

Revisions to Workforce Jobs

March 2012

Introduction

This article explains the developments and revisions to the Workforce Jobs (WFJ) series, released by the Office for National Statistics (ONS) on 14 March 2012 in the *Labour Market Statistical Bulletin*.

WFJ is a quarterly measure of the number of jobs in the United Kingdom (UK) and is the preferred measure of the change in jobs by industry. It is a compound source that draws on a range of employer surveys, household surveys and administrative sources. WFJ is the sum of employee jobs (EJ) measured primarily by employer surveys (predominantly the Short-Term Employment Surveys (STES) and the Quarterly Public Sector Employment Survey (QPSES)), self-employment jobs (SEJ) from the Labour Force Survey (LFS), and government-supported trainees (GST) and Her Majesty's Forces (HMF) from administrative sources (see **Annex A**). A variety of outputs by industry, region, gender and full/part-time status are produced for a range of publications and users.

A fundamental redevelopment of WFJ sources, classifications, methods and systems was recently undertaken and is explained clearly in the article '[Revisions to Workforce Jobs](#)' (Barford 2010). Since the publication of that article, further developments have ensued and are explained in the article '[Revisions to Workforce Jobs March 2011](#)' (Matthews and Hess 2011).

This current article explains, in detail, the various causes of revisions to previously published WFJ series, up to and including 2011 Q3 (see **Annexes B and C**) most notably:

- Benchmarking Great Britain (GB) quarterly EJ series to the latest Business Register Employment Survey (BRES) estimates for 2010;
- Improvements to the method of estimating the number of jobs by region and industry;
- Improvements to the Workforce Jobs time-series for the periods 1978-1981;
- The inclusion of estimates from ONS's Construction survey for the first time.

Benchmarking GB Employee Jobs to the Business Register Employment Survey (BRES)

Benchmarking is an annual process to align the quarterly GB EJ series to the latest estimates from BRES. BRES is a relatively new ONS survey, the aim of which is to maintain the Inter-Departmental Business Register (IDBR) and provide the basis for annual estimates of employment. BRES is based on a sample of approximately 80,000 reporting units¹, a much larger sample than STES, and so generally

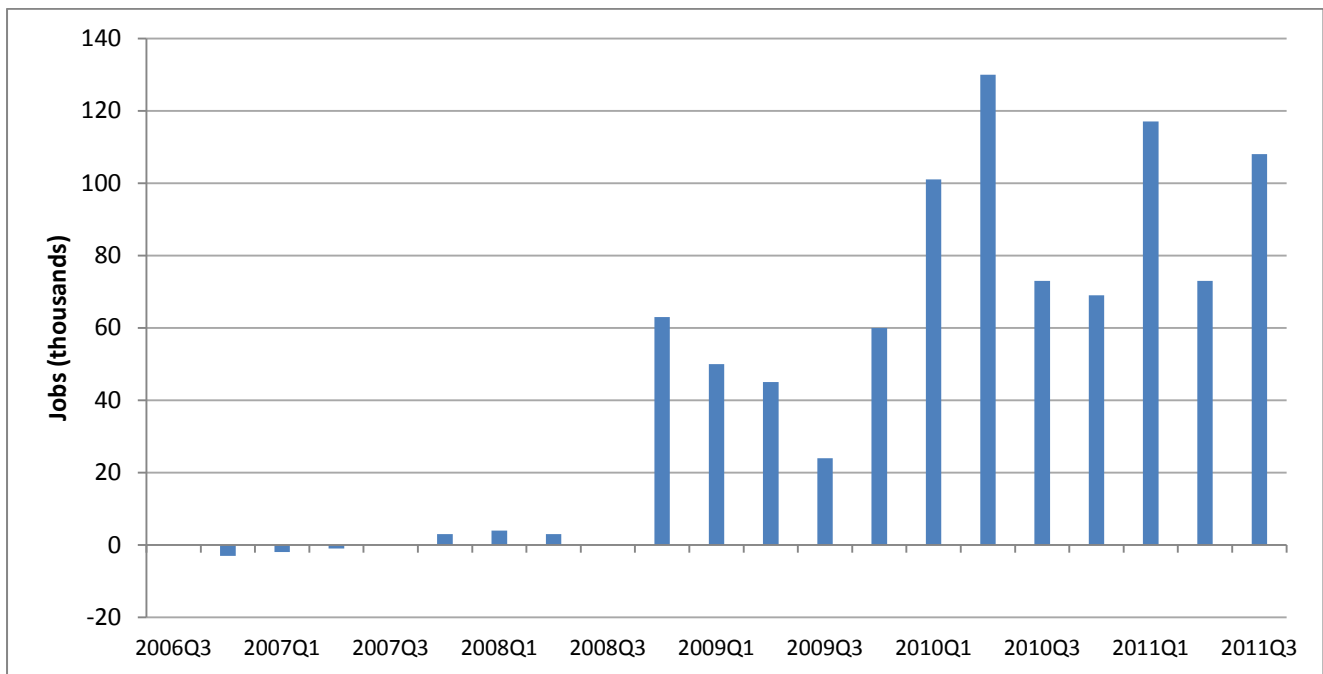
¹ Reporting units hold the mailing address to which survey forms are sent. The form can cover the enterprise as a whole, or parts of the enterprise identified by lists of local units.

produces more accurate and detailed estimates of the level of employment. BRES estimates refer to Q3 of a given year.

Benchmarking to BRES 2010

The 2010 benchmarking process caused an upward revision to the level of employee jobs in September 2010 of around 60,000. It is important to note that due to a change in source for public sector employment from 2008 Q4, as described as part of Barford (2010), the short-term employer survey (STES) estimates are now only benchmarked to BRES private sector estimates from this point. **Figure 1** shows total revisions to non-seasonally adjusted employee jobs, which include the effects of the 2010 benchmark and other adjustments described below.

Figure 1 Revisions to NSA Employee Jobs



Benchmarking contributed to upward revisions to some industries and downward revisions to others. The largest upward revision was found in SIC 85 (education), which increased by 82,000 employee jobs. The largest downward revision was found in SIC 43 (specialised construction activities), which decreased by 60,000 employee jobs. **Annex B** shows the revisions to WFJ by component at the whole economy level.

