

Statistical Bulletin





Workplace employment by industry in Wales, 2001 to 2017

31 Oct 2018 SB 70/2018

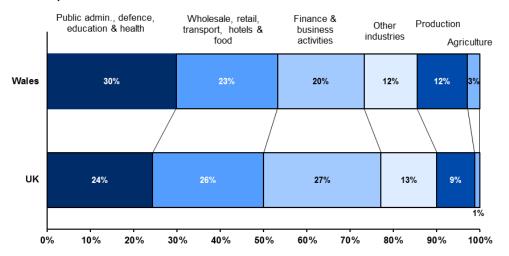
Key points

- In 2017 workplace employment in Wales was 1.41 million. This is the highest level since the series began.
- Between 2016 and 2017 total workplace employment in Wales increased by 11,000 (0.8 per cent). The corresponding UK figure increased by 1.6 per cent (Table 1) over the same period.

Chart 1 below shows that compared to 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); the production sector; and the agriculture, forestry & fishing sector.
- Employment in Wales was proportionately lower in the wholesale, retail, transport, hotels & food sector; the finance & business activities sector; and the other industries sector.

Chart 1: Share of workplace employment by industry, Wales and the UK, 2017¹



^{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, or total jobs, which are a count of jobs in the workplace. 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 2017.

In this bulletin

This bulletin contains new data on:

Introduction 2

Workplace employment for:

Wales and the UK 3

Welsh local

authorities 10

Key quality

information 15

Statistician: Ryan Pike ~ 0300 025 6415 ~ economic.stats@gov.wales

Enquiries from the press: 0300 025 8099 Public enquiries: 0300 025 5050 Twitter: @statisticswales

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 2017. It shows the impact of the recession across the UK during 2008 and 2009 and the subsequent recovery up to the end of 2017.

These were the only official estimates of total employment by industry in Wales, i.e. including employees and the self-employed, until July 2010 when the Office for National Statistics (ONS) released improved workforce jobs estimates. These improved estimates include workforce jobs by industry (rather than employee jobs by industry). A comparison between this Welsh Government workplace employment publication and ONS' workforce jobs series is given in the 'Key quality information: coherence with other sources' section on page 23.

This bulletin remains the only official source of workplace employment by industry and local authority in Wales.

Throughout the bulletin the symbol "-" indicates that the figure is between 0 and 500 (or 0 and - 500). This is used to differentiate between a low number and a true zero as figures are rounded to the nearest 1,000.

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 education and health (and social services) and don't include public sector activity in other industrial sectors (e.g. finance). The official estimates of public sector employment can be found on the ONS website.

Methodology and sources

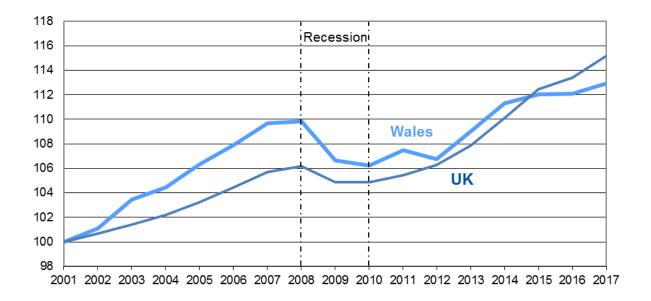
These workplace employment estimates are derived using data from the following three sources:

- 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 <u>key quality information</u> section when interpreting these estimates.

Section 1: Workplace employment for Wales and the UK

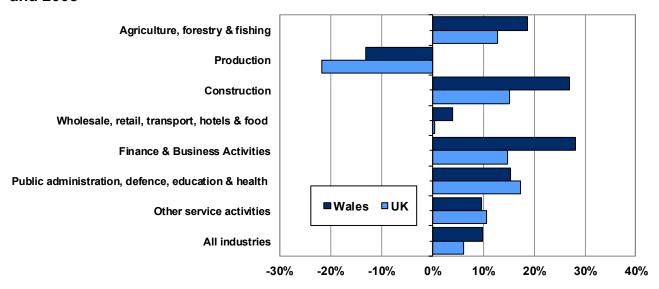
Chart 2: Workplace employment between 2001 and 2017, Wales and the UK¹ (2001=100)



- 1. See <u>key quality information</u> 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.
 - Between 2001 and 2008, Wales saw greater growth in workplace employment than the UK, growing by 10 per cent over the seven years compared with 6 per cent for the UK.
 - With the onset of recession between 2008 and 2010, Wales saw greater relative falls than the UK; falling 3 per cent over the two years compared with 1 per cent for the UK.
 - Between 2010 and 2017 Wales saw less relative growth than the UK, growing by 6 per cent over the seven years compared with 10 per cent for the UK. In particular, growth appears to have slowed in Wales over the most recent few years compared to the UK.

