



# Labour Force Survey

**2011 changes to how Ethnicity is asked on Labour Force Survey**  
Sean Milburn

**2011 changes to how Ethnicity is asked on Labour Force Survey:  
An assessment of impact on responses.  
ONS Social Surveys, September 2013**

**1. Summary**

1. Changes were made to the ethnicity questions asked on the Labour Force Survey (LFS) in both JM11 and AJ11 (the AJ11 versions being retained ongoing). These changes were introduced to bring LFS into line with 2011 Census.
2. The main element of change to the questions was a move from asking 'To which of these ethnic groups do you *belong?*', to 'What is your ethnic group? ...choose one option that best describes your *ethnic group or background?*'
3. It was anticipated that this would introduce some change in reporting behaviour, and the purpose of this paper is to assess the nature of any impact both short term during 2011 and longer term. This analysis is designed to provide LFS data users with sufficient understanding to allow them to interpret trend analysis and be able to attach relevant footnotes to analyses.
4. Analysis in this report, conducted by ONS Social Surveys Division, indicates that there is some long term impact on responses associated with the change in question, with a reduction in reporting of ethnic group being 'white' and some increase in reporting of 'mixed/multiple ethnic groups', 'Indian' and 'Pakistani'.
5. Further, in 2011 there was also a short term - temporary – impact on numbers reporting ethnic groups:
  - a. 'Black/African/Caribbean/Black British',
  - b. 'Any other Asian background' and
  - c. 'Other ethnic group'.

This is believed to have been the result of the temporary methodology required to introduce the new questions.

6. Although correspondence analysis has provided some diagnostics of how responses changed between ethnic groups during early 2011, it is not possible to conclude what personal characteristics are associated with people whose response would be different under the new question compared to the old.
7. It is recommended that any trend analysis of ethnicity should be accompanied by a footnote noting that harmonised changes in question format were made in 2011, these apparently producing some reduction in reporting of 'white' ethnic group and an increase in 'Mixed/multiple ethnic groups', 'Indian' and 'Pakistani'. Impact on dynamics of response is unclear and therefore trend analysis should be treated with caution. Particular caution should be applied to the period JM11 to AJ12, when the implementation of the new question required a revised methodology.

## **2. Background and report objectives**

In 2011 changes were made in how the LFS asks respondents about their ethnicity. The purpose of the changes was to harmonise the survey and data format with that from the 2011 Census<sup>1</sup>. The changes (see section 3 of this paper) were introduced in two stages, firstly in JM11 (January-March 2011) when both the question wording and the wording of some response categories were revised, and secondly in AJ11 (April-June 2011) when, in line with requirements identified by the census office in Scotland, an additional response category ('Arab') was added across the UK, and some additional changes were made in Scotland (for reference, the new response category 'Arab' is coded into 'Other ethnic group' in derived variables, discussed below).

Reporting by ONS during 2011 identified a break in time series data in 2011. It also suggested diagnostic reasons, and provided recommendations for conducting time series analysis and attaching caveats. Subsequent to that report, ONS Social Surveys has conducted analysis of data over a longer time period and this paper details its findings of trends in ethnic group reporting. The analysis is conducted on the nine-category variable ETHUKEUL, which has been created historically using the variables ETHCEN15 on pre-2011 data and ETHUK16 on JM11 data (see appendix 1 for derivation). The purpose of this paper is to provide users with sufficient understanding to allow them to interpret trend analysis and to be able to attach relevant footnotes. Attention is paid to a) long term estimate trends beyond 2011 and b) short term estimate trends during the time of question transition in 2011 and early 2012.