Improvements to the method of estimating the number of jobs by region and industry

As previously mentioned, a fundamental redevelopment of WFJ sources, classifications, methods and systems was recently undertaken and is explained clearly in the article [‘Revisions to Workforce Jobs’](#) (Barford 2010). One of the key changes highlighted in this article was the replacement of a matched-pairs estimator with a point-in-time ratio estimator, ONS’s standard method. This change was aimed at

removing the bias caused by the matched-pairs method. A matched-pairs method tends to underestimate change over time, as it excludes the births and deaths of businesses in the sample. In essence, only those businesses sampled in two consecutive periods are used to produce estimates of change. This bias used to cause large revisions when the STES series were benchmarked retrospectively to Business Register Employment Survey (BRES) estimates (and formerly to the Annual Business Inquiry (ABI)).

In contrast, the point-in-time estimator includes all sampled businesses in each and every period, which reduces the bias over-time. The trade-off is an increase in volatility caused by the inclusion of the rotated part of the sample for small and medium sized businesses. Sample rotation spreads the administrative burden; ensuring businesses are selected for a limited number of periods.

Unfortunately, the degree of volatility of regional estimates at an industry level, since the inception of the point-in-time ratio estimator, has been greater than anticipated and in general has been met unfavourably by users, particularly those that are interested in regional data. There are a number of instances, for example, whereby businesses have been rotated in to a region and served to distort the level of jobs for a particular industry, usually for a period of 5 quarters, which is the length of time that a small or medium sized business remains in the sample. This is explained in the remainder of this section.

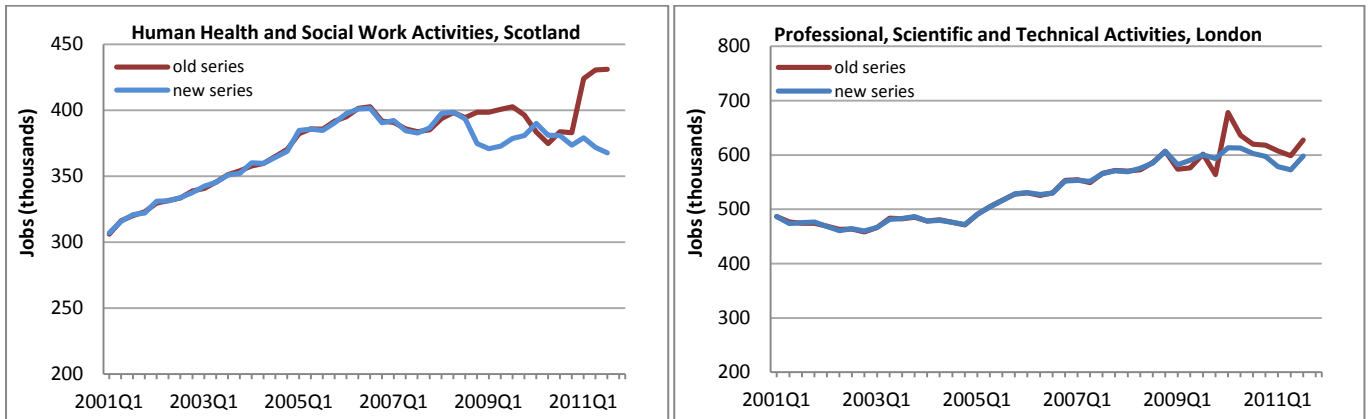
Some of the strata that form the STES sample contain very few units compared to the overall population, and hence require very large associated design weights (the ratio of business count from the population and business count from the sample). A proportion of these units are rotated each quarter. Since there is no regional dimension to the sample design (it is at GB level) the number and type of units being rotated in or out of any 'regional industry' will vary over time. Thus for any period, one or some of the highly-weighted units may be rotated in or out of a particular regional industry without being balanced by a similar movement in the other direction. This can lead to extreme volatility.

To account for this, estimates are calibrated to known regional employment totals from the sampling frame (the Inter-Departmental Business Register or 'IDBR'). This methodology makes use of a two-way calibration with respect to marginal totals of industry section and region; weights are calculated so that in each section and each region, the estimate of total employment is equal to the total register employment. However, as alluded to above, results over the last seven quarters suggested that in some cases this level of calibration was too broad to produce reliable estimates of region by industry section.

The new, improved method involves calibrating or 'controlling' estimates to a more targeted IDBR – based total. Weights are now calculated so that in each 'regional section' (the cross classification of region and industry) the estimate of total employment is equal to the total register employment. As a consequence, new estimates at a region by industry section level should be driven more by differences between returned and registered survey data than the current version and thus less volatile. This change has been worked back to 2008 Q3, which is consistent with the change in estimator outlined above and has caused substantial revisions to some series. [Annex C](#) shows the revisions to WFJ by region and industry as a consequence of the change in methodology.

Figure 2 shows examples of two regional industry sections where the WFJ estimate has been significantly improved by the new method (there are many similar cases).

Figure 2 Previously published versus revised Seasonally Adjusted Workforce jobs for selected domains



Regional estimates below section level

The methodology change, described above, also necessitates a change to the production process of regional series by lower level Standard Industrial Classification (it should be noted that the discussed volatility at the level of industry section by region is further exacerbated in lower level industry series on the current basis). Instead of these estimates being routinely produced by ONS, users will be recommended to take regional estimates from BRES (Business Register & Employment Survey) for these lower level industries, calculate the proportions relative to their industry section and apply these to the improved quarterly Employee Jobs estimate of region by industry section².

To alleviate concerns regarding the timeliness of BRES and applying a fixed annual ratio to quarterly estimates, it is important to note that the current Workforce Jobs methodology makes heavy use of the IDBR (Inter-Departmental Business Register) to apportion sample returns to local units, which in many cases is less timely than BRES. As such, the proposed method is not likely to reduce the quality of regional estimates at this lower level of aggregation.

It is important to note that estimates at UK and GB level (at all levels of industry) are not affected.

Removal of the discontinuities at 1981 and 1996 due to the transition from Standard Industrial Classification 2003 (SIC 2003) and SIC 2007

The transition from SIC 2003 to SIC 2007 (Hughes et al 2009) caused a discontinuity between December 1995 Q4 and March 1996 Q1 which was removed as part of the March 2011 publication in the then Government Office Regions (GOR) and the Great Britain (GB) series as described in the article 'Revisions to Workforce Jobs March 2011'. However a discontinuity still remained in the GB estimates between June 1978 Q2 and September 1981 Q3 at division level. The series has now been reworked by linking back the GB data from 1981 Q3 to 1978 Q2 at division level while maintaining the overall totals.

² Data are not published on the ONS website at this level, but are currently made available on request. This affects a small number of users who have all been contacted separately.

