## FEATURE

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Office for National Statistics

# Making sense of Labour Force Survey response rates

#### SUMMARY

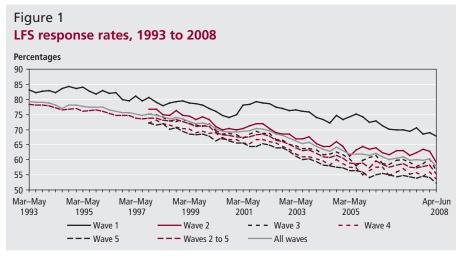
The Labour Force Survey (LFS) is the largest continuous household survey in the UK. It is the source of key labour market indicators, such as employment, unemployment, economic activity and hours worked, as well as numerous related measures. Each quarter, more than 80,000 households are randomly selected; households and individuals are interviewed in a series of five quarterly waves. However, a proportion of these households and individuals either cannot be contacted or refuse to cooperate with the survey, so the results are derived from about 50,000 households and 120,000 individuals each quarter. These responses are weighted on the basis of age, gender and geography in order to produce a representative picture of the whole population.

This article presents and analyses LFS response rates and trends and examines the detail of response and non-response. Further research required and potential interventions are also discussed.

esponse rates in the Labour Force Survey (LFS) have shown a downward trend, falling from just under 80 per cent in the early 1990s to less than 60 per cent today. Declining response rates can have a negative impact on the quality of the data and need to be understood so that measures can be taken to arrest the decline and, where evidence of this is found, targeted to counter non-response bias.

The clear downward trend for Great Britain response rates between 1993 and 2008 is shown in **Figure 1** (and in Appendix **Table A1**). Response rates for 'all waves' fell from 79 per cent in 1993 to about 58 per cent in 2008, a decline of 21 percentage points. Response rates for the first wave of interviews (wave 1) fell from 83 per cent to below 68 per cent over the same period, a fall of 15 percentage points. Thus, based on all waves, response rates have been falling by 1.4 percentage points per year.

There have, however, been two noticeable shifts within the response rates across all waves, but most pronounced in the wave 1 data. Following an unusually large drop in response rates between March 1998 and November 2000, there was an even steeper rise between December 2000, and November 2001, marking an upward shift of some 7 per cent. There was a similar, but smaller, shift between September 2004 and August 2005. Since these shifts were more pronounced for wave 1, the gap between this and other waves, which was about 5 per cent, expanded to 7 per cent and then nearly 10 per cent, before moving back to about 7 per cent more recently.



Note:

Separate data on waves 2 to 5 are not available before 1997.

Apart from these major shifts, which may have been largely the result of organisational changes, the less marked movements in response may be the result of a variety of factors such as interviewer training, incentives (such as the free stamps issued in the summer of 2007), media publicity concerning data losses, as well as holidays, weather and even sporting events.

Overall, response rates are influenced, not only by the initial success in making contact and gaining cooperation at wave 1, but also by the attrition to subsequent waves of people who had responded previously. **Figure 2** shows, for the period 1997 to 2008, the rate of attrition between waves. Although attrition between waves 2 and 5 rose only slowly, attrition between wave 1 and 2 increased erratically, but

dramatically until 2005, when it began to narrow somewhat. The latter may have been the result of the increased management emphasis on 'agreement to recall' (respondent agreeing to be contacted in the following wave) which has occurred since that time. In 1997, there were only about 4 percentage points between the wave 1 and wave 2 response rates, but by 2008 this had increased to nearly 10 per cent. So, not only have response rates fallen, but respondents who do take part in wave 1 interviews are now less likely to remain responders through waves 2 to 5. The highest rate of attrition occurs between waves 1 and 2. This is generally to be expected since, having done the survey once, respondents then know the length of time involved and the subject matter of the

questions, which may put them off taking part in subsequent waves. Respondents may also decide that taking part once fulfils their social obligation and do not see the value in repeating the process every three months. For respondents who do take part in waves 2 to 5, the subsequent attrition is much less. Those who are happy to take part twice are more likely to keep taking part.

**Table 1** shows the attrition and retention rates by Government Office Region for a single cohort between wave 1 in April to June 2007 and wave 5 in April to June 2008. The response pattern reflects the tendency for rural and sub-urban areas to exhibit relatively high response, and more highly urbanised areas to show low response (Hopper 2008). Focusing on specific regions, most noticeable is Inner London which, despite having the lowest wave 1 response rate, also has the lowest level of attrition; response rates only fall by 5 percentage points between waves 1 and 5. Thus, in Inner London, more potential respondents refuse to take part in the survey, but the respondents who do take part are the most likely to stay within the sample for all five waves, compared with the other regions. However, because Inner London starts with a much lower response rate, its retention rate (the proportion of the wave 1 respondents still within the sample at wave 5) appears less significant; the South West, South East and the Rest of Yorkshire and Humberside all have similar retention rates. Table 1 also highlights the fact that there are two general groups of non-responders: those who refuse at wave 1 and never take part in the survey and those who take part at wave 1 but refuse at one of the subsequent waves (attrition cases). The data suggest that wave 1 non-response is highest in Inner and Outer London and in the West Midlands Metropolitan area, whereas attrition is highest, and the retention rate lowest, in Merseyside, Tyne and Wear, East Midlands, Strathclyde and Greater Manchester.

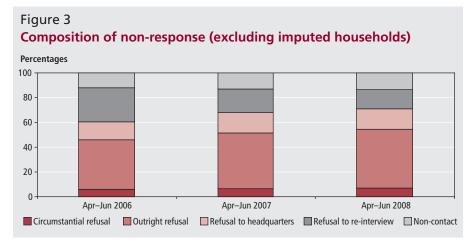
#### Figure 2 Attrition rates between waves, 1997 to 2008 Percentage points 14 12 10 8 Dec-Feb 2002 Dec-Feb 2003 Dec-Feb 1998 1999 2000 2001 2004 2005 2006 -Waves 1 and 2 Waves 2 and 3 - Waves 3 and 4 - Waves 4 and 5

Table 1
Attrition and retention rates: by Government Office Region

	Wave 1 in	Wave 5 in	Attrition	
	Apr-Jun 2007	Apr-Jun 2008	(percentage	Retention rate
Government Office Region	(per cent)	(per cent)	points)	(per cent)
Inner London	53.2	48.6	4.7	91.2
South West	73.3	<i>65.2</i>	8.1	88.9
South East	69.2	61.0	8.3	88.1
Rest of Yorkshire and Humberside	71.7	62.6	9.1	87.3
Outer London	59.4	49.4	10.0	83.1
Rest of Scotland	68.9	58.8	10.1	85.4
West Midlands Metropolitan Council	60.7	50.6	10.1	83.3
Rest of North East	71.5	60.2	11.3	84.2
Rest of North West	71.6	60.3	11.3	84.2
Rest of West Midlands	70.2	58.7	11.5	83.6
South Yorkshire	76.6	64.5	12.0	84.3
West Yorkshire	77.2	64.8	12.4	84.0
East of England	70.7	58.3	12.4	82.4
Merseyside	69.3	<i>55.2</i>	14.1	79.6
Tyne and Wear	77.1	62.7	14.4	81.3
East Midlands	75.2	60.4	14.7	80.4
Strathclyde	72.1	56.8	15.3	78.8
Greater Manchester	70.0	54.1	15.8	77.4
England	69.2	58.5	10.7	84.5
Wales	72.5	61.8	10.7	<i>85.2</i>
Scotland	70.3	57.9	12.3	82.5

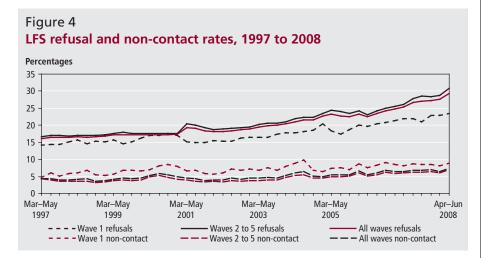
## Non-response

The trend for falling response rates means there is an increase in non-response, which consists of non-contacts and refusals to interview. Refusals to interview can be further broken down into refusals to re-interview, refusals to headquarters, outright refusals and circumstantial refusals. Figure 3 shows the composition of non-response for the April to June quarters for 2006 to 2008. This shows that all categories, except 'refusal to re-interview', have risen as a proportion of the total,



#### Note:

The outcome codes referred to here are peculiar to the LFS and do not currently conform to internationally agreed definitions.



which has itself been rising as response rates have fallen. Outright refusals now amount to almost half of the non-response cases and refusal to headquarters 17 per cent, while refusal to re-interview has fallen from more than a quarter to only 15 per cent of the total. The latter may be related to the increased emphasis on agreement to recall mentioned above, as well as the introduction of 'avoiding refusal training' (ART), although there may be other factors giving rise to such a substantial decline.

## Non-contact

Non-contact is recorded when interviewers are unable to make contact with any eligible members of the household during the sample period, either for face-to-face or telephone interviews, which are the predominant interview methods for waves 1 and waves 2 to 5, respectively. As Figure 3 shows, non-contact accounted for about one in seven non-response cases in April to June 2008. **Figure 4** shows the trends for LFS non-contacts and refusals from 1997 to 2008. Although wave 1 non-contact rates have risen as a proportion of total non-

response, from less than 5 per cent at the start of the period, they have tended to hover just above 8 per cent for the past three years. As contact continues to be attempted for cases where it failed in the previous wave, non-contact rates tend to decline for each wave, as some fresh attempts will be successful. Thus, in April to June 2008, non-contact ranged from 8.8 per cent for wave 1 cases to 6.3 per cent for wave 5 cases, averaging 7.4 per cent across all waves. Since, for most wave 1 cases, a different mode to subsequent waves (face-to-face rather than by telephone) is employed, and later waves are 'sweeping up' unsuccessful cases from earlier waves, the reasons for non-contact may differ and should be looked at separately.

Despite recent wave 1 non-contact rates being close to 8 per cent, a record proportion of non-contacts were reported in the summer of 2004, when figures rose to 9.8 per cent. Other waves also went up significantly during this quarter and response fell. For all waves, non-contact usually appears to peak around summer but fall in the autumn and sometimes in the winter quarters.

## Type of non-contact

Non-contact can take a number of forms: no contact at all or contact but with a person who is either not a member of the household (a neighbour, for instance) or is not a responsible resident (that is, a child). **Table 2** illustrates the importance of the different forms of non-contact by geography, type of accommodation and type of household.

London shows the highest proportions of non-contacts where some contact was made, either with non-household members (7.8 per cent) or with non-responsible household members (1.2 per cent) and exhibits by far the greatest overall non-contact rate. At the other extreme, in Wales, in the relatively small proportion of cases where no contact was made, this was predominantly because no contact could be made with anyone.

The overall non-contact rate is lowest for houses and bungalows and highest for 'other', converted flats and maisonettes and 'mobile' accommodation. For detached houses and 'some other kind of accommodation', a relatively high proportion of non-contacts involved some contact but only with a child or other resident not deemed to be responsible, whereas flats, maisonettes and, to a smaller extent, terraced houses showed a relatively high proportion of contacts with non-household persons – near neighbours or babysitters, perhaps.

It is often not possible for non-contacts to be assigned a type of household. However, of those households where interviewers could classify a type, single-person, nonretired households had by far the highest non-contact rate, while all other categories ranged between 0.7 and 1.6 per cent. Higher proportions of non-contact with anyone at the address seem to be common with household types having no children and where potential respondents would be likely to be working or elderly. Multiperson households have a particularly high proportion of contacts with non-household persons, while households with couples and children or lone parents are more likely to have contact made with a non-responsible household member.

## Reasons for non-contact

If an interviewer is unable to make contact with a sampled household during the interview period, they are asked to record the main reason for non-contact. **Table 3** and **Table 4** show data for the last three years concerning the main reasons for non-contact by face-to-face and telephone interviewers, respectively.

Table 2
Types of non-contact: by country, accommodation and household type, April to June 2008

Percentages Contact only with Contact only with non-responsible Household non-No contact non-household household member contact rate made member England (excluding London) Country 8.0 92.8 5.5 1.7 18.2 91.0 7.8 1.2 Scotland 7.0 7.7 92.2 0.8 Wales 6.0 94.5 49 0.6 Type of accommodation House/bungalow - detached 0.8 52.4 19.0 28.6 71.7 10.9 House/bungalow - semi-detached 1.4 17.4 Terraced, end of terrace 1.8 63.8 24.1 12.1 2.9 72.3 0.0 Flat/maisonette – purpose built 27.7 Flat/maisonette - part house/converted house/other 5.2 59.1 40.9 0.0 Mobile home, caravan or houseboat 3.7 0.0 0.0 0.0 10.6 60.0 0.0 40.0 Some other kind of accommodation Type of household Single-person household, not retired 5.6 65.4 30.8 3.8 0.9 68.4 5.3 Elderly/retired household 26.3 Lone parent 0.9 60.0 0.0 40.0 Couple - one or both working age (with children) 0.7 45.8 20.8 33.3 Couple – one or both working age (no children or not sure about dependants) 1.4 80.6 12.9 6.5 Multi-person household (students, sharers) 1.6 33.3 50.0 16.7

0.7

33.9

100.0

88.4

Table 3

Main reason for non-contact by face-to-face interviewer

Not known/uncertain

			Percentages
Main reason for non-contact (face to face)	Apr-Jun 2006	Apr-Jun 2007	Apr-Jun 2008
Rarely there/unconfirmed second residence	27.3	24.8	28.5
Would not answer door	15.8	16.9	17.6
Ran out of field time	14.6	16.8	13.7
Away all survey period/on holiday	14.0	10.2	11.5
Other	11.4	14.6	10.8
Shift worker/works odd hours	8.7	7.0	9.5
Probably vacant but unable to confirm	5.5	6.5	5.0
Telephone not answered	1.0	0.9	1.4
No reply to answer phone message	0.7	0.9	0.8
Communal phone	0.1	0.3	0.4
Number unobtainable	0.3	0.5	0.4
Could not find the address	0.3	0.3	0.2
Wrong number	0.2	0.4	0.1
Spare telephone line	0.0	0.1	0.0

Table 4

Main reason for non-contact by telephone interviewer

			Percentages
Main reason for non-contact (telephone)	Apr-Jun 2006	Apr-Jun 2007	Apr-Jun 2008
No reply to answer phone message	23.6	34.9	39.7
Telephone not answered	24.1	21.7	23.6
Number unobtainable	29.7	27.5	21.9
Wrong number	9.3	5.9	8.7
Spare telephone line	4.6	2.8	1.8
Away all survey period/on holiday	1.6	1.1	0.9
Probably vacant but unable to confirm	1.4	0.9	0.8
Rarely there/unconfirmed second residence	0.9	0.5	0.7
Ran out of field time	1.6	1.3	0.7
Other	2.4	2.2	0.6
Shift worker/works odd hours	0.1	0.3	0.3
Would not answer door	0.7	0.6	0.2
Could not find the address	0.0	0.1	0.0
Communal phone	0.0	0.1	0.0

For field interviewers, Table 3 shows that the main reason for non-contact in the field is that the interviewer was unable to find a respondent at home when they visited the address. In fact, if reasons are grouped, the data show that more than one third of non-contacts are because the property was vacant or the resident rarely there, with another fifth where the respondent is away for a sustained period or working at the times when the interviewer attempts to make contact. Even when someone is present in the household, an increasing proportion of potential respondents are unwilling to answer the door. One other sizeable category relates to the interviewer running out of field time and being unable to make any further contact attempts, although this reason is likely to be mainly as a consequence of the difficulty of finding anyone at home.

0.0

9.7

0.0

1.9

The main reasons for non-contact by the telephone unit are obviously related to that mode of communication: almost two-thirds relate to the telephone not being answered and a further third to the telephone number being wrong or unobtainable. The single main reason, 'no reply to an answerphone message' has risen substantially over the short period, to almost two-fifths.

To highlight any regional variations,

Figure 5 shows the reasons for non-contact
(by face-to-face interviewers), with figures
for England excluding London, with
London shown separately. Dwellings in
London and Wales were the most likely to
have householders rarely there or to be a
second residence, although the distribution

Probably vacant but unable to confirm

Figure 5 Reasons for non-contact by face-to-face interviewer: by country, **April to June 2008** Percentages 100 80 60 40 20 0 England Scotland Wales London (excluding London) Rarely there/unconfirmed second residence Would not answer door Ran out of field time Away all survey period/on holiday Othe ☐ Shift worker/works odd hours

Figure 6
Reasons for non-contact by telephone unit: by country,
April to June 2008

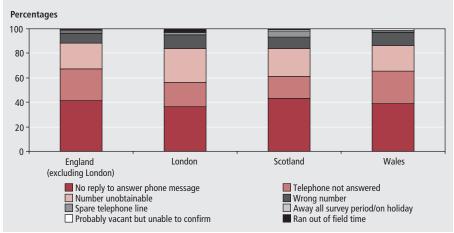
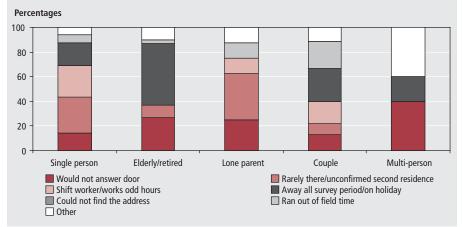


Figure 7
Reason for non-contact by face-to-face interviewer: by household type, April to June 2008



between those two reasons would be likely to differ between the two regions. London and the rest of England had the largest percentage shares of 'ran out of field time' as the main reason for non-contact, reflecting the particular difficulty interviewers face in

making contact in certain areas. Scotland had a relatively high proportion reporting 'shift worker or works odd hours' or 'away all survey period'.

Telephone not answered

**Figure 6** shows the reasons for non-contact (by the telephone unit) by country,

but with separate figures for London again. Sampled households in London were the most likely to have a wrong or unobtainable number, while Wales and the rest of England had the greatest proportions not answering the telephone.

Figure 7 and Figure 8 present the reasons for non-contact by face-to-face interviewers, by household and by dwelling type. This information is not available for telephone interviews and, for the majority of non-contacts, the data do not contain detailed information on household type as, in most cases, the interviewers do not feel able to make a judgement on this, since no contact has been made.

Figure 7 suggests that the main reason the elderly or retired were not contacted was because they were away for the whole of the survey period, perhaps reflecting ill health, whereas for lone parents and single-person households, rarely being there (or unconfirmed second residence) was the main reason. Being unwilling to answer the door was relatively prominent among the elderly and lone parents but particularly frequent for multi-person households.

The main reasons for non-contact (by face-to-face interviewers) by dwelling type are shown in Figure 8. 'Other' accounted for over 50 per cent for each dwelling type. Apart from this category, a refusal to answer the door was most common for flats, while working shifts or odd hours was most common for detached houses. Interviewers only reported running out of time, to any notable extent, with flats and terraced houses.

The majority of interviewers do not face any reportable physical impediments when attempting to contact potential respondents. However, for those who do, the major impediments that appear persistently to be a problem are gaining access to the address through an entryphone or intercom (Figure 9). This is particularly true in Scotland, possibly due to the substantial number of tenement buildings there. A locked common entrance was next in importance, particularly in many areas of England. London had the most interviewers reporting 'security staff, concierge' as the reason for non-contact, which may be due to the concentration of blocks of flats with door staff.

# Refusals

Refusals account for a much larger proportion of the non-response figures than non-contacts: Figure 3 shows that refusals accounted for nearly 87 per cent of non-response figures in April to June

Figure 8 Reason for non-contact by face-to-face interviewer: by dwelling type, April to June 2008 Percentages 100 80 60 40 20 n House (detached) Flat House Terraced house (semi-detached) Rarely there/unconfirmed second residence Would not answer door ☐ Shift worker/works odd hours Away all survey period/on holiday Ran out of field time Could not find the address Other

Figure 9 Impediments to gaining access: by country, April to June 2008 100 80 60 40 20 0 Scotland England Wales London (excluding London) Locked common entrance Locked gates ■ Security staff/concierge ■ Entryphone access/intercom ■ Guard dog ■ Warden controlled ☐ Don't know

2008, while Figure 4 shows the general rising trend for refusals, which have risen from around 16 per cent in 1997 to about 29 per cent in 2008. Refusals may take various forms including refusal in response to the letter from headquarters, outright refusals and circumstantial refusals.

Figure 10 shows 'refusals to headquarters' and 'refusals to interviewer' ('refusals to interviewer' combine outright refusals and circumstantial refusals); Figure 11 shows outright refusals and circumstantial refusals.

All refusal categories have risen considerably, as reflected in the falling response rate, with outright refusals (Figure 11) being consistently the most common and reaching around 17 per cent in 2008 for all waves. Although 'refusal to interviewer' and 'outright refusal' have increased by the greatest absolute proportion (about 9 and 7 per cent, respectively), 'refusal to headquarters' (as a response to the initial letter or leaflet) has shown by far the most substantial proportionate increase, rising almost threefold over the period.

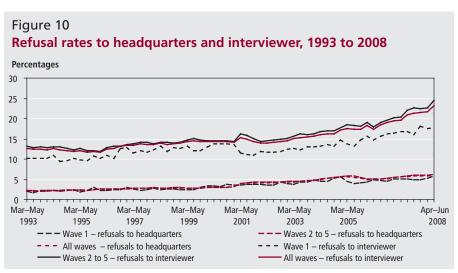
Although all refusal categories have risen over the period, around 2001 there does appear to have been a downward shift for three of the four categories (not refusal to headquarters), and a smaller downward shift, particularly for wave 1, in 2005 in another three (not circumstantial refusals), both of which are reflected in the response rates discussed earlier.

On a geographical basis, as with noncontact, London shows the highest refusal rate, at about 20 per cent, although it does not stand out to the same degree - other areas have rates of 15 to 17 per cent. Similarly, when refusal rates are viewed by accommodation type, 'converted', 'mobile' and 'other' accommodation do show the highest refusal rates (15 to 19 per cent) and houses and bungalows the lowest (9 to 11 per cent), the difference not being nearly so wide. The same narrow variation occurs for refusal by type of household: most household types have refusal rates ranging between 11 and 13 per cent; only 'other' and 'lone parent' households diverge, with rates around 7 to 8 per cent.

## Reasons for refusal

The relative importance of particular reasons for refusal tends to differ between wave 1 and the subsequent waves; Table 5 takes account of this. If reasons are grouped then, at wave 1, about onethird of refusals relate to a dislike of the survey, of government, and of revealing personal information. Another quarter relate to the respondent's time available or ability to complete the interview. For later waves, although busyness and capability reasons remain almost as strong, the antisurvey reasons diminish, while broken appointments rise around fourfold from the wave 1 level of about 10 per cent, reflecting the general change of mode from face-toface to the telephone unit.

Figure 12 shows that, on a geographical basis, dislike of surveys, government and revealing information seem to be strongest in the rest of England while busyness and broken appointments are most frequent in London. Wales has the highest proportions of 'too old/infirm' and 'about to go away', while Scotland leads in terms of the catchall category of 'cannot be bothered'.



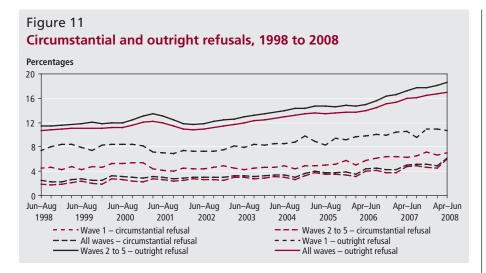


Table 5
Reasons for refusal to wave 1 and waves 2 to 5 interviews

					Perc	entages
	Mar-May 2003		Apr-Jun 2006		Apr-Jun 2008	
		Waves		Waves		Waves
Refusal reason	Wave 1	2 to 5	Wave 1	2 to 5	Wave 1	2 to 5
Genuinely too busy	9.0	11.8	11.5	11.8	12.1	9.8
Cannot be bothered (used if no more precise reason)	8.8	7.3	13.0	9.1	11.2	8.1
Other	12.5	8.8	9.8	6.9	10.6	6.4
Respondent does not believe in surveys	13.6	<i>5.3</i>	12.2	3.6	10.2	3.2
Invasion of privacy	11.9	4.5	9.4	4.4	10.1	3.2
Broken appointment	6.9	26.3	9.5	36.0	10.0	42.5
Temporarily too busy	7.6	5.3	6.8	<i>5.3</i>	6.9	5.1
Respondent is anti-government	5.7	1.4	5.7	1.0	6.0	1.1
Personal problems	6.0	9.5	6.0	8.0	5.4	6.8
About to go away	2.3	5.5	3.8	6.5	4.6	5.5
Too old/infirm	5.0	1.2	3.9	1.3	3.5	1.1
Concerns about confidentiality	2.7	0.9	1.7	0.6	3.5	1.3
Not capable	1.1	0.5	1.5	0.6	1.4	0.6
Respondent dislikes survey subject matter	2.1	1.3	1.9	0.9	1.2	0.8
Language difficulties	1.0	1.2	0.8	0.8	0.7	0.4
Respondent has had bad experience with other surveys	0.7	0.5	1.0	0.5	0.7	0.5
Late contact – insufficient field time	1.2	2.6	0.9	0.5	0.6	0.5
Respondent reports already refused another interviewer	0.3	2.7	0.2	1.3	0.5	1.0
Refusal to HQ after interviewers visit	0.4	0.3	0.2	0.2	0.4	0.1
Survey takes/took too long	1.3	2.8	0.2	0.7	0.2	1.6
Put off by record keeping	0.1	0.2	0.1	0.3	0.0	0.3

#### Note:

Percentages exclude imputed data. Waves 2 to 5 normally telephone interview.

# Who is refusing?

Although it does not take account of the groups' proportions of the population, Figure 13 does reveal that the bulk of refusals are accounted for by four categories of household, namely single (retired and non-retired) and couples (with or without children), with the largest numbers being among elderly people and couples with children.

Some information as to which households tend to fall out after the wave 1 face-to-face interview may be gleaned from information regarding recall interviews. At the end of the survey, the main respondent is asked by the interviewer if he or she

would agree to recall – meaning, take part in the survey again. This information differs from that above, in that the earlier set relates to refusal at any wave, while the recall information relates to refusal for the subsequent wave, voiced at the end of the current interview.

Figure 14 suggests that households who do not agree to recall are most likely to be described as 'other' or 'elderly/retired'. Close to 15 per cent of 'elderly/retired' households interviewed in wave 1 declined to take part in the second wave at the end of the first interview. Lone parents were the group least likely to refuse to recall, with only around 8 per cent doing so.

Refusal to recall by type of dwelling percentages is shown in **Figure 15**. Those refusing to recall are proportionately highest in dwellings described as 'other' or 'mobile home'. For all other dwelling types, the percentage declining to take part in wave 2 interviews is around 10 per cent.

Figure 16 shows that, since 1992, the proportion of respondents declining to take part in the next wave of the survey (not agreeing to recall) tended to rise until June 2005 (peaking at 13.5 per cent for refusals to recall at the end of the wave 1 interview) since when it has fallen to the current (wave 1) level of around 6 per cent. All waves have followed the same pattern although, throughout the period, refusal to recall at the end of wave 1 has been markedly higher than at subsequent waves, as is attrition more generally. The recent apparent improvement in agreement to recall may again be due to the increased management emphasis on this over recent years.

The survey does not currently ask those who do not agree to a recall at the end of their interview to give a reason for this, which would give an insight into why respondents who had been willing to take part decided not to do so next time. However, there are moves to add such questions to the survey (Smith and Robertshaw 2006).

Interview length may be expected to influence recall willingness, although there is some debate as to its effects (Groves and Couper 1999). Table 6 presents data on the average LFS interview length, in minutes, for each quarter over the past three years. As most wave 1 interviews are conducted face-to-face and most waves 2 to 5 interviews by the telephone unit, these figures have been highlighted. Face-to-face interviews tend to be longer than waves 2 to 5 interviews, as there are many questions only asked at the wave 1 interview. Wave 1 interviews seem to be increasing in length, now exceeding 30 minutes per person in quarter 2, which has tended to have the greatest number of questions. Although there is wide variation around the average, with the majority below this, this average interview length nevertheless equates to over one hour for the whole household.

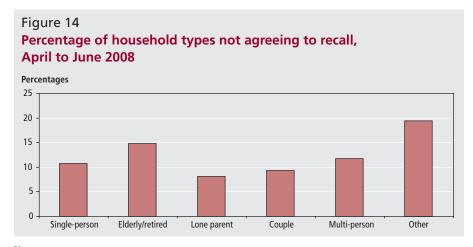
Waves 2 to 5 interviews also appear to have increased in length, but average 7 to 10 minutes less than those at wave 1, currently ranging from about 19 to 24 minutes per person. The overall increases in interview times may be too small to influence response rates at the margin, although the overall length of time might

Figure 12 Ten main reasons for refusal: by country, April to June 2008 Percentages 100 80 60 40 20 0 England Wales Scotland (excluding London) Respondent does not believe in surveys Too old/infirm Respondent is anti-government Language difficulties
Concerns about confidentiality Invasion of privacy ☐ Too busy
☐ Broken appointment About to go away
Cannot be bothered

Figure 13 Percentage of refusals: by household type, April to June 2008 Multi-person Other (2%) Single-person household, not (students, sharers) (3%) retired (18%) Couple - one or both working age (no children or not sure about dependants)(19%) Elderly/retired household (28%) Couple - one or both working age (with children) (24%) Lone parent (6%)

Note:

The large proportion recorded as 'not known' has been removed.



# Note:

Data exclude households for which interviewers are unable to indicate type.

be considered too great a burden for some respondents. As Table 5 shows, although it is not proportionately large, the length of the interview is cited as the main reason for refusal to waves 2 to 5 interviews much more than for wave 1 interviews.

## **Discussion**

As has been shown in the above analysis, non-response is a very complex issue, with no single cause and certainly no single cure. Numerous factors may influence response, including: public attitudes, media representation, data collection methodology, the weather, sporting events, staff training and political issues. These are to name but a few and it can be considered that almost everything can affect response rates in some way. While it is not possible to discuss all the potential factors affecting response rates here, or to propose interventions that could respond to all of

these factors, it is worth expanding on the data presented above to encourage further debate about the current and sustained falling response rates to the LFS.

The response rates for social surveys in general, but especially for the LFS as the UK's largest continuous survey, may well be suffering from widespread apathy and mistrust from the British public. The data presented above detail how a large and increasing proportion of non-response is due to potential respondents not believing in surveys, not trusting the government and generally not being bothered. There appears to be an increasing lack of support from the public and measures to prevent the falling response rates may have to look further than changing how the respondents are approached and targeted. Raising the profile and public awareness of the LFS through a variety of media may be one way to effect a significant change in the public's attitudes towards taking part in social surveys. Communicating the value of social surveys like the LFS through television programmes, advertisements and articles may be a tall order, but gaining the widespread awareness and the support of the public is worth considering as a way to make an impact on reversing the falling response rates.

It is also worth comparing the UK situation with that of other European countries. Table 7 shows response rate data from 2005 for other European countries which conduct a quarterly LFS; the figures may not be directly comparable and should therefore be treated with the utmost caution. These figures suggest that the UK is performing worse than most other European countries: only Denmark had a worse response rate in 2005. Some European countries have made their LFS participation compulsory; Table 7 also shows the division between those countries that have made participation in their LFS voluntary and those that have made it compulsory. The average response rate for the compulsory surveys is higher, as would be expected, although many of the other European countries conducting their survey with voluntary participation still have higher response rates than those with compulsory participation. The UK might learn from how these countries conduct their surveys. These data could also be used to argue that the UK LFS should be made compulsory as one potential solution to the declining response rates.

Reducing the burden on the respondent may also be one way to reduce the level of non-response. It might be possible to reduce the number of waves or increase

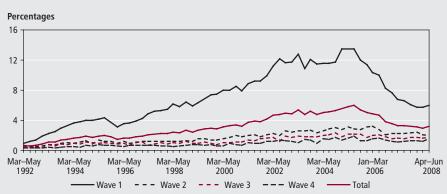
Figure 15 Percentage of dwelling types not agreeing to recall, **April to June 2008** Percentages 60 50 40 30 20 10 House House Terraced Flat Flat Mobile home Other (detached) (semi-detached) house (purpose-built) (converted

house/other

Note:

Data exclude households for which interviewers are unable to indicate type.

Figure 16
Proportion of respondents not agreeing to recall interviews, 1992 to 2008



the period between interviews, although this may have implications for the sample size and interviewer effort. Shortening the interview is another way of reducing the burden and non-response, but this is not easily achievable. Cutting out a few questions would not be likely to have a major impact on response rates; either the reduction in the number of questions would

have to be drastic or a radical change to how the data are collected would have to be made.

One key feature of the results is the wide variation in response, non-contact and refusal and the reasons cited, on the basis of geography, household and dwelling type, and other studies (Hopper 2008, Bright *et al* 2008) suggest variation by other

characteristics too. Some areas and groups exhibit very high non-contact and refusal rates while others have relatively high response rates. This suggests that, apart from the general policy measures discussed above, a set of targeted interventions focusing on high non-contact and high refusal groups, and taking account of the reasons for these, could be fruitful.

## **Conclusions**

The LFS all-wave response rate has followed the widely-experienced prolonged decline and much activity is now being carried out within ONS to both gauge and ameliorate its effects. Furthermore, there is wide variation in response, non-contact and refusal and the reasons given for this geographically, by wave, mode, household and dwelling type. This suggests that the research and interventions required will need to be tailored to suit this variation.

Although a good deal of information is being collected regarding distribution of, and reasons for, non-response, ONS is currently exploring what more can be done. Extra information needs to be gathered by interviewers regarding features of noncontactable and refusing households and dwellings and reasons for these, and a deeper insight might be gained by specially surveying non-responders. Further analysis should also be carried out to derive determinants of the various types of nonresponse among the different areas and groups.

Work is necessary to determine the effects of falling response on quality of estimates; this will inform the decisions on interventions and adjustments. Current work at ONS is considering, among other things, the characteristics of high and low responders, the effects of response rate on standard errors and the non-response bias.

Table 6 **Average interview times** 

Minutes Quarter 1 (Jan-Mar) Quarter 3 (Jul-Sep) Quarter 4 (Oct-Dec) Quarter 2 (Apr-Jun) 2006 2007 2008 2006 2007 2008 2006 2007 2008 2006 2007 2008 Face-to-face Wave 1 26.83 27.92 29.29 29.98 29.60 30.56 27.45 27.07 28.44 28.85 Waves 2 to 5 17.75 20.77 20.38 20.39 22.36 22.00 18.26 19.73 20.14 21.54 All waves 23.94 25.67 26.59 26.82 27.41 27.97 24.51 24.84 25.75 26.59 Telephone unit Wave 1 31.40 31.97 30.20 31.05 32.31 34.95 25.64 27.51 31.31 28.31 Waves 2 to 5 17.84 19.38 19.60 22.10 21.42 23.79 17.52 18.22 19.12 21.47 17.87 19.62 22.12 21.44 23.80 17.54 18.23 19.14 21.48 All waves 19.4 Total Wave 1 26.85 27.93 29.30 29.98 29.61 30.57 27.44 27.07 28.46 28.84 Waves 2 to 5 17.83 19.58 19.71 21.82 21.55 23.53 17.64 18.44 19.28 21.48 All waves 20.14 21.59 22.08 23.86 23.56 25.29 20.16 20.66 21.63 23.31

#### Note:

Average times by wave and excludes interviews of less than five minutes.

Table 7 Response rates for European countries conducting a quarterly labour force survey

Percentages

Countries with voluntary		Countries with compulsory	
labour force surveys	2005 response rate	labour force surveys	2005 response rate
Bulgaria	83.3	Belgium	79.3
Czech Republic	80.2	Germany	95.6
Denmark	63.4	Spain	80.4
Estonia	74.9	France	80.9
Ireland	90.9	Italy	90.6
Latvia	78.6	Cyprus	97.2
Lithuania	87.6	Malta	82.0
Hungary	87.5	Austria	89.3
Netherlands	86.6	Portugal	87.4
Poland	78.8	Slovakia	93.1
Romania	96.0	Turkey	85.1
Slovenia	83.8	Norway	88.0
United Kingdom	65.9		
Iceland	82.1		
Average	81.4	Average	87.4

Source: Eurostat 2007

Given the variation in response and non-response and the reasons given, interventions targeted according to these could have a greater impact than a blanket approach. Nevertheless, certain general policies, such as ART, improving the survey content and interview length, and improving the image of the ONS in general and the LFS in particular, and even consideration of making the survey compulsory, should also be pursued. However, it is important that interventions should be considered in the context of a holistic approach in which they are seen as part of a complete system and all aspects are included within the process.

# **Notes**

- A refusal to headquarters denotes a household which contacts the field office to refuse to participate in the survey in response to the advance letter.
- 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.
- Circumstantial refusal occurs where a respondent refuses to take part in the survey in a particular wave because of a temporary circumstance. It enables the interviewer to call back at the next wave.

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# REFERENCES

Bright G A ,Barnes W and Fletcher D (2008) 'Estimating non-response bias and its effects on the LFS', unpublished research paper, Office for National Statistics.

Groves R M and Couper M P (1998) Nonresponse in Household Interview Surveys, John Wiley and Sons: New York.

Hopper N (2008) 'Understanding the characteristics of non-contacts/refusers to enable improved targeting of ART', unpublished research paper, Office for National Statistics.

Smith P and Robertshaw A (2006) 'Attrition rates in the UK Labour Force Survey', Survey Methodology Bulletin 50, pp 40-3.

