

## **AWE: REVISED ESTIMATION FOR EMPLOYERS WITH UNDER 20 EMPLOYEES**

### **Summary**

The main data source for the Average Weekly Earnings (AWE) series, published each month in the Labour Market Statistical Bulletin, is the Monthly Wages and Salaries Survey (MWSS). This is a monthly survey of some 9,000 employers in Great Britain with 20 or more employees. Details of the sample design are shown in the Quality and Methodology Information documentation relating to AWE<sup>1</sup>. In line with the recommendations of the Weale Review (2008),<sup>2</sup> to produce an estimate of the average wages for small firms (under 20s) the average wages for large firms is calculated then multiplied by an adjustment factor derived from the Annual Survey of Hours and Earnings (ASHE). This paper describes the revisions arising from a review of the methodology and the use of ASHE surveys up to and including that relating to April 2014. The main differences arise from using unrounded factors, interpolating a smooth monthly path and taking more accurate measurements from the Inter-Departmental Business Register (IDBR), but this paper shows the effects of the revised estimates are very small at a whole economy level.

### **Method**

The method for estimating for companies with fewer than 20 employees is described in the Weale Review (2008)<sup>3</sup>:

#### ***Estimation and Small Businesses***

*Businesses with fewer than 20 employees, that is small firms, are not sampled in the MWSS, but they are part of the target population ... In AWE the average wage for employees in small firms is assumed to be different to that in large firms. To calculate an estimate of the average wage for small firms, in each industry, the average wage for large firms is calculated then multiplied by an adjustment factor derived from the Annual Survey of Hours and Earnings (ASHE). These adjustment factors are a mean of the ratio of the average wage of employees in small firms to the average wage of employees in large firms. The mean is*

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<sup>1</sup> <http://www.ons.gov.uk/ons/guide-method/method-quality/quality/quality-information/labour-market/index.html>

<sup>2</sup> <http://www.ons.gov.uk/ons/rel/awe/average-weekly-earnings/aei-and-awe--weale-report/index.html>

<sup>3</sup> Ibid page 14

*computed over three years to smooth out fluctuations in the adjustment factors. The estimated average wage for employees in small firms is then multiplied by the employment for those firms taken from the IDBR, to give an estimate of the total wages for small firms. The ASHE covers employees of all businesses and is based on an achieved sample of approximately 160,000 employees annually. The basic estimator for calculating the total earnings and separately the total employment among the larger businesses is a simple separate ratio estimator using employment as the auxiliary variable.*

## **Derivation of latest set of factors**

The latest adjustment factors have been calculated as a ratio of the average wage of employees in small firms to the average wage of employees in large firms using ASHE data for Great Britain. A table showing earnings growth rates by size of employer from successive ASHE surveys by size of company is shown in this link <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/labour/november-2014/index.html>

The employment size variable on ASHE is based on enterprise size<sup>4</sup>, while the AWE analysis is carried out at an inquiry specific reporting unit level. To solve this discrepancy, the employment size variable at a reporting unit level is obtained by merging the ASHE dataset to an Inter-Departmental Business Register (IDBR) extract by the Pay As You Earn (PAYE) reference variable; this dataset is then merged to the universe file to obtain an employment estimate similar to the AWE analysis.

The weighted mean of the gross pay variable is then obtained, grouped by individual Standard Industrial Classification (SIC 07)<sup>5</sup> division (sicdiv) and an under 20 marker applied. The under 20 marker is set to 1 when either of the following criteria are met:

- if the employment figure in the universe file is less than 20;
- if the employment figure in the universe file is missing AND the IDBR employment figure is less than 20.

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A group of legal units under common ownership is called an Enterprise Group.

An Enterprise is the smallest combination of legal units (generally based on VAT and/or PAYE records) which has a certain degree of autonomy within an Enterprise Group.

<sup>5</sup> <http://www.ons.gov.uk/ons/guide-method/classifications/other-classifications-used-within-national-statistics/other-national-and-international-classifications/index.html>

In the case of the second criterion, if the IDBR employment figure is greater than or equal to 20, then the universe file employment figure is replaced with that of the IDBR and the under 20 marker is set to zero.

The dataset is then divided into two groups (employers with under 20 and over 20 employees); these two datasets are merged together by sicdiv and the factor is created by dividing the average pay for employers with under 20 employees by the average pay for those with over 20. The factors for each year are shown in Table A1 in the Annex to this paper. From 2010, unlike the position in the past, unrounded factors have been used for improved accuracy.

## **Interpolation**

To reduce volatility in the series, a three-year centred moving average is derived (Table A2 in the Annex), in line with the Weale recommendations. For divisions with very small numbers of observations, a factor of 1 is assumed. Monthly factors are derived by interpolating between each observed April figure. For the period after April 2013 there are not yet three successive ASHE figures on which to base the factors. The possibility of forecasting a path for more recent periods was considered but this was judged to be impractical, as there was not a long enough back period on which to provide reliable forecasts. Therefore, the derived factor for April 2013 is projected forward for the rest of the time for which AWE is published. Once the 2015 ASHE becomes available, a revised profile will be derived for May 2013 onwards. The new revisions policy is set out in more detail below.