Improvements have also been made to the seasonally adjusted Workforce Jobs series at section level between 1978 Q2 and 1996 Q1 addressing issues caused by the conversion from SIC 2003 to SIC 2007. The overall Workforce jobs totals have been maintained at whole economy level.

Construction

ONS took over responsibility for the construction employer survey from Department for Business, Innovation and Skills (BIS)³ in 2009 and is now able to use these as the source for short-term employee jobs in construction in place of the LFS. This has been incorporated from 2010 Q4.

LFS construction estimates have been retained prior to this period and have been revised back to 2001 due to the LFS re-weighting exercise in May 2011.

Agriculture

The Labour Force Survey (LFS) currently provides WFJ with the GB short-term employee jobs series for agriculture for both public and private sectors. These are then benchmarked to the equivalent BRES series. The LFS was re-weighted in May 2012 with revised series being produced back to 2001.

General Practitioners (GPs) and Dentists

Estimates for GPs and Dentists were previously based on a range of administrative sources. However, as of mid-2010, businesses in these domains have been sampled as part of STES, which has improved timeliness and accuracy of estimates. These are now incorporated within WFJ series from 2010 Q3.

Banks

The source of WFJ estimates for Banks has changed from a combination of the British bankers Association (BBA) and the Monthly Wages and Salaries Survey (MWSS), to STES, which ensures greater consistency with other WFJ domains. This has led to small revisions back to 2010 Q3⁴ due to differences in the quarterly reference period between MWSS and STES and a slight difference in the wording of the question on the survey form (MWSS asks for the number of people on the payroll each month, whereas STES asks for the number of people employed by the company on a specific day in the middle of the quarter month).

Public Sector Employment

As detailed by Barford (2010), WFJ now makes use of ONS's official public sector employment (PSE) estimates for GB. These inputs are not benchmarked as they are the definitive measure of PSE. PSE estimates were revised at 2011 Q3 and so these revisions have now been applied to WFJ inputs. These revisions go back to 2008 Q4 and are predominantly in sections O, P and Q.

³ Previously known as Department for Business, Enterprise and Regulatory Reform (BERR)

⁴ Besides revisions caused by benchmarking process

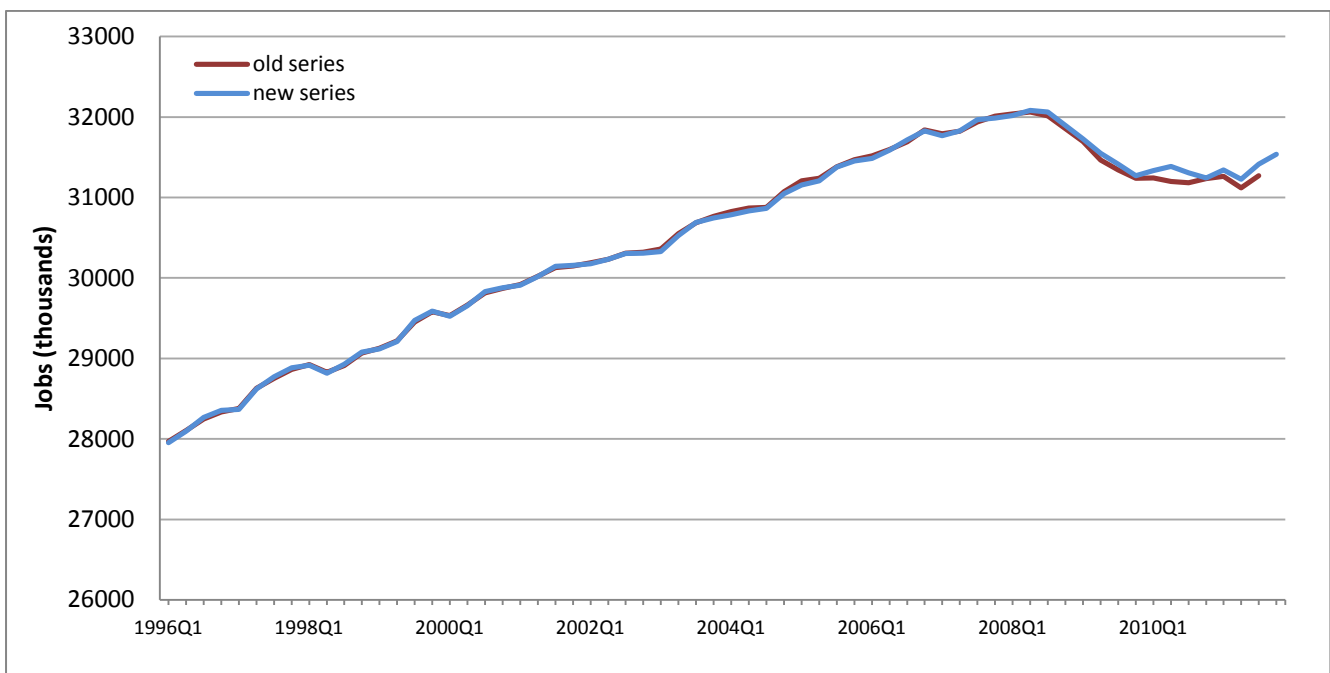
Seasonal Adjustment

Seasonal adjustment is the process of identifying and removing the seasonal components from a series to leave the underlying trend and irregular components. The revised WFJ series have undergone a seasonal adjustment review, by ONS's Methodology Directorate, causing revisions back to 1978 Q2.

The WFJ system seasonally adjusts using X12 ARIMA. Constraining processes are used to ensure the WFJ components and broad sections add to the same total. The current process involves seasonally adjusting WFJ components by sections by regions and then aggregates the series through these three hierarchical dimensions. This bottom-up approach maintains additivity throughout the seasonally adjusted dataset without the need for constraining. It also provides more seasonally adjusted series by industry and by region and enables the regional statistical bulletin tables to be produced with the same breakdowns and layouts as the national.

Figure 2 compares the previously published and revised seasonally adjusted UK Workforce jobs series from 1996 Q1.

Figure 2 Previously published versus revised UK SA Workforce jobs



Government Supported trainees (GSTs)

The Department for Business, Innovation and Skills (BIS) and the devolved administrations provide the information for these series and small revisions have been taken on.

Northern Ireland jobs

WFJ estimates for Northern Ireland are provided by the Department of Enterprise Technology and Innovation in Northern Ireland (DETINI). DETINI have revised their series back to 2009 Q4 (on a not seasonally adjusted basis).

