



**LABOUR FORCE SURVEY  
PERFORMANCE AND QUALITY  
MONITORING REPORT**

**July - September 2007**

14 November, 2007

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# Executive Summary

## July - September 2007

### Note

Due to the move from processing the LFS on a seasonal quarter basis to processing on a calendar quarter basis from January 2006, all time series data have a break in series which corresponds to this change.

### Summary of achieved sample size

The achieved sample size for the UK LFS during July to September 2007 (JS07) was **119,605** individuals in **52,071** households. Compared with the previous quarter (AJ07), this represents a decrease of 0.65% in achieved person interviews and 0.25% in household interviews. Compared with the same period during 2006, this represents an increase in achieved person and household interviews of 0.58% and 0.87% respectively.

### Summary of response rates

During the July to September 2007 quarter, the total response rate for GB excluding imputed cases was **60.0%**. This is up 0.1 of a percentage point on the previous quarter and remained unchanged from JS06.

The total response rate for GB including imputed cases is **64.8%**. This remains unchanged from the previous quarter and 64.5% for the same quarter a year ago.

The response rate varied across each wave of the survey, ranging from **70.5%** for wave 1 cases to **54.0%** for wave 5 (excluding imputed cases). Comparative response rates for the previous quarter are 69.4% and 54.4% respectively and for the same period 12 months ago 70.1% and 55.1%.

In terms of the composition of non-response, slight differences are observed when compared with recent quarters. Outright refusals account for the majority of non-response at 45.8% which is a slight increase over the last quarter (45.2%). Refusals made directly to HQ are also up (16.4%) compared with the last quarter (16.1%) and the same period 12 months ago (14.5%). There has been an increase in non-contacts (13.3%) compared with the previous quarter (13.1%), and the same period a year ago (13.1%). Refusal to re-interview for the same period a year ago was notably higher at 25.4%, compared to 17.6% in JS07, in terms of the composition of non-response.

The wave 1 response rate for the UK was **70.0%** (this excludes imputed households - there is no imputation in the LFS at wave 1).

Regional response rate patterns indicate that the highest accumulated response rate across the five waves is 71% in West Yorkshire. The highest wave one response rate was also achieved in West Yorkshire (79%) followed by Tyne and Wear (78.2%). The lowest accumulated, wave 1 and wave 5 response rates were in Inner London, at 55.7% and 49.1% of the in-scope population respectively, followed by Outer London and West Midlands.

The overall proxy response rate is 33%. Proxy response rates by the key characteristics: age, sex, ethnicity and economic activity, reveal that the highest rates are for the 16-17 age band at 85%, the 18-19 age band at 71.7%, and for those on government schemes at 56.7%. The lowest proxy response rates are for females at 26.9%, the inactive at 29.1% and unpaid family workers at 29.8%. Rates of proxy interviews have remained largely unchanged over time.

## Executive Summary (Continued)

The average income response rate for JS07 was 84.7%. The data on income response rates by NS-SEC reveal that response rates at wave one are highest for respondents in the intermediate occupations group at 87.5%. At wave five, response rates are highest for small employers and own account workers group at 86.8%. Generally, there is little difference in the rates of the groups and the total levels of response to the income questions remain largely unchanged over time.

The data on attrition rates reveal that those who drop out of the survey between waves 1 and 5, tend to be distributed fairly evenly by key characteristics, but are over-represented in the 20-29 age band, 5-6 person households and in London and under represented in economic inactive, 60+, 2 person households and East of England.

### Delivery dates of data

The client data file for the quarter for the United Kingdom was delivered on schedule.

### Questionnaire Changes

**New questions** - No new questions were introduced this quarter.

**Amended questions** - Nato was changed to Nato7 and Cryo to Cryo7

**Quarterly Specific questions** - One question is quarter specific to the JS07 quarter: Reasons for working part-time rather than full-time - PTNCRE.

**Deleted questions** - No questions were removed from the questionnaire during the AJ07 quarter.

### Fieldwork issues

The fieldwork period covered by this quarter of the LFS was from Monday, 2 July, 2007 to Sunday 2 September, 2007. The period comprised 13 reference weeks, each ending on a Sunday and each represented proportionally in the sample. Most of the fieldwork was carried out in the following week, with a small amount of work which could not be completed then being done in the course of a further 8 days ending on a Sunday. Since the start of 2006 work has continued on the integration of the LFS interviewer field force with the general interviewer field force in preparation for the Integrated Household Survey (IHS). Issues arising from this are monitored regularly with regard to any impact this may be having on LFS response. Indeed, with the IHS pilot and Census test in the field (in June and July 2007), work to improve field capacity, specifically in terms of more aggressive recruitment of field staff has been on-going and interviewer numbers are on the increase. Improvements in field capacity has allowed more flexibility on the quality of the interviewers allocated LFS work, as well as allowing proportionate more hours to be spent on the LFS. There have also been additional efforts from the Field Office to ensure that LFS reissues are appropriately dealt with.

## SUMMARY OF QUALITY

### 1 RELEVANCE

*The degree to which the statistical product meets user needs for both coverage and content*

#### **Primary Purpose**

The primary purpose of the LFS is "the prompt publication of key aggregate, whole economy, indicators, for the integrated assessment of labour market conditions" (Review of the Labour Force Survey, ONS, 2002). The 'labour market' covers all aspects of people's work, including the education and training needed to equip them for work, the jobs themselves, job-search for those out of work, and income from work and benefits.

#### **Users and Uses**

Users of LFS data often combine it with related data from other sources to provide an overall view of the state of the labour market (section 6 provides more information about the reconciliation of LFS data with data from other sources). One of the most important users of this sort of assessment is the Bank of England's Monetary Policy Committee, which sets interest rates in order to meet the Government's inflation target.

Other key users of LFS data are HM Treasury and the Department for Work and Pensions, because they are responsible for UK economic and labour market policy. They are interested in a variety of indicators of the state of the labour market, including the number of people in employment, the number of hours worked, and the number of unemployed people (defined according to the International Labour Organisation - ILO). They often analyse these series by age groups, by regions and by gender. Other Government users include the Department for Innovation, Universities & Skills (DIUS), the Department for Business, Enterprise and Regulatory Reform (BERR), the Home Office, the Health & Safety Executive, the Scottish Government, and the Welsh Assembly Government.

At the international level, LFS data is used by the European Parliament, Council and Commission, the European Central Bank and DG Employment (Directorate-General for Employment, Social Affairs and Equal Opportunities). It is also used by the Organisation for Economic Co-operation and Development (OECD) and the International Labour Organisation (ILO).

