

# Statistical Bulletin Bwletin Ystadegol

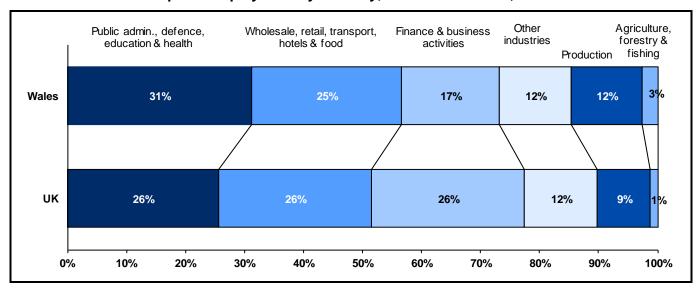


SB 80/2014 29 October 2014

# Workplace employment by industry in Wales, 2001 to 2013

This statistical bulletin uses a range of data sources to estimate workplace employment, or total jobs, by industry sector for Wales, the UK and areas within Wales.

Chart 1: Share of workplace employment by industry, Wales and the UK, 2013



### **Summary**

Using workplace employment as a measure to compare the industrial structure of Wales with that of the UK shows:

- There was a higher proportion of employment in Wales in public administration, defence, education & health (which is *not* the same as the public sector);
- A higher proportion in the production industries and agriculture; and
- A lower proportion in finance & business activities (chart 1).

Comparing workplace employment in Wales in 2013 with earlier years:

- By 2013 workplace employment had increased to 1.351 million, this is the highest level since 2007 and 2008.
- Between 2012 and 2013 total workplace employment increased by 32 thousand, or 2 per cent, the corresponding UK figure also increased by 2 per cent (table 1).

There was substantial variation between industries at the local authority level in Wales, for example:

- For the production sector, employment varied from 4 per cent in Conwy to 27 per cent in Flintshire;
- For public administration, defence, education & health sector, employment varied from 20 per cent of the total in Flintshire to 38 per cent in Merthyr Tydfil (chart 8 and table 4).

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#### INTRODUCTION

This statistical bulletin shows the trends in, and distribution of, workplace employment by industry in Wales, the UK and areas within Wales between 2001 and 2013. It shows the impact of the recession across the UK during 2008 and 2009 and the subsequent recovery up to the end of 2013.

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 ONS released improved workforce jobs estimates. These improved estimates include workforce jobs by industry (rather than employee jobs by industry). We have undertaken comparison between the ONS workforce jobs series and this workplace employment series, more information is given in the 'Key quality information: coherence with other sources' section on page 19.

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 less than half the final digit shown, which is less than 500.

The industrial sectors 'Public administration, education & health' overlap, but should **not** be regarded as identical with, 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 at: <a href="http://www.ons.gov.uk/ons/rel/pse/public-sector-employment/index.html">http://www.ons.gov.uk/ons/rel/pse/public-sector-employment/index.html</a>

# **METHODOLOGY AND SOURCES**

Reference should be made to the following background notes and key quality information which start on page 17 when interpreting these estimates:

Notes 8 and 9 for details of the differences between the UK estimates presented here and ONS

workforce jobs estimates

Note 11 for details of the methodology used in deriving these estimates

Note 13 describes the differences in these estimates and other estimates of employment and

workforce jobs

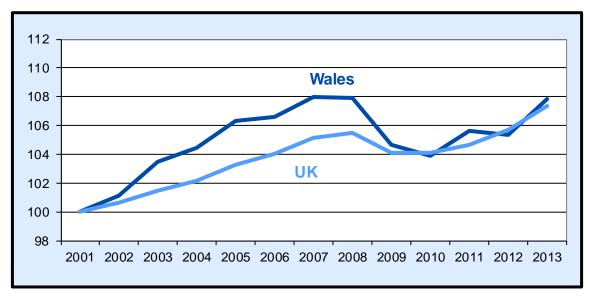
Notes 14 and 15 for details of the coverage of these estimates

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);
- Welsh Agricultural Census.

### SECTION 1: WORKPLACE EMPLOYMENT FOR WALES AND THE UK

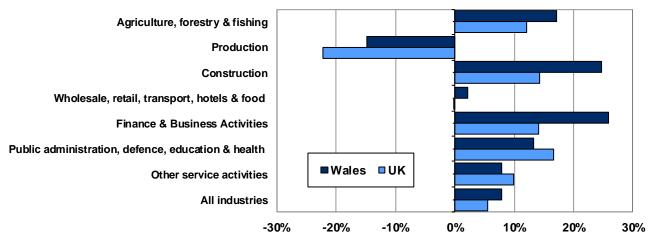
Chart 2: Time series analysis of workplace employment between 2001 and 2013, Wales and the UK¹ (2001=100)



- See background notes 8 and 9 for details of the differences between the UK estimates presented here and ONS workforce
  jobs estimates. Also see background note 11 for details of the methodology used in deriving these estimates and notes 14
  and 15 for details of the coverage of these estimates.
- Between 2001 and 2008, Wales saw greater growth in workplace employment compared to the UK, growing by 8 per cent over the 7 years compared with 6 per cent for the UK.
- With the onset of recession between 2008 and 2010 Wales saw greater falls relative to the UK; falling 4 per cent over the two years compared with 1 per cent for the UK as a whole.
- Between 2010 and 2013 workplace employment in Wales and the UK have grown in broadly the same way, with 4 per cent growth for Wales over the three years compared with 3 per cent for the UK.

Chart 2 above shows that the changes in workplace employment fell into three distinct periods: an overall growth in jobs between 2001 and 2008; recession and a fall in jobs between 2008 and 2010; then a period of recovery from 2010 onwards. Each period was associated with a different pattern of changes in workplace employment by broad industry sector. These patterns over the three periods are shown in charts 3 to 5.