GB self-employed jobs

The LFS is used as the measure of self-employment jobs (SEJ). No revisions have been included in the SEJ component of WFJ. It is anticipated that this series will be revised back to 2001 in December 2012.

References

Barford N (2010) 'Revisions to Workforce Jobs', Economic & Labour Market Review, Vol 4 No 9. Available at:

<http://www.ons.gov.uk/ons/rel/wfj/workforce-jobs/revisions-to-workforce-jobs---july-2010/revisions-to-workforce-jobs--july-2010.pdf>

Hughes J C, James G, Evans A and Prestwood D (2009) 'Implementation of Standard Industrial Classification 2007: December 2009 update', Economic & Labour Market Review, Vol 3 No 12. Available at: <http://www.ons.gov.uk/ons/rel/elmr/economic-and-labour-market-review/no--12--december-2009/implementation-of-standard-industrial-classification-2007--december-2009-update.pdf>

Matthews D and Hess S (2011) 'Revisions to Workforce Jobs - March 2011. Available at: <http://www.ons.gov.uk/ons/rel/wfj/workforce-jobs/march-2011/revisions-to-workforce-jobs.pdf>

Annex A – Workforce Jobs sources

Component		Source
Employee Jobs		
Great Britain	Private Sector	Short Term Employer Surveys (STES), benchmarked to the Business Register Employment Survey (BRES)
	Public Sector	Public Sector Employment (PSE) from Quarterly Public Sector Employment Surveys (QPSES) and administrative sources from other government departments and devolved administrations
	Agriculture	Labour Force Survey (LFS), benchmarked to BRES
	Construction	Short Term Employer Surveys (STES), benchmarked to the Business Register Employment Survey (BRES)
	Air transport	Civil Aviation Authority (CAA), benchmarked to BRES
Northern Ireland		Department of Enterprise, Trade and Investment Northern Ireland (DETI NI)
Self-Employed Jobs		Labour Force Survey (LFS) - main and second jobs by industry by region
Government Supported Trainees		
England		Department for Business, Innovation and Skills (BIS), split by industry using LFS
Wales		Welsh Assembly Government (WAG), split by industry using LFS
Scotland		Scottish Government (SG), split by industry using LFS
Northern Ireland		Department of Enterprise, Trade and Investment Northern Ireland (DETI NI), split by industry using LFS
Her Majesty's Forces		Defence Analytical Services and Advice (DASA)

Annex B – Revision tables, Workforce Jobs by Component

United Kingdom			Thousands and per cent, seasonally adjusted												
Workforce Jobs			Employee jobs			Self-employment jobs			HM Forces			Government-supported trainees			
	Revised level	Change	Change	Revised level	Change	Change	Revised level	Change	Change	Revised level	Change	Change	Revised level	Change	Change
	(000s)	(000s)	per cent	(000s)	(000s)	per cent	(000s)	(000s)	per cent	(000s)	(000s)	per cent	(000s)	(000s)	per cent
Jun-78	26862	0	0	24244	0	0	2285	0	0	332	0	0	0	0	0
Sep-78	26964	0	0	24342	1	0	2288	0	0	335	0	0	0	0	0
Dec-78	27146	1	0	24523	0	0	2291	0	0	331	0	0	0	0	0
Mar-79	27174	0	0	24554	-1	-0	2290	0	0	329	0	0	0	0	0
Jun-79	27283	0	0	24663	0	0	2292	0	0	328	0	0	0	0	0
Sep-79	27362	0	0	24702	1	0	2327	0	0	333	0	0	0	0	0
Dec-79	27411	0	0	24717	1	0	2361	0	0	333	0	0	0	0	0
Mar-80	27335	0	0	24604	0	0	2395	0	0	336	0	0	0	0	0
Jun-80	27239	0	0	24470	0	0	2432	0	0	338	0	0	0	0	0
Sep-80	26978	0	0	24168	0	0	2463	0	0	347	0	0	0	0	0
Dec-80	26686	1	0	23839	0	0	2498	0	0	349	0	0	0	0	0