## **Resulting series**

The factors shown in Table A2 have been taken into the AWE results at the 2 digit SIC level and aggregated up to industry, sector and whole economy levels. One complication is that the reclassification onto the new SIC in July 2010 makes it impossible to produce reliable revisions before then<sup>6 7</sup>. The revised data have been linked on at June 2010 (so that the June 2010 AWE is unchanged). The AWE results for July 2010 onwards have been revised

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<sup>6</sup> <http://www.ons.gov.uk/ons/rel/awe/average-weekly-earnings/transition-of-average-weekly-earnings-to-sic-2007-october-2010/index.html>

<sup>7</sup> <http://www.ons.gov.uk/ons/guide-method/classifications/other-classifications-used-within-national-statistics/other-national-and-international-classifications/index.html>

to reflect the movements in the data from taking on board the new ASHE factors after that point.

Charts A1 to A6 and B1 to B6 summarise the data to be published in the release on 14 October 2015. Table 1 shows the revisions to AWE total pay at headline level for the April in each year since 2010. To avoid two sets of revisions, the opportunity has been taken to take on board the latest seasonal adjustment annual review, which is always undertaken about this time of year, at the same time. The charts below provide an indication of revisions due to the updated under 20 factors, whereas the data to be published on 14 October will also include revisions due to changes in the seasonal adjustment parameters and additional time points at the end of the series.

TABLE 1

## Average Weekly Earnings - total pay: Revised data

	Standard Industrial Classification (2007)						Great Britain, not seasonally adjusted		
	Whole Economy (100%) <sup>2</sup>			Private sector (82%) <sup>2 4 5 6</sup>			Public sector (18%) <sup>2 4 5 6</sup>		
	original	revised	% revision	original	revised	% revision	original	revised	% revision
Apr-10	441.4	441.4	0.0	435.2	435.2	0.0	462.9	462.9	0.0
Apr 11	452.6	452.1	-0.1	446.0	445.4	-0.1	474.7	474.7	0.0
Apr 12	463.4	462.8	-0.1	458.5	457.7	-0.2	480.9	480.9	0.0
Apr 13	483.5	482.9	-0.1	482.3	481.5	-0.2	488.0	488.0	0.0
Apr 14	477.7	477.0	-0.1	474.5	473.7	-0.2	491.2	491.2	0.0
Apr 15	491.2	490.6	-0.1	490.1	489.3	-0.2	496.0	496.0	0.0

	Services, SIC 2007 sections G-S (85%) <sup>2</sup>			Finance and business services, SIC 2007 sections K-N (21%) <sup>2</sup>			Public sector excluding financial services (18%) <sup>2 5 6</sup>		
	original	revised	% revision	original	revised	% revision	original	revised	% revision
Apr-10	425.0	425.0	0.0	534.8	534.8	0.0	457.1	457.1	0.0
Apr 11	437.6	437.0	-0.1	564.9	565.3	0.1	467.6	467.6	0.0
Apr 12	448.1	447.3	-0.2	589.5	589.4	0.0	471.9	471.9	0.0
Apr 13	467.7	467.0	-0.1	631.0	631.1	0.0	478.9	478.9	0.0
Apr 14	461.5	460.8	-0.1	590.5	590.7	0.0	485.5	485.5	0.0
Apr 15	475.2	474.6	-0.1	619.8	620.4	0.1	490.9	490.9	0.0

	Manufacturing, SIC 2007 section C (8%) <sup>2</sup>			Construction, SIC 2007 section F (4%) <sup>2</sup>			Wholesaling, retailing, hotels & restaurants, SIC 2007 sections G & I (23%) <sup>2</sup>		
	original	revised	% revision	original	revised	% revision	original	revised	% revision
Apr-10	525.4	525.4	0.0	534.2	534.2	0.0	298.1	298.1	0.0
Apr 11	534.0	533.7	-0.1	529.5	531.4	0.4	300.6	300.3	-0.1
Apr 12	546.8	546.4	-0.1	543.6	546.6	0.6	306.0	306.0	0.0
Apr 13	566.4	566.7	0.1	565.5	566.0	0.1	321.3	321.5	0.1
Apr 14	571.3	571.6	0.1	543.4	543.8	0.1	324.0	324.2	0.1
Apr 15	581.4	581.7	0.1	561.1	561.7	0.1	336.2	336.5	0.1

2. The figure in brackets is the percentage of whole economy employment in that sector or industry for the latest time period.

4. From July 2009 Royal Bank of Scotland Group plc is classified to the public sector; for earlier time periods it is classified to the private sector. Between July 2009 and March 2014 Lloyds Banking Group plc is classified to the public sector; it is classified to the private sector for earlier and later time periods.

5. Between June 2010 and May 2012 English Further Education Corporations and Sixth Form College Corporations are classified to the public sector. Before June 2010 and after May 2012 they are classified to the private sector.