Each of the time periods outlined above was associated with a different pattern of changes in workplace employment by broad industry sector. These patterns over the three periods are shown in <u>Chart 3</u>, <u>Chart 4</u> and <u>Chart 5</u>.

Chart 3: Percentage change in workplace employment by industry between 2001 and 2008¹



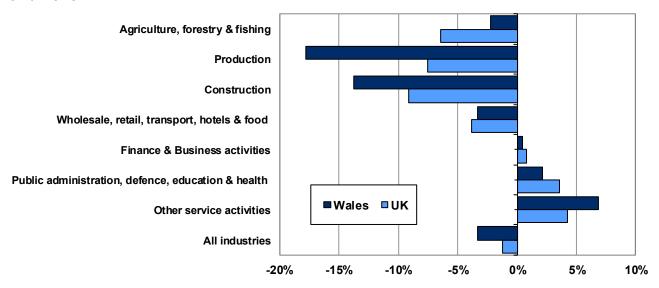
1. The arts, entertainment and recreation sectors have been included in the other industries sector.

Between 2001 and 2008:

The pre-recession period was characterised by increases in workplace employment for nearly all industry sectors across both Wales and the UK.

- In both Wales and the UK there were increases in employment in 6 of the 7 industry sectors
 with a fall in the production sector which fell by 13 per cent in Wales and by 22 per cent in
 the UK.
- The finance & business activities sector had the largest percentage increase in employment in Wales (up 28 per cent), followed by the construction sector (up 27 per cent). In the UK, the public administration, defence, education & health sector had the largest percentage increase (17 per cent).
- Of the 6 sectors showing an increase in employment, 68 per cent of the increase in Wales and 79 per cent of the increase in the UK was accounted for by the public administration, defence, education & health and the finance & business activities sectors.

Chart 4: Percentage change in workplace employment by industry between 2008 and 2010

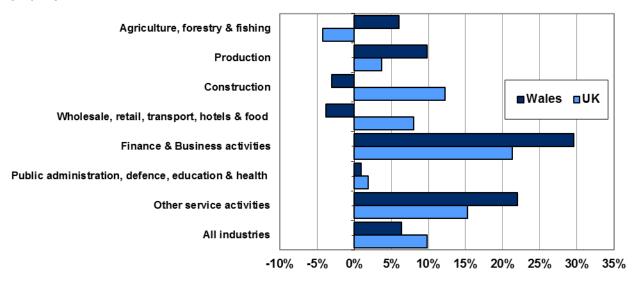


Between 2008 and 2010:

The recession period was characterised by decreases in workplace employment for four of the seven industry sectors across Wales and the UK.

- In both Wales and the UK there were falls in employment in 4 of the 7 industry sectors, and increases in 3 sectors.
- In Wales the production sector had the largest fall in employment (down 32,000 or 18 per cent) followed by the construction sector (down 15,000 or 14 per cent) with these 2 sectors accounting for 79 per cent of the total fall. These same 2 sectors accounted for 56 per cent of the fall in the UK.
- Of the 3 sectors in which employment increased, the other service activities sector had the largest percentage increase in both Wales and the UK (up 7 per cent and up 4 per cent respectively).

Chart 5: Percentage change in workplace employment by industry between 2010 and 2017



Between 2010 and 2017:

Since the recession period, workplace employment has increased in most of industry sectors in Wales and the UK.

- In Wales there have been increases in employment in 5 of the 7 industry sectors, with decreases in 2 sectors. For the UK as a whole the only fall was in the agriculture, forestry & fishing sector (down 4 per cent).
- The finance and business activities sector had the largest percentage increase in employment in Wales (up 30 per cent) followed by the other service activities sector (up 22 per cent).
- In the UK the largest percentage increases were in the finance & business activities sector (up 21 per cent) and the other service activities sector (up 15 per cent).