Mar-81	26425	0	0	23545	0	0	2531	0	0	349	0	0	0	0	0
Jun-81	26223	0	0	23308	0	0	2567	0	0	349	0	0	0	0	0
Sep-81	26132	9	0.03	23201	10	0.04	2582	0	0	350	0	0	0	0	0
Dec-81	25921	-6	-0	22978	-5	-0.02	2596	0	0	347	0	0	0	0	0
Mar-82	25856	-9	-0	22902	-9	-0.04	2611	0	0	343	0	0	0	0	0
Jun-82	25768	4	0.02	22804	5	0.02	2626	0	0	339	0	0	0	0	0
Sep-82	25674	10	0.04	22696	10	0.04	2641	0	0	338	0	0	0	0	0
Dec-82	25463	-5	-0	22472	-5	-0.02	2655	0	0	336	0	0	0	0	0
Mar-83	25392	-8	-0	22377	-8	-0.04	2670	0	0	336	0	0	9	0	0
Jun-83	25463	5	0.02	22426	5	0.02	2685	0	0	337	0	0	16	0	0
Sep-83	25763	10	0.04	22532	10	0.04	2768	0	0	340	0	0	123	0	0
Dec-83	25915	-3	-0	22547	-3	-0.01	2852	0	0	340	0	0	176	0	0
Mar-84	26039	-7	-0	22568	-8	-0.04	2935	0	0	341	0	0	194	0	0
Jun-84	26167	4	0.02	22617	4	0.02	3018	0	0	341	0	0	191	0	0
Sep-84	26296	10	0.04	22714	9	0.04	3047	0	0	343	0	0	192	0	0
Dec-84	26374	-3	-0	22758	-3	-0.01	3075	0	0	342	0	0	199	0	0
Mar-85	26422	-6	-0	22769	-7	-0.03	3103	0	0	341	0	0	208	0	0
Jun-85	26480	3	0.01	22815	3	0.01	3134	0	0	341	0	0	191	0	0
Sep-85	26553	8	0.03	22864	8	0.04	3143	0	0	340	0	0	206	0	0
Dec-85	26518	-3	-0	22819	-2	-0.01	3153	0	0	338	0	0	209	0	0
Mar-86	26479	-6	-0	22771	-6	-0.03	3162	0	0	337	0	0	209	0	0
Jun-86	26524	0	0	22776	0	0	3173	0	0	336	0	0	239	0	0
Sep-86	26637	7	0.03	22806	7	0.03	3231	0	0	337	0	0	262	0	0
Dec-86	26681	-3	-0	22786	-3	-0.01	3289	0	0	335	0	0	271	0	0
Mar-87	26745	-5	-0	22792	-6	-0.03	3347	0	0	334	0	0	272	0	0
Jun-87	27056	1	0	22990	1	0	3412	0	0	333	0	0	321	0	0
Sep-87	27346	6	0.02	23182	6	0.03	3467	0	0	334	0	0	363	0	0
Dec-87	27592	-3	-0	23377	-3	-0.01	3522	0	0	332	0	0	362	0	0
Mar-88	27807	-5	-0	23542	-5	-0.02	3577	0	0	331	0	0	358	0	0
Jun-88	28023	0	0	23708	0	0	3635	0	0	330	0	0	350	0	0
Sep-88	28304	6	0.02	23903	6	0.03	3720	0	0	329	0	0	352	0	0
Dec-88	28496	-5	-0	23960	-4	-0.02	3804	0	0	327	0	0	405	0	0
Mar-89	28798	-4	-0	24123	-4	-0.02	3888	0	0	326	0	0	461	0	0
Jun-89	28907	-1	-0	24148	-1	-0	3971	0	0	322	0	0	467	0	0
Sep-89	29016	5	0.02	24258	5	0.02	3981	0	0	322	0	0	454	0	0
Dec-89	29116	-5	-0	24356	-5	-0.02	3992	0	0	320	0	0	448	0	0
Mar-90	29130	-7	-0	24378	-7	-0.03	4003	0	0	320	0	0	430	0	0
Jun-90	29224	0	0	24450	0	0	4019	0	0	317	0	0	438	0	0
Sep-90	29120	3	0.01	24413	4	0.02	3975	0	0	317	0	0	415	0	0
Dec-90	28896	-4	-0	24243	-4	-0.02	3932	0	0	314	0	0	407	0	0
Mar-91	28582	-7	-0	23979	-7	-0.03	3889	0	0	314	0	0	400	0	0
Jun-91	28301	-1	-0	23773	-1	-0	3848	0	0	311	0	0	369	0	0
Sep-91	28140	5	0.02	23659	6	0.03	3832	0	0	310	0	0	340	0	0
Dec-91	27986	-2	-0	23518	-2	-0.01	3815	0	0	310	0	0	343	0	0
Mar-92	27968	-8	-0	23505	-8	-0.03	3799	0	0	308	0	0	357	0	0
Jun-92	27823	-1	-0	23390	-2	-0.01	3788	0	0	304	0	0	340	0	0
Sep-92	27424	8	0.03	23048	8	0.03	3758	0	0	300	0	0	319	0	0
Dec-92	27276	3	0.01	22966	4	0.02	3672	0	0	294	0	0	344	0	0
Mar-93	27385	-8	-0	22970	-8	-0.03	3777	0	0	290	0	0	348	0	0
Jun-93	27377	-5	-0	23009	-5	-0.02	3756	0	0	285	0	0	326	0	0
Sep-93	27446	14	0.05	23087	14	0.06	3772	0	0	279	0	0	308	0	0
Dec-93	27508	7	0.03	23087	8	0.03	3832	0	0	271	0	0	318	0	0
Mar-94	27486	-11	-0	23044	-11	-0.05	3856	0	0	268	0	0	318	0	0
Jun-94	27534	-6	-0	23089	-6	-0.03	3867	0	0	262	0	0	317	0	0
Sep-94	27738	16	0.06	23283	16	0.07	3908	0	0	258	0	0	290	0	0
Dec-94	27799	10	0.04	23326	10	0.04	3939	0	0	249	0	0	286	0	0
Mar-95	27785	-13	-0	23336	-13	-0.06	3939	0	0	245	0	0	265	0	0