6. From October 2013 Royal Mail plc is classified to the private sector; previously it is in the public sector.

## Size of revisions

Table 1 shows that the revisions are small at sector level, and it is hard to discern any differences when they are plotted graphically. The exception is Construction, where the revision is -0.6% at its highest point.

**TABLE 2: APRIL 2014 AWE WHOLE ECONOMY: EXPLANATION OF REVISIONS**

### OLD UNDER 20s FACTORS

Size band	Gross pay (£m)	Regular pay (£m)	Employment (000s)	% of employment	AWE total pay (£)	Combined size band	AWE total pay	under 20s factor
under								
20	2,418	2,240	5,738	21	421	under 20s	421	85.4%
20 -99	1,742	1,639	3,902	14	446	over 20s	493	
100-499	1,942	1,801	3,707	13	524			
500-999	923	828	1,567	6	589			
1000 +	6,163	5,900	12,654	46	487			
Total	13,189	12,408	27,568	100	478	total	478	

### REVISED UNDER 20s FACTORS

Size band	Gross pay (£m)	Regular pay (£m)	Employment (000s)	% of employment	AWE total pay (£)	Combined size band	AWE total pay	under 20s factor	% revision
under									
20	2,399	2,221	5,738	21	418	under 20s	418	84.7%	-0.8%
20 -99	1,742	1,639	3,902	14	446	over 20s	493		
100-499	1,942	1,801	3,707	13	524				
500-999	923	828	1,567	6	589				
1000 +	6,163	5,900	12,654	46	487				
Total	13,170	12,389	27,568	100	478	total	477		-0.1%

As shown above, the under 20 factors are input at a divisional level under the SIC 07 classification system. To show the overall effect of adjustments made for the under 20s Table 2 shows the estimates derived at a whole economy level. The revisions in this article have changed the overall under 20s adjustment at a whole economy level from 85.4% to 84.7%. This has changed the headline AWE for April 2014 by 0.1 per cent. Readers may be

surprised the revisions are so small. It must be emphasised that the number of employees is estimated accurately in the most recent figures based on IDBR data. The only reason for the whole economy AWE to fall as result of the under 20 revisions is if the pay for under 20s recorded in the ASHE declines relative to those for larger employers.

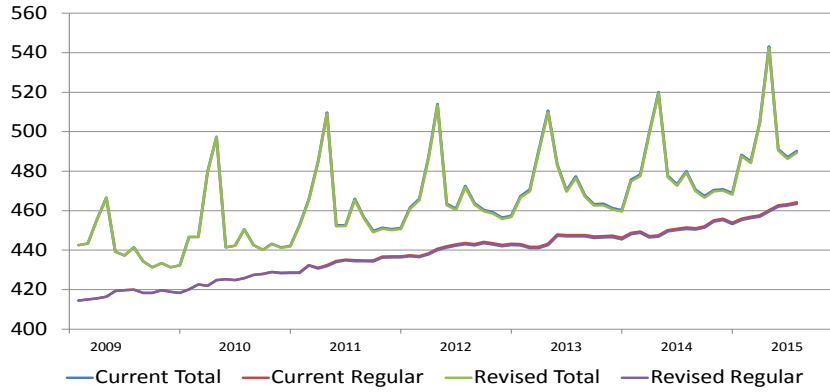
### **Revisions policy in the future**

The methodology outlined in this paper will be adopted in future years. This will entail revisions to AWE data once a year for the previous two to three years. As an example, when the 2015 ASHE data are adopted, there will be revisions to AWE data from May 2013 onwards. While revisions are generally to be avoided, this process is regarded as an acceptable way to maintain the quality of the AWE by using ASHE data for companies with under 20 employees in the most appropriate way. To reduce the frequency of revisions, the latest under 20 factors will be taken on board at the same time as the annual AWE seasonal adjustment review – probably around autumn each year.

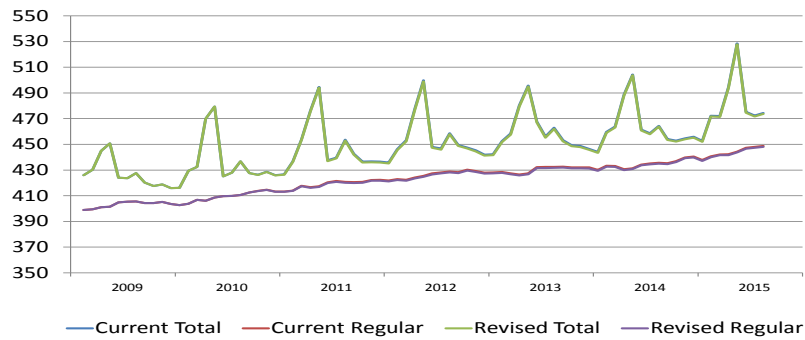
***Ian Richardson***  
***Labour Market Division***  
***Office for National Statistics***

