Comparison of LFS and WFJ statistics on jobs

Background

The Review of Employment and Jobs Statistics¹ recommended that comparisons between estimates of jobs produced from household and business surveys should be made on a quarterly basis. Following that recommendation, this document compares estimates of jobs from the Labour Force Survey (LFS) and from the Workforce Jobs series (WFJ) for June 2011. This document is updated on a quarterly basis, when the latest WFJ statistics are released.

The concept of employment (measured by the LFS as the number of people working at least one hour during the survey reference week) differs from the concept of jobs, since a person can have more than one job, and some jobs may be shared by more than one person. The LFS, which collects information mainly from residents of private households, is the preferred source of statistics on employment. The LFS can also be used to produce estimates of the total number of jobs in the UK, by adding together the headline employment figures (which are equivalent to main jobs) and those for workers with a second job. However, the WFJ series, which is compiled mainly from surveys of businesses, is the preferred source of statistics on jobs by industry, since it provides a more reliable industry breakdown than the LFS.

Comparison: June 2011

Part A of Table 1 illustrates how the LFS estimate of total UK jobs for May - July 2011 is calculated by adding together the headline LFS figure for total employment (29.169 million) and workers with second jobs (1.131 million). Part B of the table compares this total UK jobs estimate (30.301 million) and its components with the corresponding WFJ figures for June 2011. The LFS total jobs estimate is lower than the WFJ figure by 0.859 million (2.8 per cent).

Reconciliation

The Review of Employment and Jobs Statistics identified about 30 reasons why the LFS and WFJ estimates of jobs differ from each other. Some of these factors can be quantified using information from the LFS and other sources, while others are much more difficult to measure. Part C of Table 1 shows the measurable factors causing differences between the LFS and WFJ figures. A description of these factors, and how they are measured, is available at: http://www.ons.gov.uk/ons/rel/lms/labour-market-statistics/august-2011/lfs-wfj-reconciliation.pdf

The estimates of temporary foreign workers and over-counting of self-employed are discussed in the article "Comparison of Statistics on Jobs: September 2007" published in *Economic & Labour Market Review, March 2008*, and can be found on the National Statistics website:

http://www.ons.gov.uk/ons/rel/elmr/economic-and-labour-market-review/no--3--march-2008/comparison-of-statistics-on-jobs--september-2007.pdf

The final row of Table 1 shows estimates of total UK jobs that have been adjusted to take account of the measurable factors causing differences between the LFS and WFJ statistics. Once these factors have been taken into consideration, the adjusted LFS estimate of total UK jobs is higher than the adjusted WFJ estimate, by 351,000 (1.1 per cent).

The difference between the adjusted LFS and WFJ estimates (351,000) is within the bounds of the sampling variability of the difference. The approximate sampling variability (95% confidence interval) is roughly \pm 300,000 to \pm 400,000 (based on the estimated coefficients of variation published on page 83 of the Final Report of the Review of Employment and Jobs Statistics 1). However, it should be noted that the adjustments are themselves subject to a margin of uncertainty, and there are other factors causing differences between the two sources which have not been adjusted for. There are about 20 additional factors that could explain the remaining difference between the LFS and WFJ estimates. These are described in the Final Report of the Review 1 but they are not shown in Table 1 because they are difficult to quantify. As well as sampling variability, they include, for example, timing effects. The LFS estimates are averages for three month periods, whereas business surveys measure the number of jobs on a particular day.

Table 1: Labour Force Survey and Workforce Jobs statistics of jobs contributing to UK output June 2011, seasonally adjusted

Thousands and per cent

Julie 2011, Seasonally adjusted			THOUSAIN	is and per cent
	Labour Force Survey ^a ('000s)	Workforce Jobs ^b ('000s)	Difference: LFS-WFJ ('000s)	% Difference: LFS-WFJ as % of LFS
A. LFS employment and jobs estimates				
LFS total employment (main jobs) ^c LFS workers with second jobs	29,169 1,131			
Total LFS jobs	30,301			
B. Components of LFS and WFJ total jobs				
Employee jobs ^d Employee main jobs Employee second jobs	25,782 25,019 763	26,596 	-813 	-3.2
Self-employment jobs Self-employment main jobs Self-employment second jobs	4,341 3,973 368	4,341 3,973 368	0 0 0	0.0 0.0 0.0
Government-supported trainees Unpaid family workers HM Forces ^d	90 88 	30 193	59 88 -193	66.1
Total UK jobs	30,301	31,160	-859	-2.8
C. Adjustments for survey coverage and response issues ^f				
Jobs not covered by the LFS Temporary foreign workers ⁹ Armed forces not living in private accommodation ^h Workers living in communal establishments ⁱ 3rd and subsequent employee jobs ^j	80 100 80 100			
Jobs not covered by the WFJ series				
Employee jobs in private households and extra-territorial organisations ^k Unpaid family workers ^l Employment in Managed Service Companies excluded from business survey sample frame ^m	 	90 90 20		
Survey response issues				
Double-counting due to over-reporting of self-employment ⁿ LFS non-response bias ^o LFS proxy response error (main jobs) ^p LFS proxy response error (2nd jobs) ^p ABI/STES response errors ^q	 230 150 120	-450 		
D: Adjusted estimates of total UK jobs	31,161	30,810	351	1.1
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^a Labour Force Survey estimates for May-Jul 2011.

Note: The sampling variability of the difference between the LFS and WFJ estimates of jobs (95% confidence interval) is estimated to be roughly \pm 300,000 to \pm 400,000.

^b Workforce Jobs series estimates for June 2011.

^c The headline LFS employment figure comprises: employee and self-employment main jobs; government-supported trainees and unpaid family workers.

^d The LFS employee jobs figures include armed forces employees living in private households.