Jun-95	27899	-6	-0	23468	-7	-0.03	3950	0	0	241	0	0	240	0	0
Sep-95	27910	17	0.06	23490	18	0.08	3961	0	0	238	0	0	222	0	0
Dec-95	28045	10	0.04	23659	10	0.04	3932	0	0	236	0	0	217	0	0
Mar-96	27954	-16	-0.1	23619	-13	-0.06	3888	-3	-0.08	234	0	0	214	1	0.469
Jun-96	28097	-6	-0	23782	-7	-0.03	3902	1	0.03	230	0	0	183	-1	-0.54
Sep-96	28266	17	0.06	23903	15	0.06	3947	3	0.08	227	0	0	189	0	0
Dec-96	28353	19	0.07	24022	12	0.05	3917	6	0.15	225	0	0	189	0	0
Mar-97	28365	-13	-0	24120	-9	-0.04	3848	-3	-0.08	223	0	0	175	0	0
Jun-97	28621	-8	-0	24392	-9	-0.04	3849	2	0.05	220	0	0	160	-1	-0.62
Sep-97	28771	18	0.06	24537	14	0.06	3839	3	0.08	223	0	0	171	0	0
Dec-97	28882	18	0.06	24694	11	0.04	3806	6	0.16	220	0	0	162	1	0.621
Mar-98	28914	-9	-0	24774	-8	-0.03	3767	-2	-0.05	219	0	0	153	1	0.658
Jun-98	28818	-9	-0	24765	-10	-0.04	3712	3	0.08	219	0	0	122	-1	-0.81
Sep-98	28928	16	0.06	24891	14	0.06	3687	3	0.08	219	0	0	132	0	0
Dec-98	29080	13	0.04	25024	8	0.03	3711	4	0.11	219	0	0	126	1	0.8
Mar-99	29118	-8	-0	25101	-7	-0.03	3676	-1	-0.03	218	0	0	123	0	0
Jun-99	29211	-9	-0	25157	-11	-0.04	3712	3	0.08	218	0	0	124	-1	-0.8
Sep-99	29471	18	0.06	25438	13	0.05	3684	5	0.14	218	0	0	131	0	0
Dec-99	29589	9	0.03	25573	5	0.02	3670	3	0.08	217	0	0	128	0	0
Mar-00	29526	-8	-0	25566	-7	-0.03	3621	-2	-0.06	217	0	0	122	1	0.826
Jun-00	29657	-6	-0	25737	-7	-0.03	3590	3	0.08	217	0	0	113	-2	-1.74
Sep-00	29831	16	0.05	25894	11	0.04	3600	5	0.14	215	0	0	122	0	0
Dec-00	29879	8	0.03	25956	3	0.01	3590	4	0.11	216	0	0	118	1	0.855
Mar-01	29910	-10	-0	25990	-6	-0.02	3595	-4	-0.11	215	0	0	110	1	0.917
Jun-01	30018	-4	-0	26094	-6	-0.02	3615	3	0.08	214	0	0	95	-1	-1.04
Sep-01	30146	16	0.05	26192	8	0.03	3650	7	0.19	214	0	0	90	0	0
Dec-01	30157	7	0.02	26220	4	0.02	3633	3	0.08	214	0	0	90	0	0
Mar-02	30178	-12	-0	26235	-6	-0.02	3641	-5	-0.14	215	0	0	88	0	0
Jun-02	30231	-3	-0	26240	-4	-0.02	3692	3	0.08	214	0	0	86	0	0
Sep-02	30304	-4	-0	26290	7	0.03	3727	8	0.22	215	0	0	72	-19	-20.9
Dec-02	30307	-13	-0	26305	3	0.01	3713	1	0.03	216	0	0	72	-18	-20
Mar-03	30327	-32	-0.1	26246	-6	-0.02	3787	-7	-0.18	221	0	0	73	-19	-20.7
Jun-03	30527	-23	-0.1	26321	-3	-0.01	3914	1	0.03	223	0	0	70	-20	-22.2
Sep-03	30689	2	0.01	26370	7	0.03	4019	12	0.3	222	0	0	79	-17	-17.7
Dec-03	30745	-19	-0.1	26448	1	0	3997	3	0.08	221	0	0	79	-23	-22.5
Mar-04	30784	-43	-0.1	26514	-6	-0.02	3973	-11	-0.28	220	0	0	78	-25	-24.3
Jun-04	30835	-32	-0.1	26566	0	0	3979	-2	-0.05	218	0	0	72	-30	-29.4
Sep-04	30865	-10	-0	26633	4	0.02	3944	14	0.36	216	0	0	71	-30	-29.7
Dec-04	31047	-24	-0.1	26784	-1	-0	3977	8	0.2	214	0	0	72	-31	-30.1
Mar-05	31157	-49	-0.2	26942	-5	-0.02	3932	-12	-0.3	212	0	0	72	-32	-30.8
Jun-05	31209	-30	-0.1	26970	0	0	3963	-4	-0.1	210	0	0	67	-26	-28
Sep-05	31377	-4	-0	27067	6	0.02	4032	14	0.35	208	0	0	69	-25	-26.6
Dec-05	31454	-16	-0.1	27132	-5	-0.02	4047	9	0.22	206	0	0	69	-20	-22.5
Mar-06	31485	-32	-0.1	27177	-5	-0.02	4038	-13	-0.32	205	0	0	64	-15	-19
Jun-06	31588	-8	-0	27292	5	0.02	4039	-4	-0.1	204	0	0	54	-8	-12.9
Sep-06	31718	27	0.09	27342	11	0.04	4118	16	0.39	202	0	0	56	0	0
Dec-06	31827	-13	-0	27424	-13	-0.05	4145	2	0.05	202	0	0	56	-2	-3.45
Mar-07	31767	-26	-0.1	27374	-6	-0.02	4141	-18	-0.43	199	0	0	53	-1	-1.85
Jun-07	31829	5	0.02	27434	8	0.03	4150	-1	-0.02	198	0	0	47	-2	-4.08
Sep-07	31968	29	0.09	27536	16	0.06	4187	15	0.36	194	0	0	51	-1	-1.92
Dec-07	31987	-22	-0.1	27569	-21	-0.08	4171	3	0.07	195	1	0.515	53	-3	-5.36
Mar-08	32019	-19	-0.1	27604	1	0	4170	-17	-0.41	194	0	0	51	-4	-7.27
Jun-08	32083	20	0.06	27667	22	0.08	4173	0	0	193	0	0	50	-1	-1.96
Sep-08	32062	47	0.15	27673	17	0.06	4143	18	0.44	194	0	0	52	12	30
Dec-08	31897	40	0.13	27468	27	0.1	4183	2	0.05	193	0	0	53	11	26.19
Mar-09	31729	33	0.1	27289	42	0.15	4188	-20	-0.48	196	0	0	56	11	24.44
Jun-09	31548	82	0.26	27117	69	0.26	4177	1	0.02	197	0	0	57	11	23.91
Sep-09	31415	74	0.24	26919	43	0.16	4240	22	0.52	199	0	0	57	10	21.28
Dec-09	31269	29	0.09	26794	18	0.07	4219	1	0.02	198	0	0	59	12	25.53
Mar-10	31336	94	0.3	26785	96	0.36	4286	-19	-0.44	199	0	0	65	16	32.65
Jun-10	31388	187	0.6	26780	165	0.62	4347	6	0.14	198	0	0	64	17	36.17
Sep-10	31305	123	0.39	26699	94	0.35	4357	19	0.44	196	-1	-0.508	53	10	23.26
Dec-10	31242	9	0.03	26624	6	0.02	4374	-3	-0.07	195	0	0	49	5	11.36
Mar-11	31341	79	0.25	26782	83	0.31	4331	-9	-0.21	194	0	0	35	4	12.9
Jun-11	31228	107	0.34	26663	106	0.4	4341	0	0	193	0	0	31	1	3.333
Sep-11	31414	143	0.46	26671	134	0.5	4530	17	0.38	192	0	0	21	-9	-30