# CHARTS A1 TO A6: AWE (£): BEFORE AND AFTER UNDER 20 REVISIONS

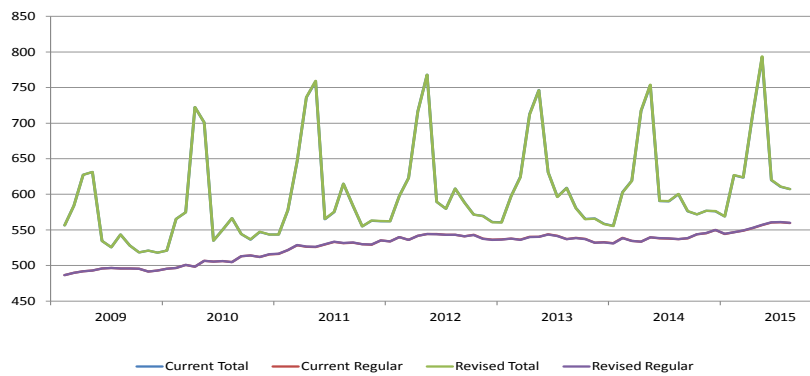
## Chart A1: Whole economy



## Chart A2: Services

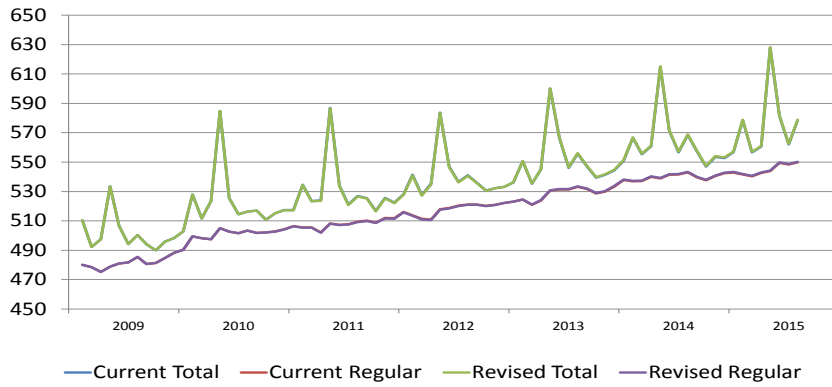


## Chart A3: Finance and business services

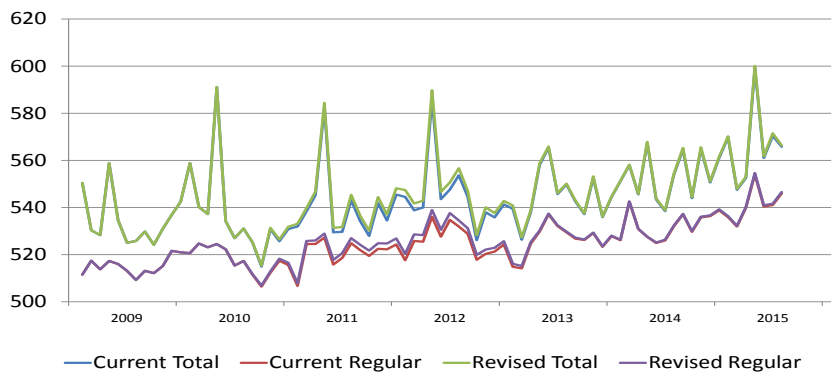




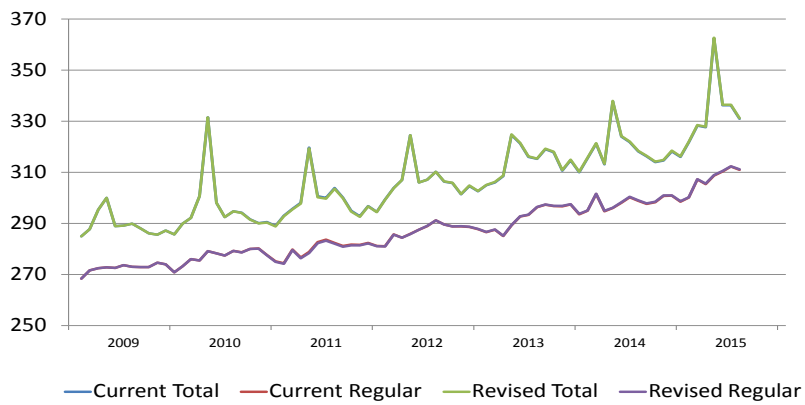