^e Unpaid family workers are not included in the WFJ estimate of total UK jobs.

_f For details of each issue, see:http://www.ons.gov.uk/ons/rel/elmr/economic-and-labour-market-review/no--3--march-2008/comparison-of-statistics-on-jobs--september-2007.pdf

^g Based on ONS experimental short-term migration estimates

h WFJ armed forces figure minus LFS microdata estimate of armed forces employees and extra-territorial organisations (Apr-Jun 2011).

¹ Estimate from pilot survey of communal establishments, Great Britain, autumn 2000.

^j Annual estimate from Family Resources Survey: 2008/09

^k Estimate based on LFS microdata (Apr-Jun 2011). A new method of coding the industry data was introduced in January 2009. and estimates may not be entirely consistent with those of previous quarters.

¹ LFS figure for unpaid family workers May-Jul 2011.

m Based on IDBR estimated employment in MSCs which are removed from the sample frame to prevent distortion of detailed results as recommended by the Review of Workforce Jobs Benchmarking.

ⁿ Estimate based on LFS microdata (Apr-Jun 2011).

[°] Estimate based on ONS study of non-response bias (Freeth, Greenwood and Lound, 2005).

^p Estimate based on proxy response study (Dawe and Knight 1997) and LFS microdata (Apr-Jun 2011).

^q Estimate taken from ABI follow-up survey, 2004.

^{..} Not applicable

Comparison over time

Table 2 gives a comparison between the LFS and WFJ estimates of total UK jobs, and short-term changes in numbers of jobs. These estimates have not been adjusted for factors causing differences between the two sources because many of these factors cannot be measured on a quarterly basis. The LFS series shows a quarterly decrease of 83,000 jobs (0.3 per cent) and the WFJ series shows a decrease of 102,000 (0.3 per cent) between March and June 2011. The LFS series shows an increase of 32,000 (0.1 per cent) over the year to June 2011 and the WFJ series shows a decrease of 41,000 (0.1 per cent).

Table 2: Labour Force Survey and Workforce Jobs estimates of levels and changes in total UK jobs¹ United Kingdom, June 2006 to June 2011, seasonally adjusted

Thousands and per cent % Change on Total UK Jobs ('000s) Change on quarter ('000s) Change on year ('000s) % Change on year quarter % Difference: Difference: LFS-WFJ as Difference Difference: WFJ WFJ LFS-WFJ % of LFS LFS-WFJ LFS WFJ WFJ LFS-WFJ 5 6 8 9 10 11 12 13 14 DYDC 30,078 31 596 357 .lun-06 -1,518 -5.0 -123 95 250 31,691 -1,555 -5.2 -37 0.2 0.3 Sep-06 30,135 57 309 -60 0.8 1.0 Dec-06 Mar-07 30,141 30,189 150 -48 -144 96 1.2 31,840 -1,699 370 275 -102 48 31.793 -1.604 0.2 176 -99 0.6 -5.3-0.1 30,316 31,824 -1,509 -5.0 127 31 95 228 0.7 Jun-07 -1.516 -8 Sep-07 30.423 31.939 -5.0 107 115 0.4 0.4 287 248 39 1.0 0.8 30,544 30,645 -4.8 -4.5 32,009 -1,465 70 30 52 71 Mar-08 32,038 -1,394 100 0.3 0.1 456 246 210 1.5 0.8 32,063 32,015 -4.7 -5.1 24 -48 77 -30 Jun-08 30,631 -1,431 -13 -38 0.0 0.1 316 239 -1,546 -163 -115 -0.1 Sep-08 30,469 -0.5 46 76 0.2 0.2 30,476 30,230 -1,381 -1,466 7 -246 -158 -0.2 -1.4 -4.9 -161 -0.5 -415 -73 -1.1 Mar-09 31.696 -85 -0.8 -34229,942 31,466 -1,524 -5.1 -288 -230 -58 -0.7 -689 -597 -93 -2.3 -1.9 Jun-09 Sep-09 Dec-09 30.034 31.341 -1.306 -4.3 92 -125 218 0.3 -0.4 -435 -674 240 -1.4 -2.1 -1.9 29,935 31,240 -1.305 -99 -101 -0.3 -617 19 Mar-10 29,956 31,242 -1,286 -4.3 21 0.1 0.0 -274 -454 181 -0.9 -1.4 Jun-10 30,269 30,233 31,201 31,182 -932 -950 -3.1 313 -41 353 -0.1 327 -265 -0.8 Sep-10 Dec-10 -3.1 -19 -17 199 357 -36 -0.1-0.1-158 0.7 -0.5 30,311 31,233 -922 78 51 0.3 0.2 376 383 0.0 29 43 427 21 407 Mar-11 30.384 31.262 -879 -2.9 72 0.2 0.1 0.1 30,301

Notes

http://www.ons.gov.uk/ons/guide-method/method-quality/quality/nsqr/theme/labour-market/nsqr-series-report-no--44----review-of-employment-and-jobs--report.pdf

Further Information

Further information about the revisions to the WFJ series and the 'Review of Workforce Jobs Benchmarking' is available on the National Statistics website:

http://www.ons.gov.uk/ons/rel/wfj/workforce-jobs/workforce-jobs-benchmarking-review/workforce-jobs-benchmarking-review.pdf

¹ Labour Force Survey (LFS) estimates of total UK jobs have been calculated by adding together the headline LFS employment figures (MGRZ) and the LFS figures for workers with second jobs (YCBW). The LFS figures are averages for three month periods covering February-April, May-July, August-October, November-January. The Workforce Jobs (WFJ) figures are for March, June, September and December.

¹ The Final Report of the Review of Employment and Jobs Statistics is available on the National Statistics website: