting workplace employment.

ii) Workforce jobs estimates

The workforce jobs series by the ONS includes a full breakdown by industry (on SIC 2007) The workforce jobs series continues to only provide industry data at a Wales level, so this bulletin remains the only official source of jobs by industry and local authority for Wales.

• The ONS produce quarterly estimates of workforce jobs by industry (which can be found in the labour market regional bulletin). These estimates are based on employer's surveys and have self employment added to them based on the Labour Force Survey (LFS) plus HM Forces and Government Support Trainees. These estimates are not available by industry below a Wales level and due to the methodology used show different levels than the estimates in this bulletin. More information on the methodology.

The key differences between the workforce jobs by industry series and the workplace employment series can be explained through differences in the underlying data sources and the methodology used. For example for self-employment, the workplace employment series uses the Annual Population Survey, whilst the workforce jobs series uses the Labour Force Survey. There is a difference between these two sources which could be accounted for by sampling variability.

The largest difference between the two data sources is in the employees' component. Whilst the estimates in this bulletin are constrained to the APS totals, the Workforce jobs series are not. The ONS publish in their labour market overview a <u>table comparing workforce jobs to the Labour Force Survey</u> investigating the differences between the two sources. This explains the differences in the employee components above.

The above link highlights the differences between the LFS and workforce jobs series at a UK level. The ONS identifies 30 reasons why this occurs, including sampling variability and timing of the datasets. Other key points to note are that:

- The workforce jobs series has some issues with double-counting due to over-reporting of self-employment.
- Workforce jobs data contains HM Forces data whilst the LFS only contains armed forces employee jobs living in private households.
- The LFS only captures those with first and second jobs, excluding those with third and subsequent employee jobs.
- The LFS contains information on unpaid family workers, and a greater number of government supported trainees than the workforce jobs data.

The ONS also publish total jobs in their jobs density estimates (which can be found in the <u>labour</u> <u>market regional bulletin</u>). These estimates differ from those shown in this bulletin as they are based on the same methodology as the quarterly estimates of workforce jobs and include HM Forces.

National Statistics status

The <u>United Kingdom Statistics Authority</u> has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Statistics.

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

These statistics last underwent a <u>full assessment against the Code of Practice</u> in 2010.

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- Removed large tables of data from the release and ensured that the data is available in online interactive tables
- Improved visuals and commentary to make it easier for the readers to draw out key messages

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators ("national indicators") that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016.

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the Well-being of Wales report.

Further information on the Well-being of Future Generations (Wales) Act 2015.

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

Further details

The document is available at: https://gov.wales/workplace-employment-industry

Next update

October 2020

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to economic.stats@gov.wales.

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