### Chart A4: Manufacturing



### Chart A5: Construction



### Chart A6: Distribution, Hotels and Restaurants



CHARTS B1 TO B6: AWE: BEFORE AND AFTER UNDER 20 REVISIONS: ANNUAL % CHANGES

Chart B1: Whole Economy

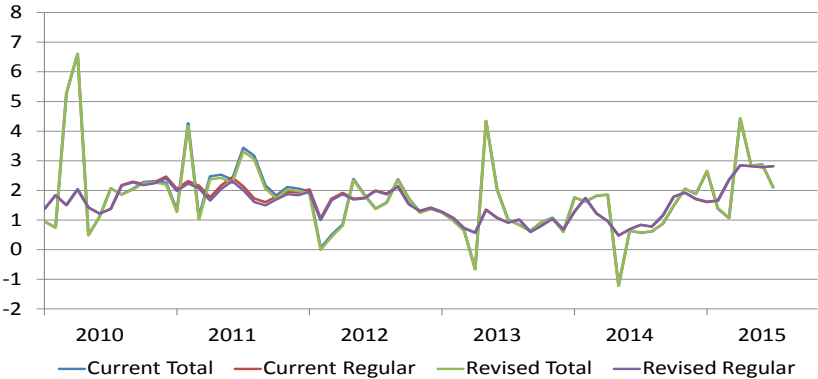


Chart B2: Services

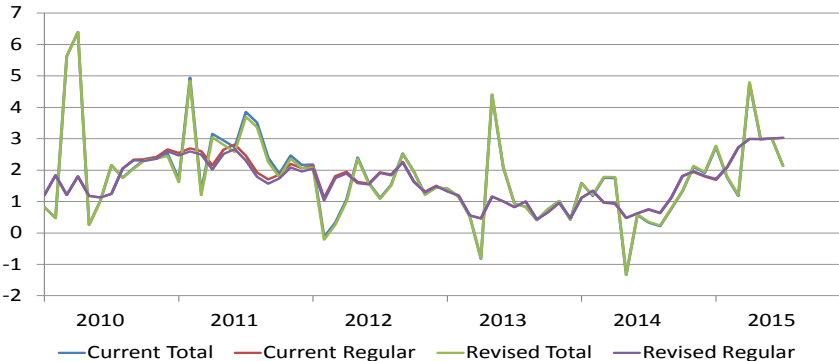
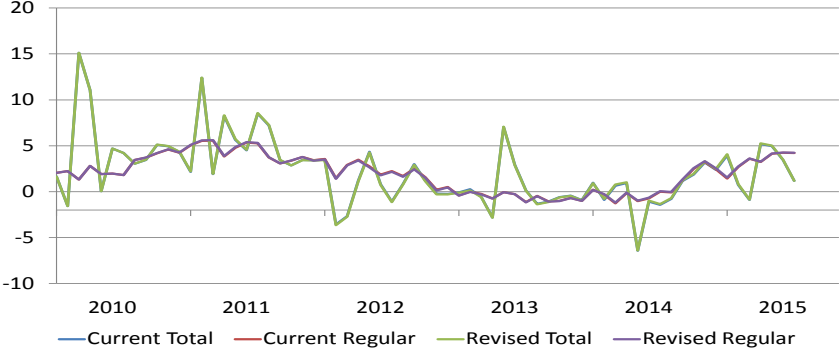
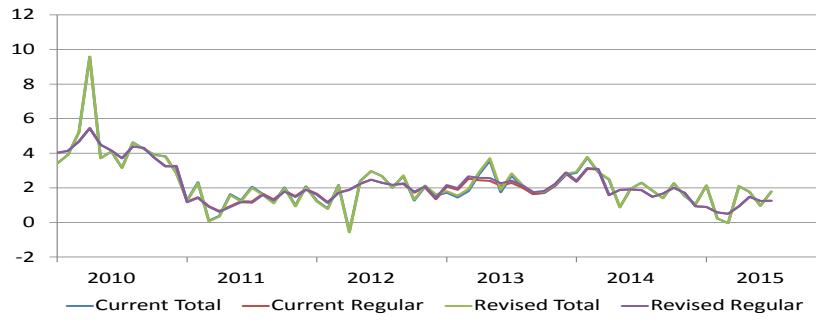