# APPENDIX

Table A1
Response rates, 1993 to 2008

							Percentages
	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Waves 2 to 5	All waves
Mar–May 1993	83.1					78.4	79.3
Jun-Aug 1993	82.2					78.2	79.0
Sep-Nov 1993 Dec 1993-Feb 1994	82.7 83.0					78.1 77.9	79.1 78.9
Dec 1995-ren 1994	05.0		**		**	77.9	70.9
Mar-May 1994	82.3					77.1	78.1
Jun-Aug 1994	83.5			**		76.6	77.0
Sep-Nov 1994	84.2					76.7	78.2
Dec 1994–Feb 1995	83.7					76.9	78.2
Mar-May 1995	84.0					76.1	77.6
Jun-Aug 1995	82.6					76.2	77.5
Sep-Nov 1995	81.7					76.4	77.4
Dec 1995–Feb 1996	82.9					76.0	77.4
Mar May 1006	82.1					<i>75.3</i>	76.6
Mar–May 1996 Jun–Aug 1996	82.1 82.2					73.3 74.6	76.1
Sep-Nov 1996	79.9					74.7	75.7
Dec 1996–Feb 1997	79.5					74.7	75.6
Mar–May 1997	81.0					73.8	75.2
Jun-Aug 1997	79.6	76.0	 75.2	72.4	72.2	<i>73.6</i>	74.8
Sep-Nov 1997 Dec 1997-Feb 1998	80.6 79.1	76.8 76.7	75.2 74.9	72.1 73.0	72.2 71.5	73.7 73.7	75.1 74.7
Dec 1997—Teb 1996	73.1	70.7	74.3	73.0	71.5	73.7	74.7
Mar-May 1998	78.0	75.0	74.0	72.0	72.0	73.2	74.2
Jun-Aug 1998	78.7	74.7	72.8	71.5	70.2	72.9	73.5
Sep-Nov 1998	79.2	76.3	72.7	70.8	70.6	<i>73.3</i>	73.9
Dec 1998–Feb 1999	79.6	74.7	73.6	70.3	69.5	72.7	73.5
Mar-May 1999	78.7	74.4	71.9	70.2	68.4	71.9	72.7
Jun-Aug 1999	78.5	73.3	71.4	69.0	68.2	71.0	72.0
Sep-Nov 1999	78.1	74.2	71.1	69.4	68.6	71.3	72.2
Dec 1999–Feb 2000	76.9	73.4	71.9	68.8	67.8	71.0	71.8
Mar May 2000	76.0	71.0	69.6	69.0	66.3	69.0	70.4
Mar–May 2000 Jun–Aug 2000	74.8	70.0	68.4	67.0	67.3	68.2	69.5
Sep-Nov 2000	74.0	70.3	68.7	66.6	66.2	68.0	69.1
Dec 2000–Feb 2001	75.0	70.0	68.3	66.7	65.5	67.6	69.1
Mar. Mar. 2004	70.4	70.4	67.1	CF C	<i>CE E</i>	67.4	CO 4
Mar–May 2001 Jun–Aug 2001	78.1 78.3	70.4 71.3	67.1 68.6	65.6 65.2	65.5 64.4	67.4 67.6	69.4 69.6
Sep-Nov 2001	76.3 79.3	71.5 71.9	69.5	66.6	64.4	68.4	70.3
Dec 2001–Feb 2002	78.7	71.9	68.7	66.7	65.4	68.4	70.2
Mar–May 2002	78.6	70.3	68.8	65.9	64.9	67.7	69.7
Jun-Aug 2002	77.4 76.9	68.9 68.4	66.8 66.4	65.5 64.3	64.0 63.9	66.6 66.0	68.5 68.0
Sep-Nov 2002 Dec 2002-Feb 2003	76.3	68.4	65.0	63.5	62.8	65.1	67.2
Mar–May 2003	76.6	67.0	64.6	61.8	61.3	64.0	66.2
Jun-Aug 2003	76.0	66.9	63.7	61.0	60.0	63.1	65.4
Sep-Nov 2003 Dec 2003-Feb 2004	75.9 74.1	67.7 65.2	63.8 63.3	60.9 60.4	60.4 59.3	63.3 62.1	65.7 64.4
DCC 2003 TCB 2004	77.1	05.2	05.5	00.4	33.3	02.7	04.4
Mar-May 2004	73.3	64.4	61.6	59.7	<i>58.3</i>	61.0	63.4
Jun-Aug 2004	72.1	64.4	61.9	58.3	58.0	60.6	62.9
Sep-Nov 2004	74.7	65.9	62.6	60.0	57.5	61.5	64.1
Dec 2004–Feb 2005	73.2	64.3	61.6	58.7	57.2	60.4	63.0
Mar–May 2005	74.3	61.2	60.2	57.6	56.4	58.8	61.9
Jun-Aug 2005	75.1	63.2	58.1	57.3	56.4	58.6	62.0
Sep-Nov 2005	74.2	64.5	59.9	55.1	56.0	58.9	61.9
Dec 2005–Feb 2006	72.5	63.5	60.8	56.5	54.2	57.4	61.4
Jan-Mar 2006	72.8	63.9	61.5	57.6	55.0	59.5	62.1
Apr–Jun 2006	72.0	62.3	58.6	57.6	55.4	58.5	61.0
Jul-Sep 2006	70.1	61.7	58.5	54.9	55.1	57.5	60.0
Oct–Dec 2006	70.0	63.0	59.9	56.0	54.4	58.3	60.6
	ac -	-	-				
Jan–Mar 2007	69.9 60.4	63.0 61.4	60.1	57.0 55.2	54.9	58.7 57.5	60.9
Apr–Jun 2007 Jul–Sep 2007	69.4 70.5	61.4 62.3	59.1 57.8	55.2 55.6	54.4 54.0	<i>57.5</i> <i>57.4</i>	59.9 60.0
Oct-Dec 2007	68.5	62.3 63.5	57.8 58.7	55.6 54.6	54.5	57.4 57.8	59.9
Jan-Mar 2008	69.0	62.8	60.3	56.0	54.2	58.3	60.4
Apr–Jun 2008	67.8	59.1	56.4	53.6	52.3	55.3	57.8

# Note:

Data do not include imputed cases.