Chart 3: Percentage change in workplace employment by industry between 2001 and 2008

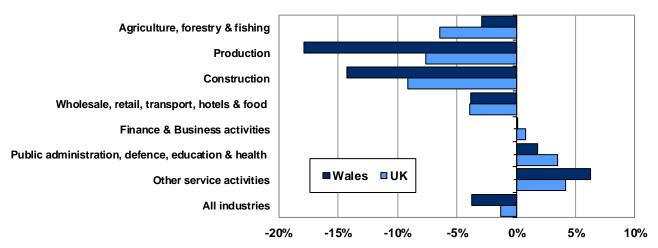


#### Between 2001 and 2008:

• In both Wales and the UK there were increases in employment in 6 of the 7 industry sectors with a fall in the remaining sector, production (down 15 per cent and 22 per cent respectively).

- The finance & business activities sector had the largest percentage increase in employment in Wales (up 26 per cent), followed by the construction sector (up 25 per cent). These 2 sectors also had strong growth across the UK, both up 14 per cent, although the largest percentage increase in the UK was in the public administration, defence, education & health sector (which is *not* the same as the public sector);, up 17 per cent.
- Of the 6 sectors showing an increase in employment, 75 per cent of the increase in Wales and 81 per cent of the increase in the UK was accounted for by the public administration, defence, education & health and the finance & business activities sectors.

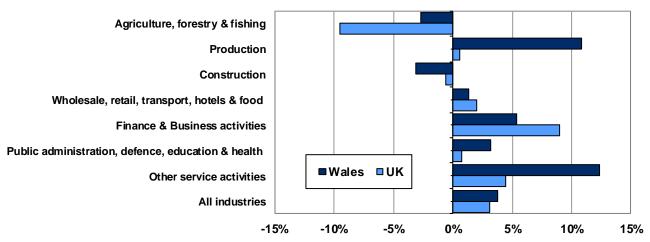
Chart 4: Percentage change in workplace employment by industry between 2008 and 2010



#### Between 2008 and 2010:

- There were falls in employment in 4 of the 7 sectors and increases in 3 sectors in both Wales and the UK.
- 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 76 per cent of the total fall. These 2 sectors accounted for 56 per cent of the fall in the UK.
- Of the 3 sectors showing an increase in employment, the other service activities sector had the largest percentage increase in both Wales and the UK (up 6 per cent and 4 per cent respectively).

Chart 5: Percentage change in workplace employment by industry between 2010 and 2013



#### Between 2010 and 2013:

- In both Wales and the UK there were increases in employment in 5 of the 7 industry sectors and falls in 2 sectors.
- The other service activities sector had the largest percentage increase in employment in Wales (up 12 per cent) followed by the production sector (up 11 per cent). In the UK the largest percentage increases were in the finance & business activities and the other service activities sectors, up 9 per cent and 4 per cent respectively.

Table 1: Workplace employment by industry for Wales and the UK<sup>1</sup>

Numbers in thousands

				Change in latest levels over:		Percentage change in latest over:	
Area and industry	2001	2012	2013	2001	2012	2001	2012
Wales:							
Agriculture, forestry & fishing	33	36	36	3	1	11%	2%
Mining & quarrying	3	2	2	-1	-	-35%	-7%
Manufacturing	193	130	141	-52	11	-27%	8%
Electricity, gas, steam & air conditioning supply	5	7	7	2	_	37%	3%
Water supply; sewerage, waste management &							
remediation activities	8	13	12	4	-	47%	-4%
Construction	85	90	88	3	-1	4%	-2%
Wholesale & retail trade; repair of motor vehicles &							
motorcycles	210	200	199	-11	-1	-5%	-1%
Transportation & storage	49	47	47	-2	-1	-4%	-1%
Accommodation & food service activities	84	95	96	12	1	14%	1%
Information & communication	25	27	27	2	-	8%	-
Financial & insurance activities	26	31	32	6	1	23%	4%
Real estate activities	12	19	18	6	-1	52%	-4%
Professional, scientific & technical activities	43	58	72	29	13	67%	23%
Administrative & support service activities	64	77	76	13	-1	20%	-1%
Public administration & defence; compulsory social							
security	74	87	89	15	2	20%	2%
Education	114	128	131	17	3	15%	3%
Human health & social work activities	167	201	203	36	2	22%	1%
Arts, entertainment & recreation	30	40	41	11	1	37%	2%
Other industries	29	32	34	6	2	20%	6%
All industries	1,253	1,319	1,351	98	32	8%	2%
United Kingdom:							
Agriculture, forestry & fishing	388	392	368	-20	-24	-5%	-6%
Mining & quarrying	72	72	64	-7	-7	-10%	-10%
Manufacturing	3,519	2,406	2,420	-1,099	14	-31%	1%
Electricity, gas, steam & air conditioning supply	109	120	117	7	-3	7%	-3%
Water supply; sewerage, waste management &							
remediation activities	153	185	185	31	-1	21%	-
Construction	1,955	2,007	2,019	64	12	3%	1%
Wholesale & retail trade; repair of motor vehicles &							
motorcycles	4,925	4,518	4,532	-394	13	-8%	-
Transportation & storage	1,406	1,429	1,409	3	-21	-	-1%
Accommodation & food service activities	1,756	1,893	1,976	220	83	13%	4%
Information & communication	1,173	1,218	1,269	96	52	8%	4%
Financial & insurance activities	1,025	1,076	1,051	26	-25	3%	-2%
Real estate activities	418	488	511	94	24	22%	5%
Professional, scientific & technical activities	1,713	2,462	2,621	908	160	53%	6%
Administrative & support service activities	2,027	2,482	2,509	483	27	24%	1%
Public administration & defence; compulsory social	•	•	•				
security	1,336	1,325	1,297	-39	-28	-3%	-2%
Education	2,217	2,689	2,723	507	34	23%	1%
Human health & social work activities	2,932	3,775	3,863	931	88	32%	2%
Arts, entertainment & recreation	752	868	890	138	22	18%	2%
Other industries	704	803	851	148	48	21%	6%
All industries	28,580	30,208	30,677	2,097	469	7%	2%