Other users include local authorities, the Trades Union Congress (TUC), The Employers Association, Confederation of British Industry, Institute of Employment Studies, Institute for Public Policy Research, National Institute of Economic and Social Research, Policy Studies Institute, the Institute for Fiscal Studies, academic researchers, the media and the general public.

#### **Strengths and Limitations**

The strengths of the LFS are that it has the largest coverage of any household survey and can thus generate statistics for small geographical areas. In addition, the sampling errors are small, as a result of the wave structure of the survey. The survey covers a large range of employment-related variables and non-employment-related variables, allowing cross-linking analyses to be undertaken (e.g. earnings against educational attainment).

One of the limitations of the LFS is that the sample design provides no guarantee of adequate coverage of any industry, as the survey is not industrially stratified. The LFS coverage also omits communal establishments, excepting NHS housing and students in halls of residence. Members of the armed forces are only included if they live in private accommodation. Also, workers under 16 are not covered.

## Relevance

### **Key Definitions**

The definitions of the three economic activity groups - employed, unemployed and economically inactive - which are used in the LFS are the standard International Labour Organisation (ILO) definitions. It should be noted that although the LFS uses ILO definitions, these definitions are not interpreted and applied in exactly the same way in different countries. For example, although 'working age' is a common term, different countries have different statutory school leaving and retirement ages. However, Eurostat collects data from Member States and adjusts them to produce comparable estimates.

## 2 ACCURACY

*The closeness between an estimated result and the (unknown) true value*

The main threats to accuracy are sources of error, namely sampling error and non-sampling error, where non-sampling error includes: coverage error, non-response error, measurement error, processing error and model assumption error.

Many of the sources of non-sampling error are difficult to measure. However, the LFS publishes detailed response rates for all waves of the survey and an overall response rate, including time-series (Table 2.5 - 2.10). Response rates are also published by Government Office Region (GOR) for each wave during the particular quarter (Table 2.11). The LFS also publishes proxy response rates (Table 2.12), response rates for income questions by National Statistics (NS) socio-economic classification (Table 2.13) and attrition rates (Table 2.14).

Surveys, such as the LFS, provide estimates of population characteristics rather than exact measures. In principle, many random samples could be drawn and each would give different results, due to the fact that each sample would be made up of different people, who would give different answers to the questions asked. The spread of these results is the sampling variability, which generally reduces with increasing sample size. A confidence interval is a range of values, defined by a lower and upper bound, which indicates the variability of an estimate. Statistical methods are used to calculate the sampling variability from which the confidence interval can be determined. For example, with a 95 per cent confidence interval, it is expected that in 95 per cent of the survey samples, the resulting confidence interval will contain the true value that would be obtained by surveying the whole population.

The LFS routinely publishes details of achieved sample sizes in terms of achieved number of household and person interviews (Tables 2.1, 2.2 & 2.3), and sampling variability for estimates of key variables, where it is expected that in 95 per cent of samples the range would contain the true value (Table 2.4). In Table 2.4, the sampling variability gives the range above and below the estimate at a 95 per cent confidence interval.

## Accuracy

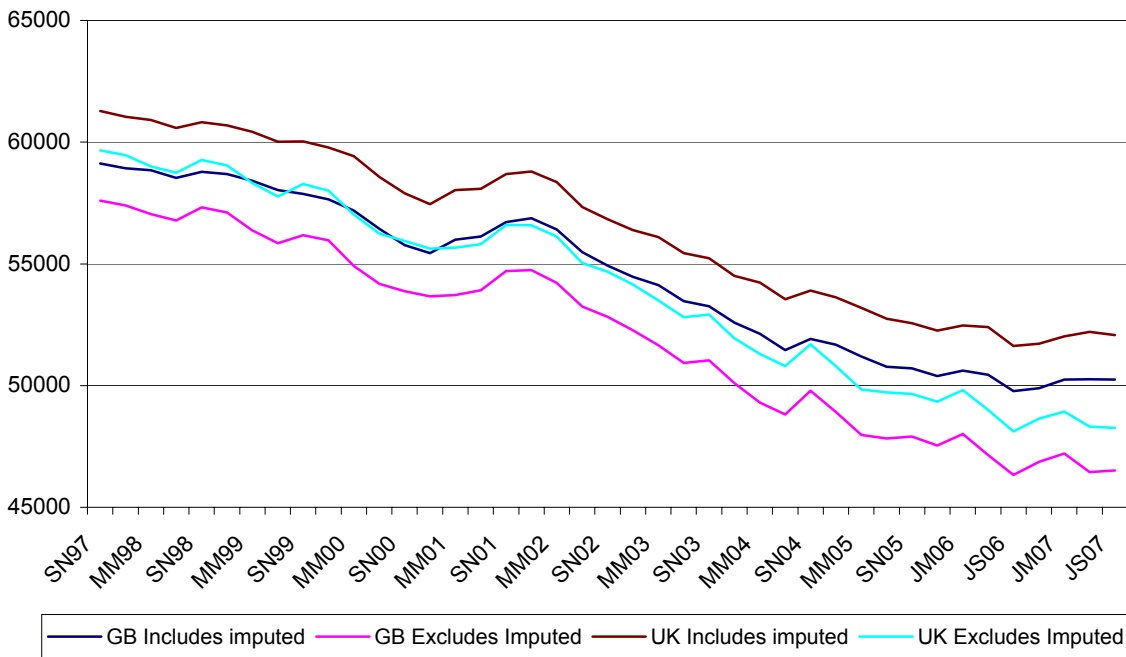
### 2.1 LFS QUARTERLY SURVEY

Achieved sample by type of household, JS07

	GB		UK	
	Includes inputed	Excludes imputed	Includes inputed	Excludes imputed
Private households	50,239	46,501	52,065	48,255
Individuals in private households	114,962	104,629	119,597	109,070
NHS Households	6	6	6	6
Individuals in NHS households	8	8	8	8

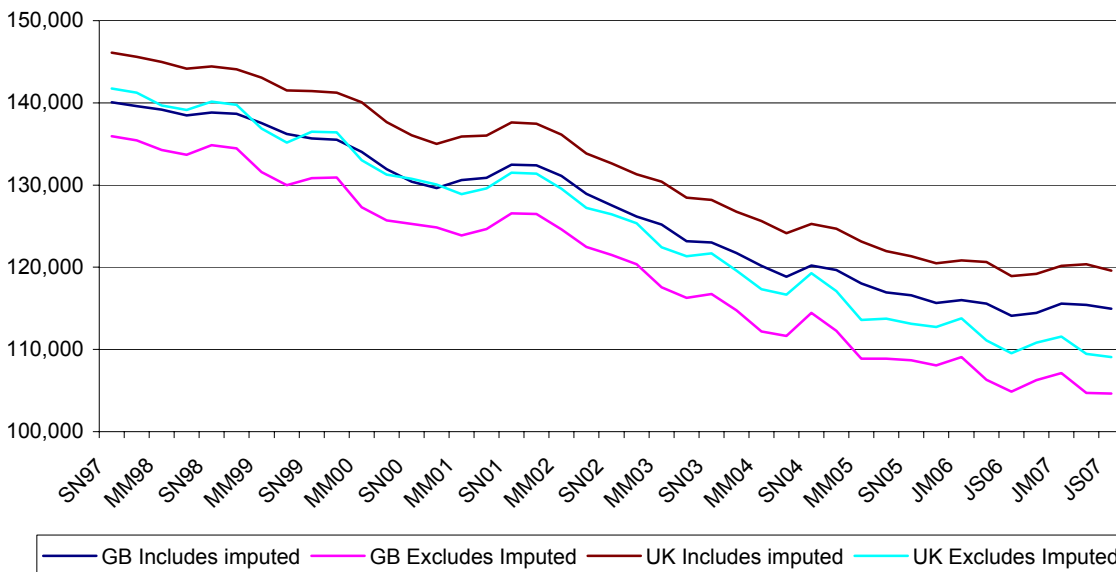
### 2.2 LFS QUARTERLY SURVEY

Achieved number of household interviews, GB and UK, SN97 to JS07



### 2.3 LFS QUARTERLY SURVEY

Achieved number of person interviews, GB and UK, SN97 to JS07





## Accuracy

### 2.4 LFS QUARTERLY SURVEY Sampling Variability, UK, JS07

Variable	Estimate	Sampling Variability +/-	Change on quarter	Sampling variability +/-	Change on year	Sampling variability +/-
Employment (000s)	28,682	135	249	136	122	135
Employment rate	74.7%	0.3	0.5%	0.3	-0.1%	0.3
Average weekly hours worked (16+)	31.4	0.2	-0.8	0.1	0.2	0.2
Unemployment (000s)	1,679	60	107	58	-43	61
Unemployment rate	5.5%	0.2	0.3%	0.2	-0.2%	0.2
Economically Active (000s)	30,362	127	355	128	78	126
Economic activity rate	79.2%	0.3	0.8%	0.3	-0.2%	0.3
Economically Inactive (000s)	7,632	117	-305	120	86	117
Economic Inactivity rate	20.8%	0.3	-0.8%	0.3	0.2%	0.3
Inactive, not wanting a job (000s)	5,563	103	-291	106	90	103
Inactive, wanting a job (000s)	2,069	66	-14	66	-4	66
Redundancies (000s)	126	16	12	15	-7	17

Note: Estimates in Table 2.4 are not seasonally adjusted. The sampling variability estimates published in the quarterly PQM are direct estimates, whereas the sampling variability estimates published in the monthly Labour Market Statistics First Release are based on monthly approximations. This may result in small differences when comparing similar periods.

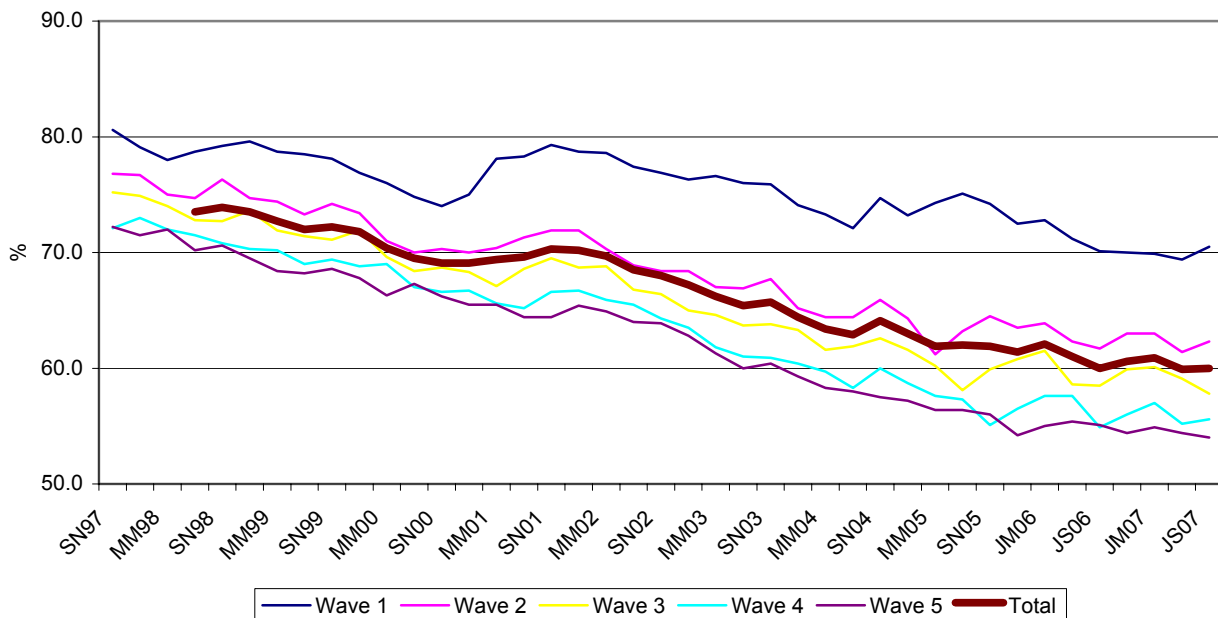
## Accuracy

### 2.5 LFS QUARTERLY SURVEY Wave specific response rates, Great Britain, excluding imputed households JS07

	Wave 1 in JS07		Wave 2 in JS07		Wave 3 in JS07		Wave 4 in JS07		Wave 5 in JS07		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Eligible households found at selected units</b>	15,373	100.0	15,466	100.0	15,494	100.0	15,579	100.0	15,616	100.0	77,528	100.0
<b>Responding units</b>												
Total	10,831	70.5	9,634	62.3	8,952	57.8	8,657	55.6	8,433	54.0	46,507	60.0
Full	10,451	68.0	8,988	58.1	8,290	53.5	8,001	51.4	7,820	50.1	43,550	56.2
Partial	380	2.5	646	4.2	662	4.3	656	4.2	613	3.9	2,957	3.8
<b>Non-responding units</b>												
Circumstantial refusal	1,014	6.6	891	5.8	816	5.3	707	4.5	618	4.0	4,046	5.2
Outright refusal	1,462	9.5	2,157	13.9	2,753	17.8	2,971	19.1	3,139	20.1	12,482	16.1
Refusal to HQ	762	5.0	902	5.8	950	6.1	958	6.1	905	5.8	4,477	5.8
Non-contact	1,304	8.5	1,108	7.2	961	6.2	941	6.0	909	5.8	5,223	6.7
<b>Addresses not issued for interviewing</b>												
Refusal to re-interview			774	5.0	1,062	6.9	1,345	8.6	1,612	10.3	4,793	6.2
Co-operation rate		77.0		70.9		66.5		65.1		64.4		68.9
Contact rate		86.6		86.3		86.8		86.7		87.0		86.7

Note: Excludes households for which response has been imputed. The total response rate is the cumulative response rate for the quarter across all waves, based on all eligible, in-scope households. For a full definition of response categories and the method used to calculate the response rates, see Technical Definitions.

### 2.6 LFS QUARTERLY SURVEY Wave specific response rates, Great Britain, excluding imputed, SN97 to JS07



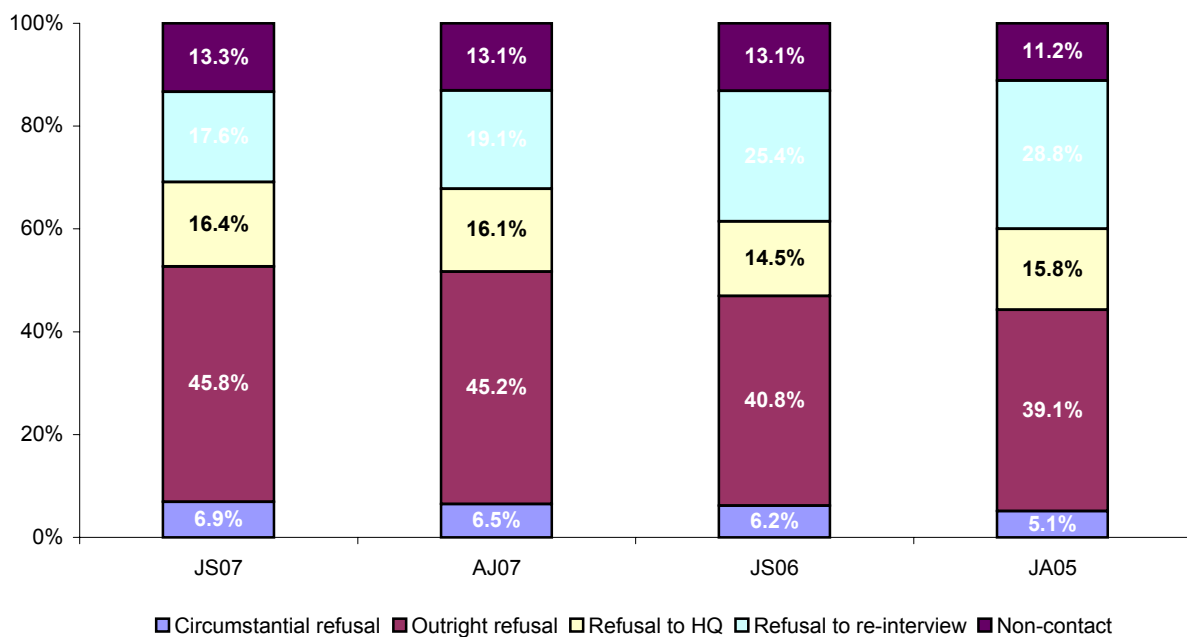
## Accuracy

### 2.7 LFS QUARTERLY SURVEY Wave specific response rates Great Britain, JS07, including imputed households

	Wave 1 in JS07		Wave 2 in JS07		Wave 3 in JS07		Wave 4 in JS07		Wave 5 in JS07		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Eligible households found at selected units</b>	15,373	100.0	15,466	100.0	15,494	100.0	15,579	100.0	15,616	100.0	77,528	100.0
<b>Responding units</b>												
Total	10,831	70.5	10,686	69.1	9,965	64.3	9,578	61.5	9,186	58.8	50,246	64.8
Full	10,451	68.0	8,988	58.1	8,290	53.5	8,001	51.4	7,820	50.1	43,550	56.2
Partial	380	2.5	646	4.2	662	4.3	656	4.2	613	3.9	2,957	3.8
Imputed	-	-	1,052	6.8	1,013	6.5	921	5.9	753	4.8	3,739	4.8
<b>Non-responding units</b>												
Circumstantial refusal	1,014	6.6	309	2.0	213	1.4	167	1.1	191	1.2	1,894	2.4
Outright refusal	1,462	9.5	2,157	13.9	2,753	17.8	2,971	19.1	3,139	20.1	12,482	16.1
Refusal to HQ	762	5.0	902	5.8	950	6.1	958	6.1	905	5.8	4,477	5.8
Non-contact	1,304	8.5	638	4.1	551	3.6	560	3.6	583	3.7	3,636	4.7
<b>Addresses not issued for interviewing</b>												
Refusal to re-interview			774	5.0	1,062	6.9	1,345	8.6	1,612	10.3	4,793	6.2
Co-operation rate		77.0		72.7		67.9		66.1		64.9		69.8
Contact rate		86.6		88.1		88.2		88.0		88.2		87.7

Note: Excludes households for which response has been imputed. The total response rate is the cumulative response rate for the quarter across all waves, based on all eligible, in-scope households. For a full definition of response categories and the method used to calculate the response rates, see Technical Definitions.

### 2.8 LFS QUARTERLY SURVEY Composition of non-response, Great Britain, JS07, including imputed households



Note: For definitions of the types of non-response, see Technical Definitions. Figures are based on the cumulative response for the quarter covering all waves.

## Accuracy

### 2.9 LFS QUARTERLY SURVEY Wave specific response rates, UK, JS07, excluding imputed households

	Wave 1 in JS07		Wave 2 in JS07		Wave 3 in JS07		Wave 4 in JS07		Wave 5 in JS07		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Eligible households found at selected units</b>	15,948	100.0	na	na	na	na	na	na	na	1a	na	na
<b>Responding units</b>												
Total	11,168	70.0	na	na	na	na	na	na	na	1a	na	na
Full	10,786	67.6	na	na	na	na	na	na	na	1a	na	na
Partial	382	2.4	na	na	na	na	na	na	na	1a	na	na
<b>Non-responding units</b>												
Circumstantial refusal	1,050	6.6	na	na	na	na	na	na	na	1a	na	na
Outright refusal	1,528	9.6	na	na	na	na	na	na	na	1a	na	na
Refusal to HQ	778	4.9	na	na	na	na	na	na	na	1a	na	na
Non-contact	1,424	8.9	na	na	na	na	na	na	na	1a	na	na
<b>Addresses not issued for interviewing</b>												
Refusal to re-interview			na	na	na	na	na	na	na	1a	na	na
Co-operation rate		76.9		na		na		na		na		na
Contact rate		86.2		na		na		na		na		na

Note: Excludes households for which response has been imputed. The total response rate is the cumulative response rate for the quarter, based on all eligible, in-scope households. See Technical Definitions for a full definition of response categories and the method used to calculate the response rates. Wave-specific response rates for Northern Ireland (and hence for UK) are currently not available and are denoted 'na'.

### 2.10 LFS QUARTERLY SURVEY Wave specific response rates, UK, JS07, including imputed households

	Wave 1 in JS07		Wave 2 in JS07		Wave 3 in JS07		Wave 4 in JS07		Wave 5 in JS07		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
<b>Eligible households found at selected units</b>	15,948	100.0	na	na	na	na	na	na	na	1a	na	na
<b>Responding units</b>												
Total	11,168	70.0	na	na	na	na	na	na	na	1a	na	na
Full	10,786	67.6	na	na	na	na	na	na	na	1a	na	na
Partial	382	2.4	na	na	na	na	na	na	na	1a	na	na
Imputed	-	-	na	na	na	na	na	na	na	1a	na	na
<b>Non-responding units</b>												
Circumstantial refusal	1,050	6.6	na	na	na	na	na	na	na	1a	na	na
Outright refusal	1,528	9.6	na	na	na	na	na	na	na	1a	na	na
Refusal to HQ	778	4.9	na	na	na	na	na	na	na	1a	na	na
Non-contact	1,424	8.9	na	na	na	na	na	na	na	1a	na	na
<b>Addresses not issued for interviewing</b>												
Refusal to re-interview			na	na	na	na	na	na	na	1a	na	na
Co-operation rate		76.9		na		na		na		na		na
Contact rate		86.2		na		na		na		na		na

Note: The total response rate is the cumulative response rate for the quarter, based on all eligible, in-scope households. For a full definition of response categories and the method used to calculate the response rates, see Technical Definitions. Wave-specific response rates for Northern Ireland (and hence for UK) are currently not available and are denoted 'na'.

## Accuracy

### 2.11 LFS QUARTERLY SURVEY Wave specific response rates, JS07, including imputed households, by GOR

	Wave 1 in JS07	Wave 2 in JS07	Wave 3 in JS07	Wave 4 in JS07	Wave 5 in JS07	Total
<b>Government Office Region (GOR)</b>						
Tyne & Wear	78.2	72.7	64.8	65.0	60.2	68.1
Rest of North East	69.5	72.1	71.5	66.5	61.6	68.2
Greater Manchester	71.8	67.6	61.0	60.4	52.9	62.8
Merseyside	68.0	65.9	61.8	57.3	57.8	62.2
Rest of North West	76.6	73.6	66.7	66.2	61.2	68.8
South Yorkshire	70.5	76.7	65.4	70.5	63.7	69.4
West Yorkshire	79.0	76.7	67.6	68.5	64.5	71.2
Rest of Yorkshire and Humberside	67.5	71.7	68.7	66.4	68.7	68.6
East Midlands	75.8	70.1	66.1	63.0	63.0	67.6
West Midlands Metropolitan Council	68.0	60.1	55.0	55.4	51.5	57.9
Rest of West Midlands	76.8	68.5	62.5	58.3	60.6	65.4
East of England	69.9	68.5	62.6	62.9	56.4	64.1
Inner London	55.7	57.8	54.1	48.0	49.1	53.0
Outer London	60.2	61.0	57.2	52.7	52.0	56.5
South East	69.7	70.6	67.3	63.1	62.1	66.5
South West	72.9	73.9	69.4	63.0	59.3	67.7
<b>England</b>	<b>70.3</b>	<b>68.9</b>	<b>63.9</b>	<b>61.2</b>	<b>58.7</b>	<b>64.6</b>
<b>Wales</b>	<b>69.7</b>	<b>72.4</b>	<b>68.8</b>	<b>64.9</b>	<b>59.4</b>	<b>67.0</b>
Strathclyde	75.1	69.6	61.8	58.0	57.1	64.3
Rest of Scotland	70.8	68.9	67.7	64.8	61.4	66.7
<b>Scotland</b>	<b>72.7</b>	<b>69.2</b>	<b>65.3</b>	<b>61.9</b>	<b>59.6</b>	<b>65.7</b>
<b>Northern Ireland</b>	<b>58.6</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

Note: The total response rate is the cumulative response rate for the quarter, based on all eligible, in-scope households. Each wave reported here is an independent sample; for example, the wave 2 response in JS07 is based on response in that quarter plus the previous quarter (AJ07) where it was issued as a wave 1 case. Wave-specific response rates for Northern Ireland are currently not available.

## Accuracy

### 2.12 LFS QUARTERLY SURVEY Proxy response, JS07, GB

		All responses	Proxy	%
<b>Age</b>	Total (16+)	91,131	30,031	33.0
	16-17	3,114	2,648	85.0
	18-19	2,625	1,883	71.7
	20+	85,392	25,500	29.9
<b>Sex</b>	Total	91,131	30,031	33.0
	Male	42,953	17,058	39.7
	Female	48,178	12,973	26.9
<b>Ethnicity</b>	Total	91,131	30,031	33.0
	White	83,536	26,992	32.3
	Non-white	7,556	3,021	40.0
	Refused	39	18	46.2
<b>Economic activity (INECAC05)</b>	Total	91,131	30,031	33.0
	Employees	46,111	16,016	34.7
	Self-Employed	7,028	2,578	36.7
	Government schemes	164	93	56.7
	Unpaid family workers	191	57	29.8
	ILO Unemployed	3,015	1,203	39.9
	Inactive	34,622	10,084	29.1

Note: For definition of 'unpaid family workers', see Section 5.

### 2.13 LFS QUARTERLY SURVEY Income Response Rates by NS-SEC, GB, JS07

	Wave 1 in JS07	Wave 5 in JS07	Total
<b>NS-SEC</b>	%	%	%
Higher managerial and professional	82.9	90.6	86.2
Lower managerial and professional	81.1	88.8	86.1
Intermediate occupations	87.5	89.0	84.5
Small employers and own account workers	83.0	85.7	86.8
Lower supervisory and technical	82.7	84.3	83.6
Semi-routine occupations	79.0	88.6	85.1
Routine occupations	79.0	84.9	81.4
<b>Total</b>	<b>82.5</b>	<b>87.8</b>	<b>84.7</b>

Note: The percentages in Table 2.13 are based on all eligible in-scope respondents at wave 1 and all eligible in-scope respondents at wave 5. The total response rate is the cumulative response rate for income for the quarter (wave 1 and wave 5), based on all eligible, in-scope respondents.

## Accuracy

### 2.14 LFS QUARTERLY SURVEY Summary of attrition by key characteristics, JS07, GB

Column percentages

		Wave 1 in JS06	Wave 5 in JS07	Responds all waves	Non-responder
		Responds	Responds		
<b>Age</b>	<16	20.1	19.9	19.0	20.4
	16-19	5.2	4.2	4.0	6.4
	20-29	11.4	7.8	6.2	16.3
	30-39	13.6	12.4	11.6	15.3
	40-49	14.1	13.8	13.5	14.6
	50-59	13.3	14.4	14.5	11.8
	60-69	10.2	12.4	13.5	7.3
	70+	12.1	15.2	17.8	8.0
<b>Sex</b>	Male	48.4	47.8	47.5	48.4
	Female	51.6	52.2	52.5	51.6
<b>Econ Activity (INECAC05)</b>	Employees	37.4	36.8	35.9	38.3
	Self Emp	5.7	5.5	5.2	5.9
	Gov Sch.	0.1	0.1	0.1	0.1
	UPFW	0.1	0.1	0.1	0.2
	ILO Unemp	2.5	2.1	1.9	3.1
	Inactive	30.9	34.8	37.8	25.6
	<16	23.2	20.6	19.0	26.9
	<b>Number of people in household (TOTNUM)</b>	1	12.0	13.1	14.4
2	30.1	33.6	35.1	25.3	
3	18.8	17.7	17.3	20.2	
4	23.1	23.2	22.4	23.0	
5	10.7	8.8	7.6	13.4	
6 or more	5.3	3.6	3.3	7.6	
<b>Region (GOVTOR)</b>	Tyne & Wear	2.1	2.1	2.1	2.1
	Rest of North East	2.7	2.5	2.6	3.0
	Greater Manchester	4.6	4.3	4.0	5.0
	Merseyside	2.2	2.1	2.2	2.3
	Rest of North West	5.3	5.3	5.6	5.4
	South Yorkshire	2.2	2.4	2.2	2.0
	West Yorkshire	3.9	4.0	3.8	3.8
	Rest of Yorkshire and Humberside	2.9	3.0	3.1	2.8
	East Midlands	8.0	8.2	8.0	7.7
	West Midlands Metropolitan Council	4.1	3.8	3.5	4.6
	Rest of West Midlands	4.9	5.2	5.5	4.6
	East of England	9.4	10.2	10.9	8.3
	Inner London	4.1	3.3	2.6	5.3
	Outer London	7.2	6.1	5.9	8.6
	South East	13.9	14.5	14.8	13.2
	South West	8.2	8.3	8.3	8.2
Wales	5.4	5.8	6.0	4.9	
Strathclyde	3.9	3.9	3.6	3.8	
Rest of Scotland	5.0	5.2	5.2	4.7	

Note: The column, *Wave 1 in XXXX Responds*, shows the percentage of responders in each key characteristics category at wave 1. The column, *Wave 5 in XXXX Responds*, shows the percentage of responders in each key characteristics category at wave 5. A significant decline in the values between waves 1 and 5 denotes a higher rate of attrition than where values are consistent between waves 1 and 5 or higher at wave 5.

### 3 TIMELINESS AND PUNCTUALITY

*Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the time lag between the actual and planned dates of publication.*

#### 3 Delivery dates of data

##### 3.1 To ONS Labour Market Division (LMD)

Scheduled delivery date for file: 16 October, 2007

Achieved delivery date for file: 16 October, 2007

Time lag between delivery date and the end of the reference period: 15 days

##### 3.2 Data file for other users

Scheduled availability date for Regional Public & Government normal release user files: 14 November, 2007

*Recipients*

ESRC

DIUS

Employment Policy Institute

BERR

Northern Ireland (DETI NI)

HSE

Home Office

DWP

Bank of England

HMT

Scottish Government

National Learning and Skills Council

Low Pay Commission

Inland Revenue

Welsh Assembly Government

HM Treasury

House of Commons Library



## 4 ACCESSIBILITY AND CLARITY

*Accessibility is the ease with which users are able to access the data, also reflecting the format(s) in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.*

The UK Data Archive at Essex University provides free access to the various LFS datasets and can be contacted via the website: <http://www.data-archive.ac.uk>

A highly disaggregated dataset, which covers a wealth of data for local areas, is available free from NOMIS: <http://www.nomisweb.co.uk>

The LFS Data Service provides LFS data for a fee, and can be contacted by phone (01633 812256). Labour Market data, including data from the LFS, are published every month and include text, tables and charts. The data are widely available, generally free of charge, through a range of media. First Releases and Time Series data contained within the releases are available to download, free of charge, from the National Statistics website. Paper copies are available through subscription from the ONS Press Office, telephone 020 7533 5707. All the main series contained within the releases are available from the website: <http://www.statistics.gov.uk/statbase/product.asp?vlnk=1944>

First Releases and Labour Market Trends both contain additional textual analysis and charts that supplement the data in the tables.

A more detailed set of data are published each month in Economic and Labour Market Review (formerly Labour Market Trends), published by Palgrave Macmillan ([www.palgrave.com/ons](http://www.palgrave.com/ons)), available in PDF format from the website: [www.statistics.gov.uk/elmr/](http://www.statistics.gov.uk/elmr/)

The Labour Market Guide can be accessed from the website: <http://www.statistics.gov.uk/about/data/guides/LabourMarket>

The Summary Quality Report for Labour Market data releases can be accessed from the website: <http://www.statistics.gov.uk/cci/article.asp?id=1354>

The Labour Market helpline can be contacted by phone (020 7533 6094) or email: [labour.market@ons.gov.uk](mailto:labour.market@ons.gov.uk)

## 5 COMPARABILITY

*The degree to which data can be compared over time and domain*

### **Background**

The LFS began in 1973 and was carried out every 2 years until 1983. Between 1984 and 1991, data were collected annually and the survey has been running in its present form, with quarterly sampling, since spring 1992. It is carried out under European Union Regulations which specify the way in which the survey should be conducted, the quality of the results that Member States supply to Eurostat and the timetable for supplying results. Although the LFS began as a survey designed to meet international obligations, its primary purpose is now (as stated in section 1, Relevance), "the prompt publication of key aggregate, whole economy, indicators, for the integrated assessment of labour market conditions" (Review of the Labour Force Survey, ONS, 2002).

### **Definitions**

The definitions of the three economic activity groups - employed, unemployed and economically inactive - which are used in the LFS are the standard International Labour Organisation (ILO) definitions.

**Economically active** - those aged 16 or over, who are either employed or unemployed in the survey reference week.

**Employed** - those aged 16 or over, who are regarded as in employment if they did at least one hour of work in the reference week (as an employee, self-employed, unpaid workers in a family business or participants in government-supported training schemes) and those who had a job that they were temporarily away from (for example, if they are on holiday).

**Unemployed** - those aged 16 or over, who are without work, want a job, have actively sought work in the last four weeks and are available to start work in the next two weeks; or are out of work but have found a job and are waiting to start it within the next two weeks.

**Economically inactive** - those who are neither in employment nor unemployed. This group includes, for example, all those who are looking after a home or family, have a long-term illness or disability which prevents them working or are retired.

**Unpaid family workers** are those who are doing unpaid work in a family business.

## Comparability

### Questionnaire Changes

**New questions** - New questions to the survey are normally introduced in January each year. Therefore, no new questions were added to the July-September 2007 questionnaire.

**Amended questions** - Nato was changed to Nato7 and Cryo to Cryo7

**Quarterly-specific questions** - One question is quarter-specific to the JS07 quarter: Reasons for working part-time rather than full-time - PTNCRE.

**Deleted questions** - No questions were removed from the questionnaire during the JS07 quarter.

### Fieldwork Issues

The fieldwork period covered by the third quarter of the LFS was from Monday 2 July, 2007 to Sunday 2 September, 2007. The period comprised 13 reference weeks, each ending on a Sunday and each represented proportionally in the sample. Most of the fieldwork was carried out in the following week, with a small amount of work which could not be completed then being done in the course of a further 8 days ending on a Sunday. Since the start of the year, work has continued on the integration of the LFS interviewer field force with the general interviewer field force in preparation for the Integrated Household Survey (IHS). Issues arising from this are monitored regularly with respect to any impact this may be having on LFS response. Indeed, with the IHS pilot and Census test being in the field (in June and July 2007), work to improve field capacity, specifically in terms of more aggressive recruitment of field staff is on-going and interviewer numbers have been on the increase. Improvements in field capacity have allowed more flexibility regarding the quality of interviewers allocated LFS work. There has also been additional efforts to ensure that reissues are appropriately dealt with.

### Harmonisation

Detailed information about harmonisation and the LFS can be found in the Labour Force Survey User Guide Volume 1: LFS Background & Methodology which can be accessed through the website: <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1537>

## 6 COHERENCE

*The degree to which data that are derived from different sources or methods, but which refer to the same phenomenon, are similar*

### **Data Sources**

The LFS is one of a number of sources of data about the labour market. Some sources provide data which overlap with LFS data on employment, unemployment and earnings. ONS has published guidance about the strengths and limitations of each source in relation to these topics and has indicated which source is the most appropriate for different purposes. Details can be found in the Labour Market Guide, which can be accessed from the website:

<http://www.statistics.gov.uk/about/data/guides/LabourMarket>

### **Strengths and Limitations of the LFS**

The strengths of the LFS are that it has the largest coverage of any household survey and can thus generate statistics for small geographical areas. In addition, the sampling errors are small, as a result of the wave structure of the survey. The survey covers a large range of employment-related variables and non-employment-related variables, allowing cross-linking analyses to be undertaken (e.g. earnings against educational attainment).

One of the limitations of the LFS is that the sample design provides no guarantee of adequate coverage of any industry, as the survey is not industrially stratified. The LFS coverage also omits communal establishments, excepting NHS housing and students in halls of residence. Members of the armed forces are only included if they live in private accommodation. Also, workers under 16 are not covered.

### **Employment, Unemployment and Economic Inactivity**

The LFS is the source recommended by ONS for certain employment-related statistics (e.g. estimates of the number of people in employment or unemployed). The LFS is also a unique source of comprehensive, coherent information about economic inactivity, where it provides information separately about people who want a job and those who do not.

### **Number and Industrial Composition of Jobs**

The workforce jobs (WFJ) series provides estimates of the number of jobs in the UK economy and is the source recommended by ONS for both the number of jobs and the industrial composition of jobs. Workforce jobs consist of the sum of employee jobs, self-employment jobs, jobs in the armed forces and government-supported trainees. Civilian workforce jobs are available by geographical region, gender and broad industry. Total workforce jobs are available by gender and broad industry.

### **Earnings**

For estimates of change in earnings (e.g. pay growth in the economy), the Average Earnings Index (AEI) is the most suitable source. It provides industry and whole-economy information, but excludes small employers, the self-employed and government-supported trainees. Pay, commission, bonuses, overtime and pay award arrears are included, but redundancy payments and benefits in kind are excluded. The Annual Survey of Hours and Earnings (ASHE) includes information about the levels, distribution and make-up of earnings and hours worked for employees in different occupations, industries, ages and regions. It should be used when the information required is not available from the AEI (such as for occupational groups or regional analyses) and is the preferred source of the earnings of full-time employees and of the average hourly earnings of all employees. The LFS should be used when the information is not available from the AEI or from ASHE and is the preferred source of data about the earnings of part-time and low-paid employees.

## 7 SUMMARY OF METHODS

The LFS covers private households, including persons who are temporarily absent. The resident population comprises persons who regard the sample address as their main address, and also those who have lived in the dwelling for more than six consecutive months, even if they do not regard this as their principal dwelling. Persons absent for more than six months are not regarded as members of the resident population. A private household comprises one or more persons whose main residence is the same dwelling and/or who share at least one meal per day. Students living in halls of residence are sampled via the private households of their parents. In Great Britain, an additional sample is drawn from persons living in National Health Service accommodation.

The year is divided into quarters of 13 weeks. Prior to January 2006, these were seasonal quarters: winter (December to February), spring (March to May), summer (June to August) and autumn (September to November). From January 2006, the LFS is being conducted on the basis of calendar quarters: January to March, April to June, July to September and October to December.

For most of Great Britain, the survey base is the Royal Mail's PAF (Postcode Address File), a database of all addresses receiving mail. The list is limited to addresses receiving fewer than 25 items of post per day, so as to exclude businesses. Because of the very low population density in the far north of Scotland (north of the Caledonian Canal), telephone directories are used as sampling frames, and interviews are carried out by telephone because face-to-face interviews would be too expensive. In Northern Ireland, the Rating and Valuation Lists (which serve for the administration of land taxes) are used.