United Kingdom			Thousands and per cent, not seasonally adjusted												
Workforce Jobs			Employee jobs			Self-employment jobs			HM Forces			Government-supported trainees			
	Revised level	Change	Change	Revised level	Change	Change	Revised level	Change	Change	Revised level	Change	Change	Revised level	Change	Change
	(000s)	(000s)	per cent	(000s)	(000s)	per cent	(000s)	(000s)	per cent	(000s)	(000s)	per cent	(000s)	(000s)	per cent
Jun-78	26877	0	0	24261	0	0	2284	0	0	332	0	0	0	0	0
Sep-78	27033	0	0	24411	0	0	2287	0	0	335	0	0	0	0	0
Dec-78	27210	0	0	24589	0	0	2290	0	0	331	0	0	0	0	0
Mar-79	27028	0	0	24409	0	0	2290	0	0	329	0	0	0	0	0
Jun-79	27297	0	0	24678	0	0	2291	0	0	328	0	0	0	0	0
Sep-79	27434	0	0	24775	0	0	2326	0	0	333	0	0	0	0	0
Dec-79	27469	0	0	24776	0	0	2360	0	0	333	0	0	0	0	0
Mar-80	27192	0	0	24462	0	0	2394	0	0	336	0	0	0	0	0
Jun-80	27252	0	0	24484	0	0	2431	0	0	338	0	0	0	0	0
Sep-80	27053	0	0	24244	0	0	2462	0	0	347	0	0	0	0	0
Dec-80	26738	0	0	23892	0	0	2497	0	0	349	0	0	0	0	0
Mar-81	26287	0	0	23408	0	0	2530	0	0	349	0	0	0	0	0
Jun-81	26245	0	0	23320	0	0	2576	0	0	349	0	0	0	0	0
Sep-81	26180	0	0	23239	0	0	2591	0	0	350	0	0	0	0	0
Dec-81	25988	0	0	23036	0	0	2606	0	0	347	0	0	0	0	0
Mar-82	25752	0	0	22789	0	0	2620	0	0	343	0	0	0	0	0
Jun-82	25795	0	0	22822	0	0	2635	0	0	339	0	0	0	0	0
Sep-82	25719	0	0	22731	0	0	2650	0	0	338	0	0	0	0	0
Dec-82	25532	0	0	22532	0	0	2664	0	0	336	0	0	0	0	0
Mar-83	25279	0	0	22264	0	0	2679	0	0	336	0	0	0	0	0
Jun-83	25488	0	0	22442	0	0	2693	0	0	337	0	0	16	0	0
Sep-83	25826	0	0	22564	0	0	2777	0	0	340	0	0	146	0	0
Dec-83	25999	0	0	22612	0	0	2860	0	0	340	0	0	187	0	0
Mar-84	25915	0	0	22454	0	0	2944	0	0	341	0	0	176	0	0
Jun-84	26172	0	0	22629	0	0	3027	0	0	341	0	0	175	0	0
Sep-84	26356	0	0	22742	0	0	3055	0	0	343	0	0	216	0	0
Dec-84	26466	0	0	22832	0	0	3084	0	0	342	0	0	209	0	0
Mar-85	26298	0	0	22656	0	0	3112	0	0	341	0	0	190	0	0
Jun-85	26484	0	0	22824	0	0	3143	0	0	341	0	0	176	0	0
Sep-85	26609	0	0	22887	0	0	3152	0	0	340	0	0	229	0	0
Dec-85	26617	0	0	22900	0	0	3162	0	0	338	0	0	217	0	0
Mar-86	26360	0	0	22661	0	0	3171	0	0	337	0	0	191	0	0
Jun-86	26529	0	0	22784	0	0	3183	0	0	336	0	0	226	0	0
Sep-86	26687	0	0	22824	0	0	3240	0	0	337	0	0	285	0	0
Dec-86	26782	0	0	22871	0	0	3298	0	0	335	0	0	278	0	0
Mar-87	26632	0	0	22687	0	0	3356	0	0	334	0	0	255	0	0
Jun-87	27060	0	0	22995	0	0	3421	0	0	333	0	0	311	0	0
Sep-87	27388	0	0	23195	0	0	3476	0	0	334	0	0	383	0	0
Dec-87	27694	0	0	23465	0	0	3531	0	0	332	0	0	366	0	0
Mar-88	27703	0	0	23442	0	0	3587	0	0	331	0	0	343	0	0
Jun-88	28028	0	0	23710	0	0	3646	0	0	330	0	0	343	0	0
Sep-88	28340	0	0	23912	0	0	3730	0	0	329	0	0	369	0	0
Dec-88	28597	0	0	24048	0	0	3814	0	0	327	0	0	408	0	0
Mar-89	28701	0	0	24029	0	0	3898	0	0	326	0	0	448	0	0
Jun-89	28917	0	0	24153	0	0	3980	0	0	322	0	0	462	0	0
Sep-89	29045	0	0	24264	0	0	3991	0	0	322	0	0	468	0	0
Dec-89	29211	0	0	24439	0	0	4001	0	0	320	0	0	450	0	0
Mar-90	29058	0	0	24290	0	0	4012	0	0	320	0	0	436	0	0
Jun-90	29230	0	0	24462	0	0	4027	0	0	317	0	0	423	0	0
Sep-90	29127	0	0	24413	0	0	3984	0	0	317	0	0	413	0	0
Dec-90	28991	0	0	24318	0	0	3941	0	0	314	0	0	418	0	0
Mar-91	28516	0	0	23898	0	0	3898	0	0	314	0	0	406	0	0
Jun-91	28314	0	0	23794	0	0	3856	0	0	311	0	0	353	0	0
Sep-91	28139	0	0	23652	0	0	3840	0	0	310	0	0	338	0	0
Dec-91	28075	0	0	23586	0	0	3824	0	0	310	0	0	355	0	0
Mar-92	27905	0	0	23426	0	0	3808	0	0	308	0	0	363	0	0
Jun-92	27831	0	0	23417	0	0	3785	0	0	304	0	0	325	0	0
Sep-92	27411	0	0	23036	0	0	3760	0	0	300	0	0	317	0	0
Dec-92	27373	0	0	23030	0	0	3693	0	0	294	0	0	356	0	0
Mar-93	27279	0	0	22888	0	0	3748	0	0	290	0	0	354	0	0
Jun-93	27385	0	0	23036	0	0	3753	0	0	285	0	0	311	0	0
Sep-93	27452	0	0	23072	0	0	3795	0	0	279	0	0	306	0	0
Dec-93	27571	0	0	23155	0	0	3816	0	0	271	0	0	329	0	0
Mar-94	27394	0	0	22956	0	0	3847	0	0	268	0	0	323	0	0
Jun-94	27542	0	0	23116	0	0	3862	0	0	262	0	0	302	0	0
Sep-94	27745	0	0	23266	0	0	3932	0	0	258	0	0	289	0	0
Dec-94	27872	0	0	23403	0	0	3924	0	0	249	0	0	296	0	0
Mar-95	27685	0	0	23240	0	0	3930	0	0	245	0	0	270	0	0
Jun-95	27901	0	0	23493	0	0	3942	0	0	241	0	0	225	0	0
Sep-95	27923	0	0	23475	0	0	3988	0	0	238	0	0	222	0	0
Dec-95	28132	0	0	23746	0	0	3923	0	0	236	0	0	227	0	0
Mar-96	27854	0	0	23516	0	0	3889	0	0	234	0	0	214	0	0

Jun-96	28114	0	0	23800	0	0	3903	0	0	230	0	0	181	0	0
Sep-96	28255	0	0	23894	0	0	3945	0	0	226	0	0	189	0	0
Dec-96	28451	0	0	24116	0	0	3919	0	0	225	0	0	190	0	0
Mar-97	28257	0	0	24010	0	0	3849	0	0	224	0	0	175	0	0
Jun-97	28627	0	0	24398	0	0	3851	0	0	220	0	0	159	0	0
Sep-97	28766	0	0	24535	0	0	3838	0	0	222	0	0	171	0	0
Dec-97	28991	0	0	24801	0	0	3807	0	0	220	0	0	163	0	0
Mar-98	28804	0	0	24662	0	0	3769	0	0	220	0	0	153	0	0
Jun-98	28810	0	0	24757	0	0	3712	0	0	219	0	0	121	0	0
Sep-98	28928	0	0	24893	0	0	3685	0	0	218	0	0	132	0	0
Dec-98	29201	0	0	25141	0	0	3715	0	0	219	0	0	127	0	0
Mar-99	29013	0	0	24992	0	0	3678	0	0	218	0	0	124	0	0
Jun-99	29190	0	0	25138	0	0	3712	0	0	218	0	0	123	0	0
Sep-99	29472	0	0	25443	0	0	3681	0	0	217	0	0	131	0	0
Dec-99	29716	0	0	25696	0	0	3673	0	0	218	0	0	129	0	0
Mar-00	29426	0	0	25464	0	0	3622	0	0	218	0	0	123	0	0
Jun-00	29628	0	0	25709	0	0	3590	0	0	217	0	0	112	0	0
Sep-00	29830	0	0	25895	0	0	3599	0	0	215	0	0	121	0	0
Dec-00	30012	0	0	26085	0	0	3593	0	0	216	0	0	118	0	0
Mar-01	29814	0	0	25892	0	0	3596	0	0	216	0	0	111	0	0
Jun-01	29988	0	0	26065	0	0	3615	0	0	214	0	0	94	0	0
Sep-01	30137	0	0	26185	0	0	3649	0	0	213	0	0	90	0	0
Dec-01	30295	0	0	26354	0	0	3636	0	0	215	0	0	91	0	0
Mar-02	30083	0	0	26139	0	0	3641	0	0	215	0	0	88	0	0
Jun-02	30204	0	0	26212	0	0	3692	0	0	214	0	0	86	0	0
Sep-02	30285	-19	-0.1	26273	0	0	3726	0	0	214	0	0	72	-19	-21
Dec-02	30452	-18	-0.1	26446	0	0	3717	0	0	216	0	0	73	-18	-20
Mar-03	30236	-19	-0.1	26153	0	0	3788	0	0	221	0	0	74	-19	-20
Jun-03	30503	-19	-0.1	26296	0	0	3915	0	0	223	0	0	69	-19	-22
Sep-03	30662	-17	-0.1	26346	0	0	4017	0	0	221	0	0	79	-17	-18
Dec-03	30892	-23	-0.1	26589	0	0	4001	0	0	222	0	0	79	-23	-23
Mar-04	30696	-27	-0.1	26423	0	0	3975	0	0	220	0	0	78	-27	-26
Jun-04	30813	-29	-0.1	26542	0	0	3981	0	0	218	0	0	71	-29	-29
Sep-04	30834	-29	-0.1	26606	0	0	3941	0	0	215	0	0	72	-29	-29
Dec-04	31192	-31	-0.1	26925	0	0	3980	0	0	215	0	0	73	-30	-29
Mar-05	31067	-32	-0.1	26851	0	0	3932	0	0	213	0	0	71	-32	-31
Jun-05	31191	-26	-0.1	26950	0	0	3965	0	0	210	0	0	67	-25	-27
Sep-05	31344	-25	-0.1	27038	0	0	4029	0	0	207	0	0	69	-26	-27
Dec-05	31599	-20	-0.1	27273	0	0	4051	0	0	206	0	0	69	-20	-22
Mar-06	31397	-16	-0.1	27085	0	0	4042	0	0	206	0	0	65	-15	-19
Jun-06	31574	-8	-0	27273	0	0	4044	0	0	204	0	0	53	-8	-13
Sep-06	31683	0	0	27311	0	0	4115	0	0	202	0	0	56	0	0
Dec-06	31965	-4	-0	27565	-3	-0	4141	0	0	202	0	0	56	-2	-3.4
Mar-07	31674	-5	-0	27276	-2	-0	4145	0	0	200	0	0	53	-2	-3.6
Jun-07	31814	-4	-0	27417	-1	-0	4154	0	0	197	0	0	46	-2	-4.2
Sep-07	31933	-1	-0	27505	0	0	4183	0	0	194	0	0	51	-1	-1.9
Dec-07	32129	-1	-0	27715	3	0.01	4167	0	0	195	0	0	53	-3	-5.4
Mar-08	31923	0	0	27503	4	0.01	4175	0	0	194	0	0	51	-3	-5.6
Jun-08	32068	2	0.01	27648	3	0.01	4177	0	0	193	0	0	49	-2	-3.9
Sep-08	32030	12	0.04	27645	0	0	4139	0	0	194	0	0	52	11	26.8
Dec-08	32039	75	0.23	27615	63	0.23	4177	0	0	193	0	0	54	12	28.6
Mar-09	31642	60	0.19	27193	50	0.18	4197	0	0	196	0	0	57	12	26.7
Jun-09	31535	57	0.18	27098	45	0.17	4183	0	0	197	0	0	57	13	29.5
Sep-09	31378	33	0.11	26891	24	0.09	4231	0	0	199	0	0	57	10	21.3
Dec-09	31405	72	0.23	26936	60	0.22	4212	0	0	198	0	0	59	12	25.5
Mar-10	31255	117	0.38	26693	101	0.38	4297	0	0	199	0	0	66	16	32
Jun-10	31370	147	0.47	26757	130	0.49	4352	0	0	197	0	0	63	17	37
Sep-10	31267	82	0.26	26670	73	0.27	4348	0	0	196	0	0	53	10	23.3
Dec-10	31380	74	0.24	26768	69	0.26	4368	0	0	195	0	0	50	6	13.6
Mar-11	31265	122	0.39	26693	117	0.44	4342	0	0	194	0	0	35	4	12.9
Jun-11	31206	75	0.24	26636	73	0.27	4346	0	0	193	0	0	30	1	3.45
Sep-11	31376	99	0.32	26641	108	0.41	4522	0	0	191	-1	-0.5	21	-9	-30

[Annex C – Revision tables, Workforce Jobs by Region and Industry \(Hyperlink\)](#)