Table 1: Workplace employment by industry for Wales and the UK^{1,2}

Numbers in thousands Change in latest Percentage change levels since: in latest since: Area and industry 2001 2016 2017 2001 2016 2001 2016 Wales: Agriculture, forestry & fishing 33 43 41 8 -3 23% -6% Mining & quarrying -1 -41% -22% 3 2 2 -1 Manufacturing 193 141 143 -50 1 -26% 1% Electricity, gas, steam & air conditioning 5 2 44% -5% 8 8 Water supply; sewerage, waste 8 2 51% management & remediation activities 10 12 4 20% Construction 85 102 90 5 -12 6% -12% Wholesale & retail trade; repair of motor 210 198 184 -26 -14 -12% -7% vehicles & motorcycles Transportation & storage 49 42 46 -3 3 -6% 8% Accommodation & food service activities 84 119 102 18 -17 21% -14% Information & communication 25 34 59 34 24 136% 71% Financial & insurance activities 26 31 32 6 1 21% 3% Real estate activities 12 23 18 6 -5 55% -20% Professional, scientific & technical activities 43 72 82 39 10 90% 14% Administrative & support service activities 64 89 92 29 3 45% 4% Public administration & defence; compulsory social security 74 3 83 86 12 16% 3% Education 114 130 130 16 14% Human health & social work activities 167 204 207 40 3 24% 1% Arts, entertainment & recreation 41 43 2 45% 30 13 5% 29 9 Other industries 31 40 12 40% 28% All industries 1,253 1,404 1,415 162 11 13% 1% United Kingdom: Agriculture, forestry & fishing 388 391 393 5 2 1% 1% Mining & quarrying 72 62 59 -12 -2 -17% -3% Manufacturing 2,495 63 -29% 3% 3,519 2,432 -1,0243% Electricity, gas, steam & air conditioning 109 132 137 27 4 25% Water supply; sewerage, waste management & remediation activities 192 33% 6% 153 203 50 11 Construction 1,955 2,190 2,296 341 106 17% 5% Wholesale & retail trade; repair of motor vehicles & motorcycles 4,925 4,582 4,616 -309 35 -6.3% 1% -27.0 Transportation & storage 1,632 1,605 14% -2% 1,406 199 Accommodation & food service activities 1,756 2,190 27% 2% 2,224 468 34.0 Information & communication 1,173 1,387 1,452 279 65.5 24% 5% Financial & insurance activities 1,025 1,071 1,054 28 -16.7 3% -2% 561 Real estate activities 418 532 143 29.2 34% 5% Professional, scientific & technical activities 1,713 3,012 2,969 1,256 -42.9 73% -1% Administrative & support service activities 2,027 2,789 2,887 860 99 42% 4% Public administration & defence; compulsory social security 1,336 1,227 1,228 -107 -8% 2,217 2,760 2,755 539 -5 24% Human health & social work activities 2,932 3,963 4,045 82 38% 2% 1,112 Arts, entertainment & recreation 752 960 994 242 34 32% 4% Other industries 704 910 941 237 31 34% 3% All industries 28,580 32,413 32,915 4,335 503 15% 2%

Source: Annual Population Survey, Business Register and Employment Survey and Survey of Agriculture and Horticulture

^{1.} See <u>key quality information</u> for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see <u>key quality information</u> for details of the methodology used in deriving these estimates and details of the coverage of these estimates. The full series can be found on <u>StatsWales</u>.

^{2.} Data on levels is rounded to the nearest thousand; changes are based on unrounded data, then rounded to the nearest thousand, so may not sum.

Table 1 shows that:

Between 2001 and 2017:

- Workplace employment in Wales increased by 13 per cent, with 15 of the 19 industry sectors increasing and 4 industry sectors falling. In the UK, it increased by 15 per cent, with increases in 15 of the 19 industry sectors and falls in 4 industry sectors. Of the 4 industry sectors which fell in Wales, 3 also fell in the UK.
- In Wales the human health & social work activities sector had the largest absolute increase (up 40,000 or 24 per cent) followed by the professional, scientific & technical activities sector (up 39,000 or 90 per cent) and the information and communication sector (up 34,000 or 136 per cent). The largest absolute falls were in the manufacturing sector (down 50,000 or 26 per cent) and the wholesale & retail trade; repair of motor vehicles & motorcycles sector (down 26,000 or 12 per cent).
- In the UK the professional, scientific & technical activities sector had the largest absolute increase (up 1,256,000 or 73 per cent) followed by human health and social work activities sector (up 1,112,000 or 38 per cent). The largest absolute fall was in the manufacturing sector (down 1,024,000 or 29 per cent).
- The largest percentage difference between Wales and the UK was in the information and communication sector which increased by 136 per cent in Wales compared to a 24 per cent increase in the UK.