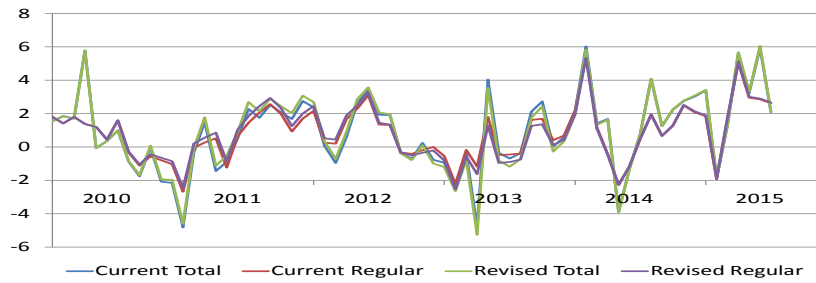
Chart B3: Finance and business services



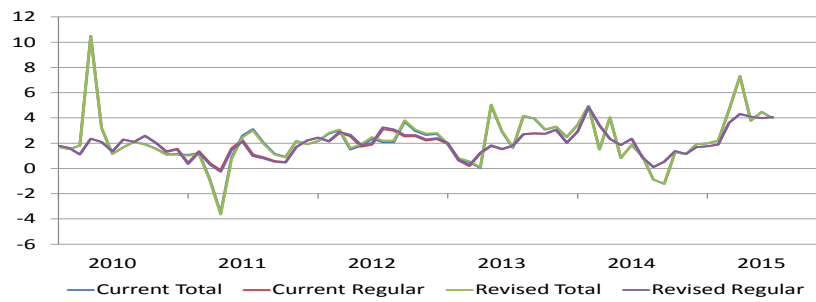
### Chart B4: Manufacturing



### Chart B5: Construction



### Chart B6: Distribution, Hotels and Restaurants



**TABLE A1: ASHE FACTORS BY SIC DIVISION - April each year**

Div	Description	2009	2010	2011	2012	2013	2014
1	Crop and animal production, hunting and related service activities	0.937	0.900	0.877	0.857	0.898	0.886
2	Forestry and logging	0.496	0.737	0.576	0.606	0.679	0.519
3	Fishing and aquaculture	0.864	0.849	0.565	0.673	0.696	0.970
5	Mining of coal and lignite	na	na	na	na	na	na
6	Extraction of crude petroleum and natural gas	1.035	na	na	1.851	na	na
8	Other mining and quarrying	1.026	1.149	0.921	0.983	3.141	1.046
9	Mining support service activities	2.838	0.623	0.547	0.453	0.552	0.544
10	Manufacture of food products	0.746	0.597	0.652	0.677	0.589	0.672
11	Manufacture of beverages	0.529	0.666	0.665	0.637	0.593	0.482
12	Manufacture of tobacco products	na	na	na	na	na	na
13	Manufacture of textiles	0.864	0.747	0.796	0.770	0.733	0.811
14	Manufacture of wearing apparel	0.932	0.880	0.772	1.001	0.741	0.912
15	Manufacture of leather and related products	0.991	1.373	0.606	0.683	1.303	0.819
16	Manufacture of wood and of products of wood	0.772	0.706	0.703	0.797	0.772	1.034
17	Manufacture of paper and paper products	0.698	0.693	0.696	0.679	0.707	0.764
18	Printing and reproduction of recorded media	0.739	0.793	0.747	0.739	0.734	0.728
19	Manufacture of coke and refined petroleum products	na	0.035	1.194	0.301	0.850	1.069
20	Manufacture of chemicals and chemical products	0.613	0.640	0.592	0.527	0.544	0.489
21	Manufacture of basic pharmaceutical products and preparations	0.711	0.998	1.001	0.991	1.496	0.780
22	Manufacture of rubber and plastic products	0.727	0.698	0.769	0.775	0.754	0.767
23	Manufacture of other non-metallic mineral products	0.653	0.721	0.756	0.696	0.683	0.682
24	Manufacture of basic metals	0.677	0.626	0.699	0.539	0.606	0.632
25	Manufacture of fabricated metal products, except machinery & equipment	0.758	0.756	0.800	0.804	0.771	0.802
26	Manufacture of computer, electronic and optical products	0.743	0.745	0.830	0.709	0.720	0.719
27	Manufacture of electrical equipment	0.792	0.834	0.704	0.811	0.851	0.834
28	Manufacture of machinery and equipment n.e.c.	0.791	0.769	0.728	0.713	0.775	0.798
29	Manufacture of motor vehicles, trailers and semi-trailers	0.674	0.674	0.583	0.509	0.506	0.524

<b>Div</b>	<b>Description</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
30	Manufacture of other transport equipment	0.865	0.969	0.746	0.692	0.625	0.563
31	Manufacture of furniture	0.732	0.756	0.775	0.762	0.825	0.862
32	Other manufacturing	0.716	0.738	0.696	0.735	0.701	0.714
33	Repair and installation of machinery and equipment	0.631	0.600	0.575	0.605	0.665	0.660
35	Electricity, gas, steam and air conditioning supply	2.024	3.651	2.361	1.917	1.476	0.947
36	Water collection, treatment and supply	na	na	na	na	na	na
37	Sewerage	0.560	0.660	0.640	0.653	0.695	0.803
38	Waste collection, treatment and disposal activities; materials recovery	0.752	0.774	0.606	0.579	0.597	0.576
39	Remediation activities and other waste management services	na	na	0.973	0.538	0.579	0.343
41	Construction of buildings	0.743	0.693	0.728	0.771	0.807	0.718
42	Civil engineering	0.695	0.669	0.652	0.676	0.653	0.677
43	Specialised construction activities	0.697	0.717	0.728	0.725	0.679	0.688
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	0.742	0.745	0.752	0.809	0.782	0.763
46	Wholesale trade, except of motor vehicles and motorcycles	0.841	0.845	0.843	0.845	0.831	0.850
47	Retail trade, except of motor vehicles and motorcycles	1.043	0.982	0.954	0.976	1.041	0.956
49	Land transport and transport via pipelines	0.869	0.672	0.701	0.636	0.636	0.634
50	Water transport	0.573	0.725	0.620	0.453	0.752	0.390
51	Air transport	0.850	0.465	0.794	0.543	0.629	0.723
52	Warehousing and support activities for transportation	0.676	0.739	0.699	0.678	0.723	0.701
53	Postal and courier activities	0.539	0.578	0.596	0.648	0.593	0.605
55	Accommodation	0.789	0.774	0.698	0.701	0.734	0.817
56	Food and beverage service activities	0.716	0.698	0.727	0.673	0.711	0.711
58	Publishing activities	0.822	0.837	0.795	0.814	0.742	0.719
59	Film and television programme production, music publishing etc	1.476	0.898	0.679	0.744	0.907	0.872
60	Programming and broadcasting activities	0.742	0.734	0.557	0.608	0.539	0.721
61	Telecommunications	1.120	0.813	0.843	0.687	0.839	0.762
62	Computer programming, consultancy and related activities	0.655	0.633	0.650	0.608	0.620	0.680
63	Information service activities	0.722	0.721	0.570	0.690	0.632	0.623