Source: Annual Population Survey, Business Register and Employment Survey and Welsh Agricultural Census

Work/Employment/Jobs/Whole-Workforce

See background notes 8 and 9 for details of the differences between the UK estimates presented here and ONS workforce
jobs estimates. Also see note 11 for details of the methodology used in deriving these estimates and notes 14 and 15 for
details of the coverage of these estimates. The full series can be found at:
<a href="https://statswales.wales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-">https://statswales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-</a>

Table 1 sets of the detail of changes from 2001 to 2013 and between 2012 and 2013 respectively:

# Between 2001 and 2013:

- In absolute terms, 15 of the 19 industry sectors in Wales had increases and 4 sectors had falls. In the UK, 14 of the 19 industry sectors had increases and 5 sectors had falls (3 of which also had falls in Wales).
- In 2013, the human health & social work activities sector (which includes the private sector) was the largest sector in Wales in terms of workplace employment. The human health & social work activities sector had overtaken the manufacturing sector in 2004 to become the second biggest sector in Wales between 2004 and 2010, in 2011 it overtook the wholesale & retail trade; repair of motor vehicles & motorcycles sector to become the largest sector in Wales. The wholesale & retail trade; repair of motor vehicles & motorcycles sector was the second largest sector in Wales and the manufacturing sector was the third largest sector.
- The wholesale & retail trade; repair of motor vehicles & motorcycles sector remains the largest sector in the UK in 2013. The human health & social work activities sector followed the same pattern in the UK as in Wales, overtaking the manufacturing sector in 2004 to become the second largest sector. Education was the third largest sector after overtaking the manufacturing sector in 2009.
- In Wales, over 12 years, the professional, scientific and technical activities sector had the largest percentage increase (up 67 per cent) followed by the real estates sector (up 52 per cent) with the water supply; sewerage, waste management & remediation activities sector third (up 47 per cent). The largest percentage falls were in the mining & quarrying and manufacturing sectors, down 35 per cent and 27 per cent respectively.
- In the UK the largest percentage increases were in the professional, scientific & technical activities and the human health & social work activities sectors, up 53 per cent and 32 per cent respectively. The largest percentage fall was in the manufacturing sector (down 31 per cent).
- The largest percentage difference between Wales and the UK was in the electricity, gas, steam and air conditioning supply sector which increased by 37 per cent in Wales compared to a 7 per cent increase in the UK. The real estate sector had the second largest difference, increasing by 52 per cent in Wales compared to a 22 per cent increase in the UK.

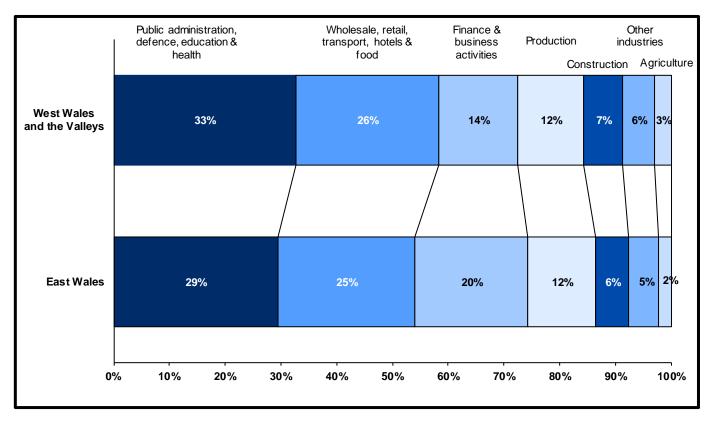
### Between 2012 and 2013:

- Workplace employment increased by 32,000 in Wales, or 2 per cent, with 11 of the 19 industry sectors experiencing increases, 7 sectors had falls and 1 was unchanged. In the UK workplace employment increased by 469,000, also by 2 per cent, with increases in 12 of the 19 industry sectors and falls in 7 sectors.
- Over the year, the largest absolute and percentage increase in the number of jobs in Wales was in the professional, scientific & technical activities sector (up 13,000 or 23 per cent) and manufacturing (up 11 thousand or 8 per cent); there were only relatively small increases or decreases across the other sectors in Wales.
- For the UK, the professional, scientific & technical activities sector also had the largest increase (up 160,000 or 6 per cent). Other sectors with increases were human health & social work activities (up 88,000 or 2 per cent), accommodation &food service activities (up 83,000 or 4 per cent) and information & communication (up 52,000 or 4 per cent).
- There were falls across the UK for the public administration & defence; compulsory social services sector (which is *not* the same as the public sector), down 28,000 thousand or 2 per cent; the financial and insurance activities sector (down 25,000 or 2 per cent); and the agriculture, forestry and fishing sector (down 24,000 or 5 per cent).

# SECTION 2: WORKPLACE EMPLOYMENT FOR WELSH NUTS2 AREAS

Chart 6 below shows the shares of workplace employment by industry groupings for the two NUTS2 areas of Wales, please *see background note 6 on page 16*.

Chart 6: Share of workplace employment by industry for Welsh NUTS2 areas, 2013<sup>1</sup>



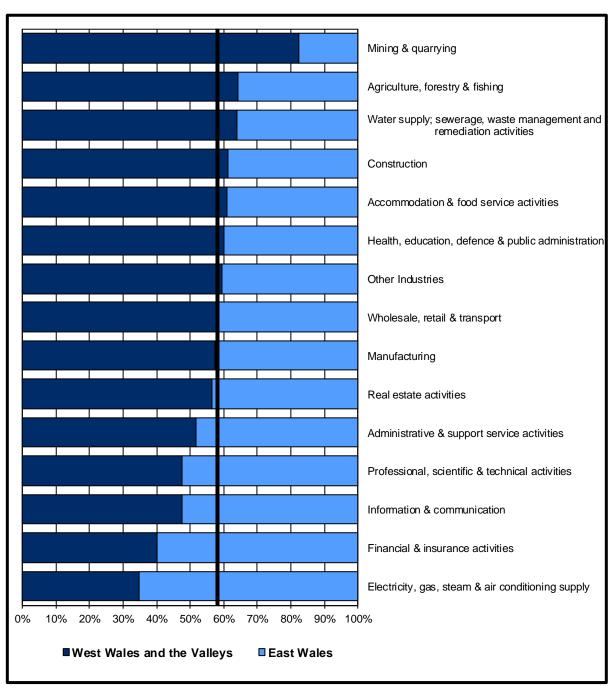
- 1. See background note 6 for the definition of the NUTS2 areas in Wales. Also see note 11 for details of the methodology used in deriving these estimates and notes 14 and 15 for details of the coverage of these estimates.
- In 2013, West Wales and the Valleys had a larger share of jobs in 5 of the 7 industry groupings, namely the public administration, defence, education, & health sector (which is *not* the same as the public sector); the wholesale, retail, transport, hotels & food sector; the construction sector; the agriculture sector; and the other industries sector.
- East Wales had a larger share of jobs in 1 industry groupings, namely the finance & business activities sector. In the remaining industry grouping, the production sector, the share was equal.

An alternative and more detailed analysis of the differences between workplace employment in the different industry sectors and NUTS2 areas of Wales is given in chart 7 below.

This chart looks at the share of jobs in each sector in 2013, located in each of the NUTS2 areas of Wales. The line on the chart represents the share of total Welsh workplace employment in West Wales and the Valleys (58 per cent) and so reflects the all-industries average. Shares in excess of this line indicate industries that are more represented in West Wales and the Valleys than East Wales, and vice versa.

The chart shows significant variation by industry, ranging from 82 per cent of jobs in the mining & quarrying sector being located in West Wales and the Valleys, compared with just 35 per cent of jobs in the electricity, gas, steam and air conditioning supply sector.

Chart 7: Share of workplace employment by Welsh NUTS2 areas and industry sector, 2013<sup>1</sup>



See background note 6 for the definition of the NUTS2 areas in Wales. Also see note 11 for details of the methodology
used in deriving these estimates and notes 14 and 15 for details of the coverage of these estimates.

Table 2: Workplace employment by industry and Welsh NUTS2 areas<sup>1</sup>

Numbers in thousands

				Change levels	in latest over:	Percentage change in latest over:	
Area and industry	2001	2012	2013	2001	2012	2001	2012
West Wales and the Valleys:							
Agriculture, forestry & fishing	22	23	23	2	1	8%	3%
Mining & quarrying	2	2	2	-	-	-16%	-6%
Manufacturing	114	76	81	-34	5	-29%	7%
Electricity, gas, steam & air conditioning supply	2	3	3	1	-	35%	-8%
Water supply; sewerage, waste management &							
remediation activities	5	7	8	3	-	61%	5%
Construction	53	58	54	1	-3	3%	-6%
Wholesale & retail trade; repair of motor vehicles &							
motorcycles	128	117	116	-12	-1	-9%	-1%
Transportation & storage	27	27	26	-1	-1	-3%	-4%
Accommodation & food service activities	53	59	58	5	-1	9%	-1%
Information & communication	11	13	13	2	_	17%	-3%
Financial & insurance activities	10	12	13	3	1	30%	5%
Real estate activities	6	11	10	4	-1	63%	-7%
Professional, scientific & technical activities	22	30	34	12	5	52%	16%
Administrative & support service activities	33	39	40	7		21%	1%
Public administration & defence; compulsory social	33	33	40	,		2170	170
security	45	52	53	9	1	19%	2%
Education	71	80	80	10	1	14%	1%
Human health & social work activities	99	123	121	21	-2	21%	-2%
Arts, entertainment & recreation	17	23	24	7	1	39%	4%
Other industries	16	18	20	4	2	25%	10%
All industries	736	<i>7</i> 73	779	43	6	6%	1%
East Wales:							
Agriculture, forestry & fishing	11	13	13	2	-	16%	2%
Mining & quarrying	1	-	-	-1	-	-68%	-7%
Manufacturing	79	55	60	-18	5	-23%	10%
Electricity, gas, steam & air conditioning supply	3	4	5	1	-	39%	9%
Water supply; sewerage, waste management &							
remediation activities	3	5	4	1	-1	27%	-16%
Construction	32	32	34	2	2	5%	6%
Wholesale & retail trade; repair of motor vehicles &							
motorcycles	82	83	83	1	-	1%	-
Transportation & storage	22	20	21	-1	1	-6%	3%
Accommodation & food service activities	31	36	37	7	1	22%	4%
Information & communication	14	14	14	-	-	1%	2%
Financial & insurance activities	16	19	19	3	1	19%	4%
Real estate activities	6	8	8	2	-	39%	-
Professional, scientific & technical activities	21	29	38	17	9	83%	31%
Administrative & support service activities	31	38	37	6	-1	19%	-3%
Public administration & defence; compulsory social	<b>.</b>		٠.	ŭ	•		270
security	29	35	35	6	1	20%	2%
Education	44	48	51	7	3	16%	6%
Human health & social work activities	67	78	82	, 15	4	22%	6%
Arts, entertainment & recreation	12	17	16	4	-	34%	-2%
Other industries	12	14	14	2	_	14%	2%
All industries	517	546	<b>572</b>	55	26	11%	5%

Source: Annual Population Survey, Business Register and Employment Survey and Welsh Agricultural Census

See background note 6 for the definition of the NUTS2 areas, note 11 for details of the methodology used and notes 14 and 15 for details of the coverage of these estimates. The full series can be found at: <a href="https://statswales.wales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-">https://statswales.wales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-</a> Work/Employment/Jobs/Whole-Workforce

#### Between 2001 and 2013:

- Both of the Welsh NUTS2 areas had an overall increase in workplace employment with East Wales having a larger percentage increase than West Wales and the Valleys, 11 per cent compared to 6 per cent.
- West Wales and the Valleys had percentage increases in workplace employment in 15 of the 19 industry sectors, with the remaining 4 sectors having falls. East Wales had percentage increases in 16 of the 19 industry sectors and falls in the remaining 3 sectors.
- In West Wales and the Valleys the human health & social work activities sector had the largest absolute increase (up 21,000 or 21 per cent) followed by the professional, scientific & technical activities sector, up 12,000 or 52 per cent.
- In East Wales the professional, scientific & technical activities sector had the largest absolute increase (up 17,000 or 83 per cent) followed by the human health & social work activities sector (up 15,000 or 22 per cent).
- The manufacturing sector had the largest fall in both West Wales and the Valleys and East Wales, down 34,000 (29 per cent) and down 18,000 (23 per cent) respectively.
- When looking at the percentage differences between the NUTS2 areas of Wales, the mining & quarrying sector had the largest percentage difference, falling by 16 per cent in West Wales and the Valleys compared to a 68 per cent fall in East Wales. This was followed by the professional, scientific & technical activities sector (up 52 per cent compared to 83 per cent increase in East Wales) and real estate activities sector (up 63 per cent compared to a 39 per cent increase in East Wales).

#### Between 2012 and 2013:

- Workplace employment increased by 6,000 or 1 per cent in West Wales and the Valleys whilst East Wales had a 26,000 or 5 per cent increase.
- West Wales and the Valleys had percentage increases in workplace employment in 10 of the 19 industry sectors and falls in 9 sectors. East Wales had increases in 13 of the 19 industries sectors, falls in 4 sectors, whilst the remaining 2 sectors were unchanged
- The largest absolute increases in West Wales and the Valleys were in the professional, scientific & technical activities sector (up 5,000 or 16 per cent) and the manufacturing sector (up 5,000 or 7 per cent) whilst the largest absolute fall was in the construction sector (down 3,000 or 6 per cent).
- In East Wales the largest absolute increase was also in the professional, scientific & technical activities sector (up 9,000 or 31 per cent) followed by the manufacturing sector (up 5,000 or 10 per cent) whilst the largest absolute falls were in the administrative & support service activities sector (down 1,000 or 3 per cent) and the water supply; sewerage, waste management and remediation activities sector (down 1,000 or 16 per cent).
- In West Wales and the Valleys, 9 of the 19 industry sectors had increases both over 2001 and 2012 and 3 of the 19 industry sectors had falls both over 2001 and 2012.
- In East Wales, 11 of the 19 industry sectors had increases both over 2001 and 2012 and 1 of the 19 industry sectors had a fall both over 2001 and 2012.

#### SECTION 3: WORKPLACE EMPLOYMENT FOR WELSH LOCAL AUTHORITIES

Table 3: Workplace employment by Welsh local authority<sup>1</sup>

Numbers in thousands Change in latest Percentage change levels over: in latest over: Local authority areas 2012 2013 2001 2012 2001 2012 2001 736 773 West Wales and the Valleys 779 43 6 6% 1% Isle of Anglesey 25 26 24 -1 -2 -3% -7% 3 -2 Gwynedd 57 62 61 6% -3% 2 Conwy 42 45 44 -1 4% -3% Denbighshire 43 43 2 41 5% 1% Ceredigion 35 36 1 -1% 4% 36 4 Pembrokeshire 49 55 54 -2 9% -4% Carmarthenshire 66 74 8 3 12% 71 4% Swansea 107 114 116 9 3 8% 2% -3 7% Neath Port Talbot 43 49 46 3 -6% 66 8 56 59 10 18% Bridgend 13% 79 75 Rhondda Cynon Taf 76 -1 -4 -1% -5% Merthyr Tydfil 22 23 23 2 7% 1% Caerphilly 56 59 60 4 1 7% 1% 23 19 20 -3 2 9% Blaenau Gwent -12% Torfaen 35 2 35 37 1 3% 6% East Wales 517 546 572 55 26 11% 5% 7% 56 3 Flintshire 56 59 4 6% 2 3 63 66 3% Wrexham 64 5% 7 Powys 56 59 63 3 12% 6% Vale of Glamorgan 41 38 39 -1 1 -3% 2% Cardiff 183 211 228 45 17 25% 8% 2 Monmouthshire 43 44 45 2 4% 4% 74 76 72 -2 -4 Newport -3% -6% Welsh economic regions: North Wales 286 295 297 11 2 4% 1% Mid Wales 92 94 99 6 5 7% 5% South West Wales 266 289 290 24 1 9% South East Wales 609 641 665 56 24 9% 4% Wales 1,253 1,319 1,351 98 32 8% 2% United Kingdom 28,580 30,208 30,677 469 7% 2%