Between 2016 and 2017:

- Workplace employment in Wales increased by 11,000 (1 per cent), with increases in 11 of the 19 industry sectors, decreases in 7 sectors while 1 sectors was unchanged. In the UK workplace employment increased by 503,000 (2 per cent), with increases in 13 of the 19 industry sectors, decreases in 4 sectors, and 2 of the sectors were unchanged.
- The largest absolute increase in the number of jobs in Wales was in the information and communication sector, up 24,000 (71 per cent), followed by the professional, scientific and technical activities sector, up 10,000 (14 per cent). The accommodation and food service activities sector had the largest absolute fall, down 17,000 (14 per cent), followed by the wholesales and retail trade; repair of motor vehicles and motorcycles sector which fell by 14,000 (7 per cent).
- The construction sector had the largest absolute increase in the number of jobs in the UK, up 106,000 (5 per cent) followed by the administrative and support service activities sector, up 99,000 (4 per cent). The sector with the largest absolute fall across the UK was the professional, scientific and technical activities sector, down 43,000 (1 per cent).
- Please note that the year on year changes are highly volatile in some industry sectors due to low sample sizes.

In 2017:

- In Wales the human health & social work activities sector was the largest industry sector in terms of workplace employment in both 2016 and 2017. The wholesale & retail trade; repair of motor vehicles & motorcycles sector was the largest sector in Wales between 2001 and 2010, However, it fell behind the human health & social work activities sector (which includes the private sector) in all years between 2011 and 2017, except for 2015.
- The wholesale & retail trade; repair of motor vehicles & motorcycles sector was the second largest sector in Wales followed by the manufacturing sector, the education sector and the accommodation & food service activities sector. These top 5 industry sectors accounted for over half of the total jobs in Wales (54 per cent).
- In the UK the wholesale & retail trade; repair of motor vehicles & motorcycles sector remains the largest sector followed by the human health & social work activities sector, the professional, scientific & technical activities sector, the administrative & support service activities sector and the education sector. These top 5 industry sectors accounted for over half of the total jobs in the UK (52 per cent).

Section 2: Workplace employment for Welsh local authorities

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.

Table 2: Workplace employment by Welsh local authority^{1,2}

					N	umbers in the	ousands
				Change in latest levels over:		Percentage change in latest over:	
Local authority areas	2001	2016	2017	2001	2016	2001	2016
West Wales and the Valleys	736	816	819	83	3	11%	
Isle of Anglesey	25	23	26	1	3	4%	12%
Gwynedd	57	64	66	9	2	15%	3%
Conwy	42	48	47	5	-1	12%	-1%
Denbighshire	41	45	44	3	-1	7%	-3%
Ceredigion	36	37	35	-2	-2	-5%	-7%
Pembrokeshire	49	58	56	7	-2	15%	-3%
Carmarthenshire	66	83	84	18	1	28%	2%
Swansea	107	130	123	16	-7	15%	-5%
Neath Port Talbot	43	50	46	3	-4	7%	-7%
Bridgend	56	60	63	6	2	11%	4%
Rhondda Cynon Taf	76	76	82	6	6	8%	8%
Merthyr Tydfil	22	24	25	3	1	15%	3%
Caerphilly	56	61	61	6	-	10%	1%
Blaenau Gwent	23	19	21	-2	2	-10%	9%
Torfaen	35	37	39	4	2	11%	5%
East Wales	517	588	596	79	8	15%	1%
Flintshire	56	55	54	-2	-1	-3%	-2%
Wrexham	64	71	72	8	1	12%	1%
Powys	56	61	63	7	2	13%	4%
Vale of Glamorgan	41	42	39	-1	-3	-3%	-6%
Cardiff	183	236	237	54	1	30%	1%
Monmouthshire	43	47	45	2	-2	5%	-4%
Newport	74	76	85	11	9	15%	11%
North Wales	286	306	309	24	3	8%	1%
Mid Wales	92	98	98	5	-	6%	-
South West Wales	266	321	310	44	-11	17%	-3%
South East Wales	609	679	698	89	18	15%	3%
Wales	1,253	1,404	1,415	162	11	13%	1%
United Kingdom	28,580	32,413	32,915	4,335	503	15%	2%

Source: Annual Population Survey, Business Register and Employment Survey and Survey of Agriculture and Horticulture

^{1.} See <u>key quality information</u> for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see <u>key quality information</u> for the definition of the NUTS2 areas in Wales, for details of the methodology used in deriving these estimates and for details of the coverage of these estimates. The full series can be found on <u>StatsWales</u>.