<b>Div</b>	<b>Description</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
64	Financial service activities, except insurance and pension funding	0.952	0.982	1.007	0.833	0.732	0.655
65	Insurance and pension funding, except compulsory social security	0.727	0.790	0.843	0.838	0.863	0.848
66	Activities auxiliary to financial services and insurance activities	0.595	0.541	0.538	0.627	0.570	0.636
68	Real estate activities	0.842	0.781	0.804	0.757	0.778	0.763
69	Legal and accounting activities	0.505	0.519	0.491	0.489	0.486	0.512
70	Activities of head offices; management consultancy activities	0.679	0.674	0.696	0.766	0.698	0.718
71	Architectural and engineering activities; technical testing and analysis	0.632	0.654	0.605	0.601	0.621	0.612
72	Scientific research and development	0.760	0.852	0.765	0.800	0.850	0.796
73	Advertising and market research	0.738	0.860	0.796	0.842	0.857	0.879
74	Other professional, scientific and technical activities	0.595	0.749	0.686	0.668	0.718	0.741
75	Veterinary activities	1.011	0.903	0.798	0.747	0.760	0.778
77	Rental and leasing activities	0.777	0.873	0.935	0.862	0.812	0.771
78	Employment activities	1.162	1.057	1.156	1.155	1.260	1.115
79	Travel agency, tour operator and related activities	0.839	0.751	0.858	0.693	0.668	0.741
80	Security and investigation activities	0.915	0.959	0.801	0.833	0.984	0.939
81	Services to buildings and landscape activities	1.025	0.932	1.047	1.028	0.990	0.946
82	Office administrative, office support and other business support activities	0.871	0.864	0.878	0.841	0.790	0.797
84	Public administration and defence; compulsory social security	0.442	0.407	0.533	0.326	0.320	0.411
85	Education	0.575	0.515	0.517	0.530	0.538	0.554
86	Human health activities	0.601	0.548	0.534	0.527	0.555	0.558
87	Residential care activities	0.871	0.872	0.883	0.864	0.920	0.954
88	Social work activities without accommodation	0.788	0.790	0.803	0.831	0.836	0.845
90	Creative, arts and entertainment activities	0.855	1.024	0.882	0.910	0.921	0.821
91	Libraries, archives, museums and other cultural activities	0.754	0.697	0.551	0.705	0.781	0.748
92	Gambling and betting activities	0.704	0.653	0.562	0.500	0.655	0.770
93	Sports activities and amusement and recreation activities	0.760	0.687	0.770	0.775	0.819	0.695
94	Activities of membership organisations	0.610	0.648	0.646	0.652	0.645	0.599
95	Repair of computers and personal and household goods	0.588	0.590	0.631	0.791	0.612	0.581
96	Other personal service activities	0.734	0.751	0.742	0.693	0.653	0.644

**TABLE A2: ASHE FACTORS BY SIC DIVISION - three-year moving averages**

<b>Div</b>	<b>Description</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
1	Crop and animal production, hunting and related service activities	0.905	0.878	0.877	0.880
2	Forestry and logging	0.603	0.640	0.620	0.602
3	Fishing and aquaculture	0.759	0.696	0.645	0.780
5	Mining of coal and lignite	1	1	1	1
6	Extraction of crude petroleum and natural gas	1.035	1.851	1.851	1.851
8	Other mining and quarrying	1.032	1.018	1.682	1.723
9	Mining support service activities	1.336	0.541	0.517	0.516
10	Manufacture of food products	0.665	0.642	0.640	0.646
11	Manufacture of beverages	0.620	0.656	0.631	0.570
12	Manufacture of tobacco products	1	1	1	1
13	Manufacture of textiles	0.802	0.771	0.766	0.771
14	Manufacture of wearing apparel	0.861	0.884	0.838	0.885
15	Manufacture of leather and related products	0.990	0.887	0.864	0.935
16	Manufacture of wood and of products of wood	0.727	0.736	0.757	0.868
17	Manufacture of paper and paper products	0.695	0.689	0.694	0.717
18	Printing and reproduction of recorded media	0.760	0.760	0.740	0.734
19	Manufacture of coke and refined petroleum products	0.615	0.510	0.782	0.740
20	Manufacture of chemicals and chemical products	0.615	0.586	0.554	0.520
21	Manufacture of basic pharmaceutical products and preparations	0.903	0.997	1.163	1.089
22	Manufacture of rubber and plastic products	0.731	0.747	0.766	0.765
23	Manufacture of other non-metallic mineral products	0.710	0.724	0.712	0.687
24	Manufacture of basic metals	0.667	0.621	0.614	0.592
25	Manufacture of fabricated metal products, except machinery & equipment	0.772	0.787	0.792	0.792
26	Manufacture of computer, electronic and optical products	0.772	0.761	0.753	0.716
27	Manufacture of electrical equipment	0.777	0.783	0.789	0.832
28	Manufacture of machinery and equipment n.e.c.	0.763	0.737	0.739	0.762
29	Manufacture of motor vehicles, trailers and semi-trailers	0.644	0.588	0.532	0.513