<sup>1</sup> - The ethnicity questions included in the 2011 census were developed by an iterative and comprehensive process of user consultation, evaluation and prioritisation of user requirements; qualitative and quantitative question testing was carried out from 2005 to 2009. Uses of ethnicity data collected by the census include: policy delivery including meeting statutory requirements under the Race Relations Act, resource allocation and service provision, and understanding and representing the interests of specific groups (ONS, 2009, p. 4)

### 3. What changes were made to the LFS ethnicity questions?

In JM11 there was a change in focus of the question wording. Previously (i.e. 2001 census and LFS 2001 – 2010) respondents were asked which ethnic group they consider they belong to; the new wording asks respondents ‘What is your ethnic group?’ The development process for the 2011 census ethnicity questions concluded,

*[I]t is more suitable [...] to ask ‘What is your ethnic group?’ instead of ‘What do you consider your ethnic group to be?’. This provides a distinction from national identity, for which the recommended phrasing ‘how would you describe your national identity?’ is more subjective” (ONS, 2009, p. 27)*

The new question then instructs respondents to choose a category that best describes their ethnic group or background.

*The term ‘background’ seemed to be more aligned with respondents’ understanding of ethnic group, as it allowed for a variety of factors to be included, reflecting the varied interpretations of ethnic group (ibid, p. 28).*

A summary of the question wordings is as follows:

3.1 In JM11 both the question wording and some of the response options were changed:

Table 1a: Top level ethnicity variables in LFS questionnaires 2001-2010 and JM11.

To OD10	JM11	JM11
<p><b>ETH01</b> {USE SHOWCARD} To which of these ethnic groups do you consider you belong</p> <p>1 White 2 Mixed 3 Asian or Asian British 4 Black or Black British</p> <p>5 Chinese 6 Other ethnic group</p> <p>Coverage: UK</p>	<p><b>ETH11</b> {USE SHOWCARD} What is your ethnic group? I'll read out the options, choose one option that best describes your ethnic group or background.</p> <p>1 White 2 Mixed, multiple ethnic groups 3 Asian / Asian British 4 Black / African / Caribbean / Black British 5 Chinese 6 Other ethnic group</p> <p>Coverage: GB</p>	<p><b>ETHNI11</b> {USE SHOWCARD} What is your ethnic group? I'll read out the options, choose one option that best describes your ethnic group or background.</p> <p>1 White 2 Irish Traveller 3 Mixed, multiple ethnic groups 4 Asian / Asian British 5 Black / African / Caribbean / Black British 6 Chinese 7 Other ethnic group</p> <p>Coverage: Northern Ireland</p>

3.2 Then in AJ12 response options were changed (with 'Arab' added), to be as follows:

Table 1b: Top level ethnicity variables in LFS questionnaires from AJ11.

From AJ11	From AJ11	From AJ11
<p><b>ETH11EW</b> {USE SHOWCARD} What is your ethnic group? I'll read out the options, choose one option that best describes your ethnic group or background.</p> <p>1 White 2 Mixed, multiple ethnic groups 3 Asian / Asian British 4 Black / African / Caribbean / Black British 5 Chinese 6 Arab 7 Other ethnic group</p> <p>Coverage: England &amp; Wales</p>	<p><b>ETH11S</b> {USE SHOWCARD} What is your ethnic group? I'll read out the options, choose one option that best describes your ethnic group or background.</p> <p>1 White 2 Mixed, multiple ethnic groups 3 Asian / Asian Scottish / Asian British 4 African 5 Caribbean or Black 6 Arab 7 Other ethnic group</p> <p>Coverage: Scotland</p>	<p><b>ETHNI11</b> {USE SHOWCARD} What is your ethnic group? I'll read out the options, choose one option that best describes your ethnic group or background.</p> <p>1 White 2 Irish Traveller 3 Mixed, multiple ethnic groups 4 Asian / Asian British 5 Black / African / Caribbean / Black British 6 Chinese 7 Arab 8 Other ethnic group</p> <p>Coverage: Northern Ireland</p>

The response given at the top level variable then routes the respondent to the appropriate secondary level variable. The example below shows the second level variable when the top level variable is coded to 'Asian'. Note that there were no changes to the secondary level Asian variable for England, Wales and Northern Ireland, i.e. the categories remained unchanged from those introduced in 2001; changes to the LFS questionnaire in Scotland for AJ11 (which involved merging 'Indian' and 'Bangladeshi' options into one code and adding 'British' as a new response option) reflect census questions introduced by the census office in Scotland.