^{2.} Data on levels is rounded to the nearest thousand; changes are based on unrounded data, then rounded to the nearest thousand, so may not sum.

Between 2001 and 2017:

- Within Wales workplace employment increased in 18 of the 22 Welsh local authorities.
 Cardiff had the largest absolute increase (up 54,000 or 30 per cent) followed by
 Carmarthenshire (up 18,000 or 28 per cent) and Swansea (up 16,000 or 15 per cent).
- Blaenau Gwent was the local authority with the largest absolute decrease (down 2,000 or 10 per cent). This was followed by Ceredigion (down 2,000 or 5 per cent) and Flintshire (down 2,000 or 3 per cent).
- All of the 4 economic regions in Wales had increases. South East Wales had the largest absolute increase (up 89,000 or 15 per cent) followed by South West Wales (up 44,000 or 17 per cent), North Wales (up 24,000 or 8 per cent) and Mid Wales (up 5,000 or 6 per cent.)

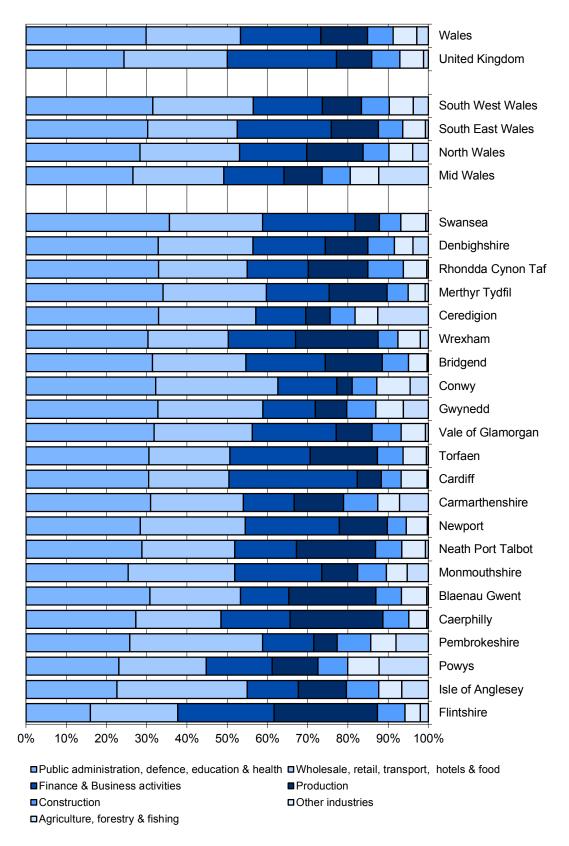
Between 2016 and 2017:

- Workplace employment increased in 12 of the 22 Welsh local authorities with Newport having the largest absolute increase in workplace employment (up 9,000 or 11 per cent) followed by Rhondda Cynon Taf (up 6,000 or 8 per cent).
- Of the remaining local authorities, 9 had falls in workplace employment and 1 was unchanged (Caerphilly). Swansea and Neath Port Talbot had the largest absolute falls, down 7,000 (5 per cent) and 4,000 (7 per cent) respectively.
- Two of the four Welsh economic regions had increases over the year. South East Wales having the largest absolute increase (up 18,000 or 3 per cent), followed by North Wales, up 3,000 (1 per cent). South West Wales had the only decrease (down 11,000 or 3 per cent) and Mid Wales remained unchanged.
- Please note that the year on year changes are highly volatile in some local authorities due to low sample sizes.

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 <u>Chart 6</u>, which illustrates the shares of workplace employment in each of the 7 broad industry sectors for each of the Welsh local authority areas in 2017. <u>Table 3</u>, which follows Chart 6, gives the numbers of jobs used to produce Chart 6.