Source: Annual Population Survey, Business Register and Employment Survey and Welsh Agricultural Census

#### Between 2001 and 2013:

- Workplace employment increased by 8 per cent in Wales and increased by 7 per cent in the UK.
  Within Wales, there was a 6 per cent increase in West Wales and the Valleys and an 11 per cent
  increase in East Wales. Amongst the 22 Welsh local authorities Cardiff had the largest percentage
  increase in jobs (up 25 per cent) followed by Bridgend (up 18 per cent).
- 6 of the 22 local authorities experienced a fall in workplace employment over this period, with Blaenau Gwent having the largest percentage fall (down 12 per cent) followed by the Isle of Anglesey, the Vale of Glamorgan and Newport (all down 3 per cent).

See background notes 8 and 9 for details of the differences between the UK estimates presented here and ONS workforce
jobs estimates. Also see background note 6 for the definition of the NUTS2 areas in Wales, note 11 for details of the
methodology used in deriving these estimates and notes 14 and 15 for details of the coverage of these estimates. The full
series can be found at: <a href="https://statswales.wales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-Work/Employment/Jobs/Whole-Workforce">https://statswales.wales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-Work/Employment/Jobs/Whole-Workforce</a>

• All 4 economic regions in Wales had increases with South West Wales and South East Wales having the largest increase (both up 9 per cent), followed by Mid Wales (up 7 per cent) and North Wales (up 4 per cent).

#### Between 2012 and 2013:

- Workplace employment increase by 2 per cent in both Wales and the UK. Within Wales, there was a 1 per cent increase in West Wales and the Valleys and a 5 per cent increase in East Wales. Amongst the 22 Welsh local authorities Bridgend had the largest percentage increase in jobs (up 13 per cent), followed by Blaenau Gwent (up 9 per cent).
- 7 of the 22 local authorities experienced a fall in workplace employment over this period, with the Isle of Anglesey having the largest percentage fall (down 7 per cent), followed by Newport (down 6 per cent).
- All 4 economic regions in Wales had increases over the year, with Mid Wales having the largest increase (up 5 per cent), followed by South East Wales (up 5 per cent), North Wales (up 1 per cent) and South West Wales which increased by less than 1 per cent.

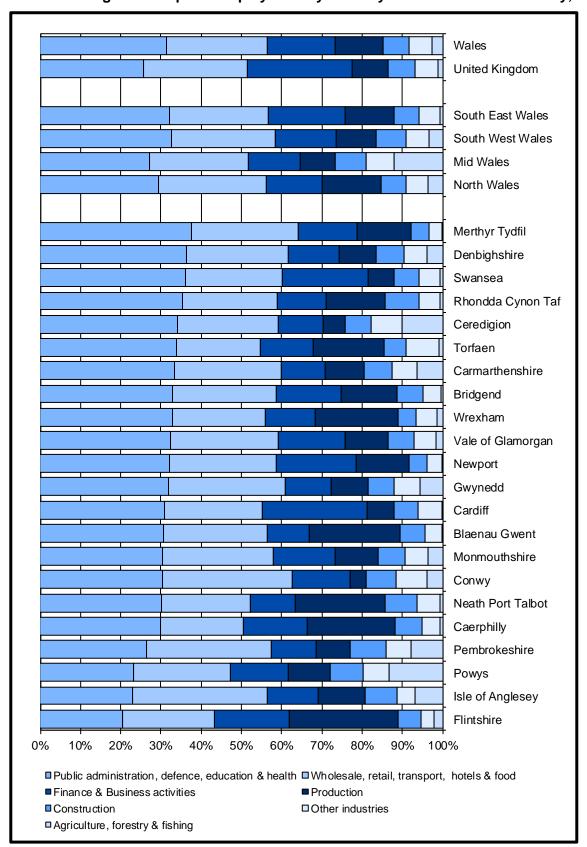
There are clear differences in the profile of jobs in the different local authority areas, with higher proportions of jobs in the agriculture sector in the more rural areas, and higher proportions of jobs in the production and construction and service sectors in the more urban areas.

This is shown in chart 8 over the page, which illustrates the shares of workplace employment in each of the 7 broad industry sectors for each of the local authority areas in 2013. Table 4, which follows chart 8, gives the counts of jobs used to produce chart 8.

# In summary:

- Powys, Ceredigion and Pembrokeshire had the highest shares of workplace employment in the agriculture, forestry & fishing sector in 2013 (13 per cent, 10 per cent and 8 per cent respectively).
   Cardiff, Newport, Blaenau Gwent, Bridgend and Merthyr Tydfil had the lowest share (all 0 per cent).
- At 38 per cent Merthyr Tydfil had the highest share of workplace employment in the public administration, defence, education & health sector (which is *not* the same as the public sector), followed by Swansea and Denbighshire (both 36 per cent). Flintshire had the lowest (20 per cent).
- The Isle of Anglesey and Conwy had the highest shares of workplace employment in the wholesale, retail, transport, hotels & food sector, at 34 per cent and 32 per cent respectively. Whilst Torfaen and Caerphilly had the lowest share (both 21 per cent).
- Cardiff had the highest share of workplace employment in the finance & business activities (26 per cent), followed by Swansea (21 per cent). Blaenau Gwent had the lowest share (10 per cent).
- Flintshire had the highest shares of workplace employment in the production sector at 27 per cent followed by Blaenau Gwent (23 per cent). Conwy had the lowest share (4 per cent).
- Pembrokeshire had the highest share of workplace employment in the construction sector at 9 per cent. Merthyr Tydfil, Newport and Wrexham had the lowest, all at 4 per cent.