In Great Britain, a systematic sample is drawn each quarter from the three sampling bases, yielding 16,600 PAF addresses, 75 telephone numbers for the north of Scotland and 42 units of National Health Service housing. As the PAF is broken down geographically, the systematic sampling ensures that the sample is representative at regional level. In Northern Ireland, a simple random sample is drawn, each quarter, from each of the three strata, giving 650 addresses in all.

A rotation system comprising five waves is used. Respondents are questioned 5 times at 13-week intervals and one-fifth of the sample is replaced each quarter. Interviews are carried out on a face-to-face basis with the help of portable computers (CAPI) for the interviews in the first wave. In the far north of Scotland (north of the Caledonian Canal) and for interviews in the second to fifth waves, wherever possible, interviews are carried out by telephone (CATI).

Further details of the methodology used in the LFS can be found in the Labour Force Survey User Guide Volume 1: LFS Background & Methodology, which can be accessed through the website: <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1537>.

## 8 TECHNICAL DEFINITIONS

### Imputation

If a household is unavailable for interview, but was interviewed in the previous wave, responses from the previous wave are rolled forward. This is referred to as 'imputation'. Imputation is carried out to minimise non-response bias in estimates, while simultaneously improving precision by boosting the sample size. The rationale is that most LFS variables do not change from one quarter to another for most people. Responses are rolled forward for one wave only. Data are not rolled forward after a second consecutive non-response. Tables and charts (at person or household level) containing responses which have been rolled forward from the previous wave are denoted by the term 'including imputed'. Tables and charts which do not contain responses which have been rolled forward from the previous wave are denoted by the term 'excluding imputed'.

### Method of Calculating Sampling Variability

The sampling variability is the spread of results which would be obtained if different samples were drawn. A confidence interval is a range of values, defined by a lower and upper bound, which indicates the variability of an estimate. Statistical methods are used to calculate the sampling variability from which the confidence interval can be determined. For example, with a 95 per cent confidence interval, it is expected that in 95 per cent of the survey samples, the resulting confidence interval will contain the true value that would be obtained by surveying the whole population. The statistical methodology used to calculate the sampling variability published in this report can be found at the website below: <http://nswebcopy/about/data/methodology/default.asp>

### Method of Calculating Response Rates

The response rate indicates how many interviews were achieved as a proportion of those eligible for the survey. The formula used is as follows:

$$RR = (FR + PR)/(FR + PR + OR + CR + RHQ + NC + RRI^*)$$

where RR = response rate, FR = full response, PR = partial response, OR = outright refusal, CR = circumstantial refusal, RHQ = refusal to HQ, NC = non contact, RRI = refusal to re-interview, \*applies to waves 2 to 5 only.

### Definitions of Response Outcome Categories

A **full response** denotes a household in which each household member has answered all applicable questions.

A **partial response** denotes a household in which questions were not completed because someone refused to be interviewed, refused part way through the questionnaire or refused to let someone else answer on his or her behalf. However, at least one question block must have been completed. If only part information has been collected for a one-person household, it is coded as a refusal or non-contact.

An **outright refusal** is a household which refuses to respond to the survey and the interviewer feels that there is no chance of an interview at the current or in any future wave.

A **circumstantial refusal** is a household where the respondent refuses to respond because of a temporary circumstance (e.g. going on holiday, too busy during the field period). A circumstantial refusal enables an interviewer to call back at the next wave.

A **refusal to HQ** is a household which contacts headquarters to refuse to participate in the survey in response to the advance letter.

A **non-contact** arises when an address is occupied, but where it has not been possible to contact any member of the household in the field period.

A **refusal to re-interview** is a household which takes part in the survey (at one or more of waves one to four) but which, when asked to take part in the next wave (waves two to five), refuses.

## Technical Definitions

### **Method of Calculating Income Response Rates**

The income question is asked at wave 1 and wave 5 only. Individuals aged 16-69 who are in employment in the reference week, form the sub-set of respondents who are eligible for these questions. The percentage response rates for the income questions are based on all eligible, in-scope respondents at wave 1 and all eligible, in-scope respondents at wave 5. The total response rate is the cumulative response rate for income for the quarter (wave 1 and wave 5), based on all eligible, in-scope respondents.

### **NS-SEC**

NS-SEC is the National Statistics Socio-Economic Classification, which replaces previous classifications which were based on social class and social and economic group.

### **Proxy Response**

The LFS has to complete fieldwork to a tight timetable and interview as many of the sampled households as possible, which leaves limited time for recalls. LFS interviewers try to interview every adult (aged 16+) in each sampled household. However, when a household member is unavailable for interview, interviewers accept information by proxy from another responsible adult in the household. The proxy respondents are normally people living with a partner, on behalf of their partner and parents on behalf of their adult offspring who live with them.

### **Attrition**

Attrition is the term applied to respondents who begin the survey but subsequently drop out. It has been known for some time that these respondents tend to have different characteristics to those who remain in all waves of the survey, which can, therefore, result in attrition bias. For example, if respondents in a particular age band have a higher tendency to drop out (attrition rate) than respondents in other age bands, then they will be under-represented in subsequent waves of the survey and in estimates.

## Website References

Labour Force Survey User Guide Volume 1: Background & Methodology	<a href="http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1944">http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1944</a>
Labour Market Guide	<a href="http://www.statistics.gov.uk/about/data/guides/LabourMarket">http://www.statistics.gov.uk/about/data/guides/LabourMarket</a>
Labour Market Statistics First Release	<a href="http://www.statistics.gov.uk/statbase/product.asp?vlnk=1944">http://www.statistics.gov.uk/statbase/product.asp?vlnk=1944</a>
Labour Market Trends	<a href="http://www.statistics.gov.uk/statbase/product.asp?vlnk=550">www.statistics.gov.uk/statbase/product.asp?vlnk=550</a>
Methodology for the Calculation of Sampling Variability in the Labour Force Survey	<a href="http://nswebcopy/about/data/methodology/default.asp">http://nswebcopy/about/data/methodology/default.asp</a>
NOMIS	<a href="http://www.nomisweb.co.uk">www.nomisweb.co.uk</a>
Summary Quality Report for Labour Market Data Releases	<a href="http://www.statistics.gov.uk/cci/article.asp?id=1354">http://www.statistics.gov.uk/cci/article.asp?id=1354</a>
UK Data Archive, University of Essex	<a href="http://www.data-archive.ac.uk">http://www.data-archive.ac.uk</a>