Chart 6: Percentage of workplace employment by industry and Welsh local authority, 2017^{a, b}



a. See <u>key quality information</u> for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see <u>key quality information</u> 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.

Table 3: Workplace employment by industry and Welsh local authority 2017^a

Numbers in thousands Wholesale, **Public** retail, Financial Professional, scientific administration, Agriculture, transport, & Real and technical activities; defence, Other AII forestry & hotels & Information & insurance estate administrative & support education & service Local authority area fishing activities service activities health activities industries Production Construction food communication activities West Wales and the Vallevs Isle of Anglesey Gw ynedd Conw v Denbighshire Ceredigion Pembrokeshire Carmarthenshire Sw ansea Neath Port Talbot Bridgend Rhondda Cynon Taf Merthyr Tydfil Caerphilly Blaenau Gw ent Torfaen East Wales Flintshire Wrexham Pow ys Vale of Glamorgan Cardiff Monmouthshire New port North Wales Mid Wales South West Wales South East Wales Wales 1,415 1,054 **United Kingdom** 2.894 2.296 8,445 1.452 5.856 8.029 1,935 32,915

Source: Annual Population Survey, Business Register and Employment Survey and Survey of Agriculture and Horticulture

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 the definition of the NUTS2 areas in Wales, for details of the methodology used in deriving these estimates and for details of the coverage of these estimates.

The full series can be found on StatsWales.

In 2017:

- At 36 per cent Swansea had the highest share of workplace employment in the public administration, defence, education & health sector, followed by Merthyr Tydfil (34 per cent).
 Flintshire had the lowest share at 16 per cent. For Wales the share was 30 per cent; the UK share was 24 per cent.
- Pembrokeshire had the highest shares of workplace employment in the wholesale, retail, transport, hotels & food sector at 33 per cent. Whilst Torfaen, Wrexham, and Cardiff had the lowest share, all at 20 per cent. For Wales the share was 23 per cent; the UK share was 26 per cent.
- Cardiff had the highest share of workplace employment in the finance & business activities sector at 32 per cent, followed by Flintshire (24 per cent), and Newport (23 per cent). The local authorities with the lowest share were Ceredigion and Blaenau Gwent, both at 12 per cent. For Wales the share was 20 per cent; the UK share was 27 per cent.
- Flintshire had the highest share of workplace employment in the production sector at 26 per cent followed by Caerphilly (23 per cent), and Blaenau Gwent (22 per cent). Conwy had the lowest share at 4 per cent. For Wales the share was 12 per cent; the UK share was 9 per cent.
- Rhondda Cynon Taf and Carmarthenshire had the highest share of workplace employment in the construction sector (both at 9 per cent). Swansea, Merthyr Tydfil, Wrexham, Cardiff, and Newport had the lowest share, all at 5 per cent. For Wales the share was 6 per cent; the UK share was 7 per cent.
- Conwy and Powys had the highest share of workplace employment in the other service activities sector, both at 8 per cent. Caerphilly, Merthyr Tydfil, and Flintshire had the lowest share, all at 4 per cent. For both Wales and the UK the share was 6 per cent.
- Ceredigion had the highest share of workplace employment in the agriculture, forestry &
 fishing sector at 13 per cent, followed by Powys at 12 per cent. This is in contrast with
 Newport, Cardiff, Bridgend, Rhondda Cynon Taf, Caerphilly, Blaenau Gwent, and Torfaen
 which all had a share of 0 per cent. For Wales the share was 3 per cent; the UK share was
 1 per cent.

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. As well as this, the data in this bulletin also allows estimates of productivity to be produced as the industrial split is consistent with that of the regional accounts.

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.

Like both BRES and the previous bulletins, this bulletin also allows for analysis at a sub-Wales level, down to local authority level. Thus, this bulletin provides estimates of total jobs over time by both industry and local authority in Wales, and therefore represents an improvement over BRES in analysing the labour market from an industrial perspective.

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 breakdown applied to the data is based on the Standard Industrial Classification (SIC) 2007. As the sub-Wales detail is increased, greater aggregation of the industry detail is performed, to ensure that the data presented are robust. The industry sectors used for Wales data are relatively detailed and self-explanatory, whilst at the local authority level, there are ten broad industry sectors, which cover agriculture, forestry and fishing (section A), production (sections B, C, D and E), construction (section F), wholesale, retail, transport, hotels and food (sections G, H and I), information and communication (section J), financial and insurance activities (section K), real estate activities (section L), professional, scientific and technical activities; administrative and support service activities (sections M and N), public administration, defence, education and health (sections O, P and Q) and other service activities (sections R to U). As noted in SB 70/2011 "Workplace employment by industry in Wales, 2001 to 2009", the back series of data prior to 2008 has been converted to SIC 2007 from SIC 2003.

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 purely 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 in table 5 of the latest ONS UK labour market release. 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, any jobs held by residents of communal establishments will be excluded. The main impact of this is that HM forces jobs where the job-holders are usually resident on a base or ship will be excluded, although forces jobs where the job-holders live in private households will be 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 an individual may 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, given that the results are heavily based on the annual APS datasets, which themselves are derived from a sample of approximately 18,000 people of working age across Wales, with a minimum of around 600 people aged 16-64 in most local authorities in Wales, then it is reasonable to conclude that the estimates presented here are fit for purpose in analysing the industrial structure of the workplace employment across Wales and its sub-regions.

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 NUTS2 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 NUTS2 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 (Table A below).
- 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, Tables 4 and 5). 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 <u>methodology</u> used show different levels than the estimates in this bulletin.

Table A – Comparison of workplace employment (WPE) to workforce jobs (WFJ), 2017

Thousands and Per cent

	Workplace Employment (000s)	Workforce Jobs (000s)	Difference WFJ-WPE (000s)	% Total difference (WFJ-WPE) as % of WFJ	
	Welsh Government	ONS			
Wales					
Employees	1,186.2	1,309.6	123.5	9.4	
Self-employed	223.8	209.1	-14.8	-7.1	
Government-					
supported trainees	4.8	2.9	-2.0	-69.0	
HM Forces		2.5	**		
Total	1,414.8	1,524.0	109.2	7.2	
UK					
Employees	27,501.4	30,354.5	2,853.1	9.4	
Self-employed	5,345.9	4,515.3	-830.5	-18.4	
Government-					
supported trainees	68.0	46.4	-21.6	-46.6	
HM Forces	••	155.9	••		
Total	32,915.2	35,072.1	2,156.9	6.1	

^{..} Not Applicable

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>, section 9). 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.

Table B – Comparison of workforce jobs (WFJ) workplace employment (WPE), by industry, 2017

				Thousands
	Total	Employee Jobs	Self Employed	Government Supported Trainees
A:Agriculture, forestry and fishing	20.70	11.00	9.77	-0.13
B:Mining and quarrying	0.80	1.00	-0.26	-0.01
C:Manufacturing D:Electricity, gas, steam and air conditioning	1.40	6.80	-5.31	-0.14
supply	-0.30	-0.40	0.12	-0.02
E:Water supply; sewerage, waste management				
and remediation activities	-1.50	-0.80	-0.68	0.00
F:Construction	18.80	18.20	0.57	-0.04
G:Wholesale and retail trade; repair of motor				
vehicles and motorcycles	17.10	17.70	-0.24	-0.36
H:Transportation and storage	-0.90	-1.30	0.57	-0.16
I:Accommodation and food service activities	27.10	31.40	-3.99	-0.29
J:Information and communication	-17.90	-13.20	-4.61	-0.12
K:Financial and insurance activities	-1.70	-1.20	-0.39	-0.08
L:Real estate activities	5.80	3.00	2.90	-0.06
M:Professional, scientific and technical				
activities	-8.50	-2.20	-6.21	-0.09
N:Administrative and support service activities	-3.30	-3.70	0.48	-0.16
O:Public administration and defence;				
compulsory social security	1.40	-0.70	-0.22	-0.13
P:Education	7.50	9.10	-1.48	-0.11
Q:Human health and social work activities	49.50	53.40	-3.81	-0.10
R:Arts, entertainment and recreation	-4.40	-3.30	-1.05	-0.04
STU: Other industries	-2.40	-1.50	-0.93	0.06
Total	109.20	123.50	-14.75	-1.99

A larger figure shows that workforce jobs estimates by the ONS are higher than workplace employment estimates by the WG. This table excludes HM Forces (which would fall under section O).

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.

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:

http://gov.wales/statistics-and-research/work-place-employment-industry/?lang=en

Next update

October 2019

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.

Open Government Licence

All content is available under the Open Government Licence v3.0, except where otherwise stated.