Chart 8: Percentage of workplace employment by industry and Welsh local authority, 2013<sup>1</sup>



See background notes 8 and 9 for details of the differences between the UK estimates presented here and ONS workforce
jobs estimates. Also see note 11 for details of the methodology used in deriving these estimates and notes 14 and 15 for
details of the coverage of these estimates.

Table 4: Workplace employment by industry and Welsh local authority 2013<sup>1</sup>

Numbers in thousands

Local authority area	Agriculture, forestry & fishing	Production	Construction	Wholesale, retail, transport, hotels & food	Information & communication	Financial & insurance activities	Real estate activities	Professional, scientific and technical activities; administrative & support service activities	Public administration, defence, education & health	Other service activities	All industries
West Wales and the Valleys	23	93	54	200	13	13	10	74	254	44	779
Isle of Anglesey	2	3	2	8	-	-	-	2	6	1	24
Gwynedd	3	5	4	18	1	1	1	5	19	4	61
Conwy	2	2	3	14	1	1	1	4	13	3	44
Denbighshire	2	4	3	11	1	1	1	4	16	2	43
Ceredigion	4	2	2	9	-	-	1	3	12	3	36
Pembrokeshire	4	4	5	17	-	1	1	4	14	3	54
Carmarthenshire	5	7	5	20	1	1	1	6	25	5	74
Swansea	1	7	7	28	3	6	2	15	42	6	116
Neath Port Talbot	-	10	4	10	-	-	1	4	14	3	46
Bridgend	-	9	4	17	2	1	1	7	22	3	66
Rhondda Cynon Taf	1	11	6	18	1	1	1	6	27	4	75
Merthyr Tydfil	-	3	1	6	1	-	-	2	9	1	23
Caerphilly	-	13	4	12	-	1	-	8	18	3	60
Blaenau Gwent	-	5	1	5	-	-	-	1	6	1	20
Torfaen	-	6	2	8	1	-	1	3	12	3	37
East Wales	13	70	34	141	14	19	8	74	168	30	572
Flintshire	1	16	3	14	2	1	1	8	12	2	59
Wrexham	1	14	3	15	1	1	-	6	22	3	66
Powys	8	7	5	15	1	1	1	7	15	4	63
Vale of Glamorgan	1	4	2	11	1	-	1	5	13	2	39
Cardiff	-	15	14	55	7	14	3	36	71	14	228
Monmouthshire	2	5	3	13	1	1	1	5	14	3	45
Newport	-	9	3	19	2	3	1	9	23	3	72
North Wales	11	44	19	80	6	3	3	29	88	16	297
Mid Wales	12	9	8	24	1	1	1	9	27	7	99
South West Wales	10	29	21	74	4	7	4	29	95	17	290
South East Wales	4	81	41	163	16	21	9	82	213	35	665
<i>Wal</i> es	36	162	88	341	27	32	18	148	423	75	1,351
United Kingdom	368	2,786	2,019	7,917	1,269	1,051	511	5,131	7,884	1,741	30,677

Source: Annual Population Survey, Business Register and Employment Survey and Welsh Agricultural Census

<sup>1.</sup> See background notes 8 and 9 for details of the differences between the UK estimates presented here and ONS workforce jobs estimates. Also see background note 5 for the definition of the NUTS2 areas in Wales, note 11 for details of the methodology used in deriving these estimates and notes 14 and 15 for details of the coverage of these estimates.

The full series can be found at: <a href="https://statswales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-Work/Employment/Jobs/Whole-Workforce">https://statswales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-Work/Employment/Jobs/Whole-Workforce</a>

#### **NOTES**

## Revisions and planned changes to the bulletin

This year's bulletin:

There are no changes/revisions to this bulletin.

Next year's bulletin:

There are no planned changes. There may be revisions due to the reweighting of the Annual Population Survey to take account of new mid year population estimates.

#### **Background**

- 1. 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.
- 2. This is the eleventh statistical bulletin produced by the Welsh Government which does this, following on from the publication of October 2013, which provided similar data for 2001 to 2012 see <a href="http://wales.gov.uk/statistics-and-research/work-place-employment-industry/">http://wales.gov.uk/statistics-and-research/work-place-employment-industry/</a>
- 3. The Business Register and Employment Survey (BRES formerly the Annual Business Inquiry (ABI)) conducted by the Office for National Statistics (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.
- 4. 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.
- 5. 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 ONS Annual Population Survey (APS) (previously the Local Labour Force Survey or LLFS), and also BRES and the Welsh Agricultural Census.
- 6. The Welsh sub-regional breakdowns of the data given in this bulletin are at NUTS2 and local authority levels. Nomenclature of Units for Territorial Statistics (NUTS) is an EU hierarchical geographic breakdown of member states. NUTS1 defines the regions of UK (of which Wales is one), whilst NUTS4 defines local authorities, with NUTS2 and NUTS3 representing successive hierarchical aggregations of local authorities. Within Wales, there are 2 NUTS2 areas, namely 'West Wales and the Valleys' and 'East Wales', the former being the area of Wales currently eligible for Convergence funding from the European Union. The local authorities which make-up the two NUTS2 areas in Wales are shown in tables 3 or 4.
- 7. 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) and public administration, defence, education and health (sections O, P and Q) and other service activities (sections R to U). Industry detail shown for the NUTS2 areas is at the same level of detail as that shown at the Wales level. 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; <a href="http://wales.gov.uk/statistics-and-research/work-place-employment-industry/">http://wales.gov.uk/statistics-and-research/work-place-employment-industry/</a>

- 8. 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.
- 9. 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:

  <a href="http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm:77-21589">http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm:77-21589</a>
  and should be used in preference to the UK estimates given here unless making comparisons with the estimates for Wales presented here.
- 10. 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.

# Key quality information: methodology

- 11. 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.
  - The Wales and UK data for all years reflect the reweighted datasets published by the ONS in May 2013, which better align the data with the latest population estimates. The local authority level data from 2004 onwards are also based on the reweighted APS datasets. The local authority data for 2001 to 2003 are based on the previous un-reweighted LLFS datasets, adjusted to the reweighted totals for Wales as a whole. This is because for various technical reasons the previous weights were better aligned with population estimates at local authority level for these three years.
  - 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 Welsh Agricultural Census 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.

12. 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: <a href="http://www.ons.gov.uk/ons/guide-method/method-quality/quality-reviews/theme/labour-market/nsqr-44/nsqr-series-report-no--44--review-of-employment-and-jobs-statistics-.pdf">http://www.ons.gov.uk/ons/guide-method/method-quality/quality-reviews/theme/labour-market/nsqr-44/nsqr-series-report-no--44--review-of-employment-and-jobs-statistics-.pdf</a>, 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.

# Key quality information: coherence with other sources

# i) Headline estimates of employment

- 13. 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 ONS labour market release for Wales at <a href="http://www.ons.gov.uk/ons/rel/subnational-labour/regional-labour-market-statistics/index.html">http://www.ons.gov.uk/ons/rel/subnational-labour/regional-labour-market-statistics/index.html</a>. 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. It is estimated that in 2012 around 85,500 Welsh residents work in jobs located outside Wales, and around 43,700 non-Welsh residents work in jobs located inside Wales. Thus Wales is a net exporter of employment, and there are many similar flows between the different local authorities within Wales.
  - As some employed residents have more than one job, the headline measure of employment will be lower than the count of jobs. There were around 55,000 second jobs in Wales and around 1.1 million second jobs across the UK as a whole in 2013.
  - 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 6,100 unpaid family workers in the APS for 2013 across Wales and around 119,000 across the UK. 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 methodology used show different levels than the estimates in this bulletin. More information on the methodology can be found here: <a href="http://www.ons.gov.uk/ons/guide-method/method-quality/quality/quality-information/labour-market/summary-quality-report-for-workforce-jobs.pdf">http://www.ons.gov.uk/ons/guide-method/method-quality/quality/quality-information/labour-market/summary-quality-report-for-workforce-jobs.pdf</a>

Table A - Comparison of workplace employment (WPE) to workforce jobs (WFJ), 2013

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	1,131.1	1,161.2	30.0	2.6
Self-employed	208.0	181.2	-26.8	-14.8
Government-supported				
trainees	11.7	4.6	-7.1	-154.3
HM Forces	**	2.8	2.8	100.0
Total	1,350.8	1,349.8	-1.0	-0.1
UK				
Employees	25,848.7	27,810.3	1,961.6	7.1
Self-employed	4,677.7	4,253.8	-423.9	-10.0
Government-supported				
trainees	150.6	21.8	-128.8	-590.8
HM Forces		173.6	173.6	100.0
Total	30,676.9	32,259.4	1,582.5	4.9

<sup>..</sup> 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 table comparing workforce jobs to the Labour Force Survey investigating the differences between the two sources. This explains the differences in the employee components above and can be found here:

  <a href="http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm:77-21589">http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm:77-21589</a>
- 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.
  - o 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 labour market regional bulletin, table 12). 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, 2013

Thousands

	Total	Employee Jobs	Self Employed	Government Supported Trainees
A:Agriculture, forestry and fishing	-5.4	2.1	-7.3	-0.1
B:Mining and quarrying	8.0	0.4	0.4	0.0
C:Manufacturing	-2.9	-2.0	0.3	-1.2
D:Electricity, gas, steam and air conditioning supply	-0.8	-1.0	0.3	-0.1
E:Water supply; sewerage, waste management and				
remediation activities	0.2	0.4	-0.1	-0.1
F:Construction	0.1	1.0	-0.4	-0.6
G:Wholesale and retail trade; repair of motor				
vehicles and motorcycles	17.4	20.6	-2.6	-0.6
H:Transportation and storage	0.1	2.4	-2.0	-0.3
I:Accommodation and food service activities	-9.2	-4.9	-3.7	-0.5
J:Information and communication	-0.5	2.2	-2.5	-0.2
K:Financial and insurance activities	-1.9	-0.9	-0.9	-0.2
L:Real estate activities	1.4	2.2	-0.7	-0.1
M:Professional, scientific and technical activities	-18.9	-18.1	-0.4	-0.4
N:Administrative and support service activities	1.1	5.5	-3.9	-0.5
O:Public administration and defence; compulsory				
social security	1.9	0.6	-1.0	-0.6
P:Education	5.6	7.8	-1.4	-0.8
Q:Human health and social work activities	2.1	3.8	-0.9	-0.8
R:Arts, entertainment and recreation	9.9	9.1	1.0	-0.2
STU: Other industries	-2.1	-1.1	-1.1	0.1
Total	-1.0	30.0	-26.8	-7.1

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).

#### Key quality information: coverage and accuracy

- 14. 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.
- 15. 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.
- 16. 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 16,000 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.

#### Accessing the data

17. All the data given in this bulletin can be found on StatsWales, via the following link <a href="https://statswales.wales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-Work/Employment/Jobs/Whole-Workforce">https://statswales.wales.gov.uk/Catalogue/Business-Economy-and-Labour-Market/People-and-Work/Employment/Jobs/Whole-Workforce</a>