<b>Div</b>	<b>Description</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
30	Manufacture of other transport equipment	0.860	0.802	0.687	0.627
31	Manufacture of furniture	0.754	0.764	0.787	0.816
32	Other manufacturing	0.717	0.723	0.711	0.717
33	Repair and installation of machinery and equipment	0.602	0.593	0.615	0.644
35	Electricity, gas, steam and air conditioning supply	2.679	2.643	1.918	1.447
36	Water collection, treatment and supply	1	1	1	1
37	Sewerage	0.620	0.651	0.663	0.717
38	Waste collection, treatment and disposal activities; materials recovery	0.711	0.653	0.594	0.584
39	Remediation activities and other waste management services	0.973	0.756	0.697	0.487
41	Construction of buildings	0.721	0.731	0.768	0.765
42	Civil engineering	0.672	0.666	0.660	0.669
43	Specialised construction activities	0.714	0.723	0.711	0.697
45	Wholesale and retail trade and repair of motor vehicles and motorcycles	0.746	0.769	0.781	0.785
46	Wholesale trade, except of motor vehicles and motorcycles	0.843	0.844	0.840	0.842
47	Retail trade, except of motor vehicles and motorcycles	0.993	0.971	0.990	0.991
49	Land transport and transport via pipelines	0.748	0.670	0.658	0.636
50	Water transport	0.639	0.599	0.609	0.532
51	Air transport	0.703	0.601	0.656	0.632
52	Warehousing and support activities for transportation	0.704	0.705	0.700	0.701
53	Postal and courier activities	0.571	0.607	0.612	0.615
55	Accommodation	0.754	0.724	0.711	0.751
56	Food and beverage service activities	0.713	0.699	0.704	0.698
58	Publishing activities	0.818	0.815	0.783	0.758
59	Film and television programme production, music publishing etc	1.018	0.774	0.777	0.841
60	Programming and broadcasting activities	0.678	0.633	0.568	0.623
61	Telecommunications	0.925	0.781	0.790	0.763
62	Computer programming, consultancy and related activities	0.646	0.630	0.626	0.636
63	Information service activities	0.671	0.660	0.631	0.648
64	Financial service activities, except insurance and pension funding	0.980	0.940	0.857	0.740
65	Insurance and pension funding, except compulsory social security	0.787	0.824	0.848	0.850



<b>Div</b>	<b>Description</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
66	Activities auxiliary to financial services and insurance activities	0.558	0.569	0.578	0.611
68	Real estate activities	0.809	0.781	0.780	0.766
69	Legal and accounting activities	0.505	0.499	0.488	0.495
70	Activities of head offices; management consultancy activities	0.683	0.712	0.720	0.727
71	Architectural and engineering activities; technical testing and analysis	0.630	0.620	0.609	0.611
72	Scientific research and development	0.792	0.806	0.805	0.815
73	Advertising and market research	0.798	0.833	0.832	0.860
74	Other professional, scientific and technical activities	0.677	0.701	0.691	0.709
75	Veterinary activities	0.904	0.816	0.768	0.762
77	Rental and leasing activities	0.862	0.890	0.870	0.815
78	Employment activities	1.125	1.123	1.190	1.177
79	Travel agency, tour operator and related activities	0.816	0.767	0.740	0.701
80	Security and investigation activities	0.892	0.864	0.873	0.919
81	Services to buildings and landscape activities	1.001	1.002	1.021	0.988
82	Office administrative, office support and other business support activities	0.871	0.861	0.837	0.810
84	Public administration and defence; compulsory social security	0.460	0.422	0.393	0.352
85	Education	0.536	0.520	0.528	0.540
86	Human health activities	0.561	0.537	0.539	0.547
87	Residential care activities	0.876	0.873	0.889	0.913
88	Social work activities without accommodation	0.794	0.808	0.823	0.837
90	Creative, arts and entertainment activities	0.920	0.939	0.904	0.884
91	Libraries, archives, museums and other cultural activities	0.667	0.651	0.679	0.745
92	Gambling and betting activities	0.639	0.572	0.572	0.642
93	Sports activities and amusement and recreation activities	0.739	0.744	0.788	0.763
94	Activities of membership organisations	0.635	0.648	0.647	0.632
95	Repair of computers and personal and household goods	0.603	0.671	0.678	0.661
96	Other personal service activities	0.742	0.729	0.696	0.663