Table 2. Secondary variables where top level ethnic group = Asian.

From AJ11	From AJ11
<p><b>ETHAS11</b> And which one of these best describes your ethnic group or background?</p> <p>1 Indian 2 Pakistani  3 Bangladeshi 4 another Asian background</p> <p>APPLIES IF ETH11=3 OR ETHNI11=4 (Asian / Asian British) Coverage: England, Wales &amp; NI</p>	<p><b>ETHAS11S</b> And which one of these best describes your ethnic group or background?</p> <p>1 Pakistani / Pakistani Scottish / Pakistani British 2 Indian / Indian Scottish / Indian British Bangladeshi / Bangladeshi Scottish / Bangladeshi 3 British 4 Chinese / Chinese Scottish / Chinese British 5 Any other Asian ethnic group</p> <p>APPLIES IF ETH11S=3 (Asian / Asian Scottish / Asian British) Coverage: Scotland</p>

The values recorded at the various secondary level questions are then collated via a number of derived variables. For full details of all LFS ethnicity variables and derived variables see *Labour Force Survey Update Report: Ethnicity Changes in 2011* (LFS Steering Group paper, June 2011). Proxy responses for ethnic group variables are permitted. Ethnic group data for respondents under 16 will be given by an adult in the household.

#### 4. How the question changes were implemented

Introduction of the new questions required a revised approach to LFS question methodology in the short term. This is described by comparing 'standard' LFS methodology with the temporary methodology employed in 2011, as follows.

##### 4.1 Standard LFS methodology

The Labour Force Survey is a panel survey consisting of five waves. The survey uses a rotational sampling design in which, once selected for interviewing, a household is retained in the sample for five consecutive quarters with the repeat interviews scheduled to occur at thirteen week intervals. An advantage of the rotational sample design is the provision of longitudinal analysis of change in respondents' circumstances across the survey period. There is however a class of variables describing demographic and cultural characteristics that are assumed to be essentially static and are therefore not intended to be asked again after the survey's first contact with the respondent, typically at wave 1. This class includes sex, date-of-birth, country-of-birth, nationality, national identity, religion **and ethnic group**.

##### 4.2 Temporary methodology in 2011

Any significant revisions to questions such as those relating to ethnic group, in wording or definitions, for example, require that the variables be re-asked. For this reason the revised ethnic group variables introduced in JM11 were asked of all five waves in that quarter with the result that:

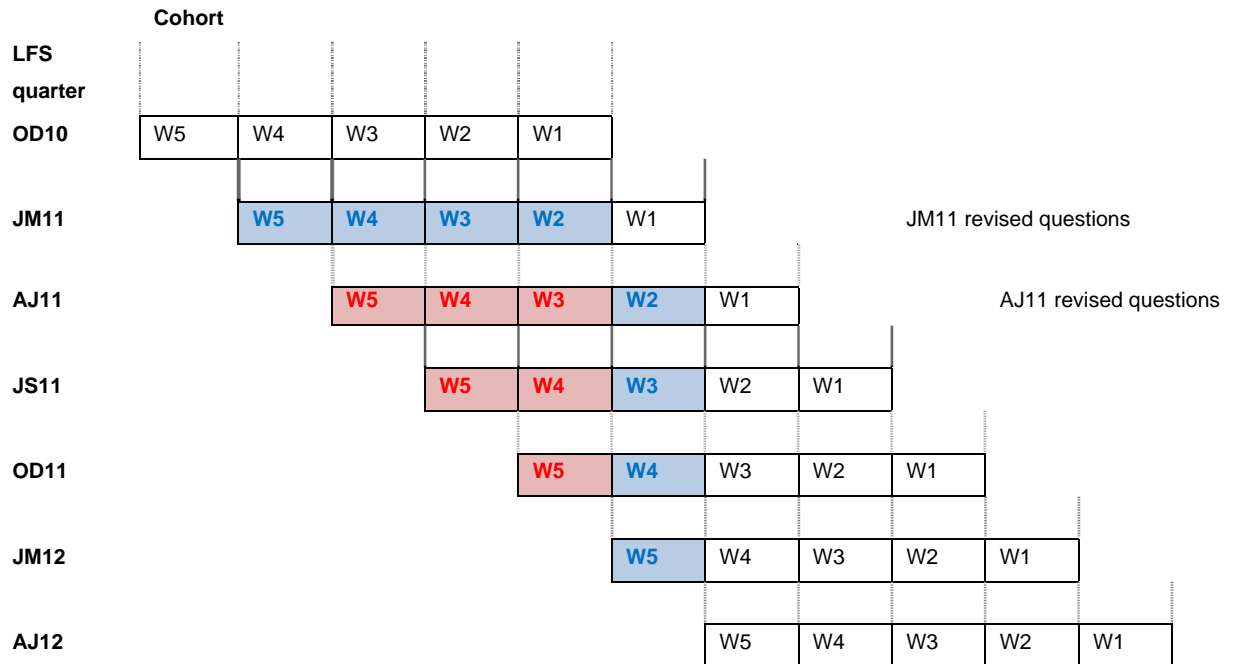
- Respondents in waves 2-5 were asked their ethnic group a second time, using a second question version.

In AJ11 the second set of revised ethnic group variables were asked of all five waves in that quarter, with a result that:

- Respondents in wave 1 were asked their ethnic group using one question format, as normal.
- Respondents in waves 2 were asked a second question version (having previously being asked in wave 1 in the JM11)
- Respondents in waves 3-5 were asked their ethnic group using a third version having been asked in OD10 and JM11 previously.
- From JS11 the standard methodology of recording ethnicity in a single format is restored. Note however that that the JS11 sample still contains one wave of respondents who were asked their ethnicity twice and two waves who were asked using three different question versions.
- It is not until AJ12 that all respondents who were asked their ethnicity multiple times have dropped out of the LFS and the entire sample consists only of respondents asked their ethnicity once.

The repetition of the ethnicity questions through 2011 is represented in fig. 1, below. The horizontal 'cut' shows the composition of each quarter's LFS sample, i.e. one quarter's data; the vertical 'cut' shows the progress of a given cohort through the five waves of its participation in the LFS.

Figure 1.



Key:  $W_n$  = wave position in relevant LFS quarter, e.g. W1 (OD10) = wave 1 in OD10.

Number of ethnicity question versions asked of each cohort (cumulative):

- W1 one
- W1 two
- W1 three



## 5. Ethnicity outcomes

There are three factors which are believed to have had impact on ethnic group reporting:

1. The changes to the question itself, which may produce altered responses (both immediately and ongoing)
2. The fact that between JM11 and JM12 the sample includes a subset of respondents who were asked about ethnicity using more than one question version (changed between waves, as detailed in section 4).
3. The fact that during 2011 and early 2012 the revised ethnicity question versions were asked to respondents via telephone. This is different from usual methodology whereby the majority of people (in wave 1) are first asked about ethnicity face to face. This is because wave 1 is typically conducted face to face whereas waves 2 to 5 are conducted by telephone.

Analysis in this report is able to provide an indication of the impact of changes to the question itself (point 1, above) on level of response to each ethnic group. However, it cannot:

- Isolate the effect of factors 2. and 3. (above) individually, as these two factors are inherently linked.
- Identify any more about the profile of people who may give a different response to the new question version in future, other than a topline indication of ethnic groups crossover during 2011.

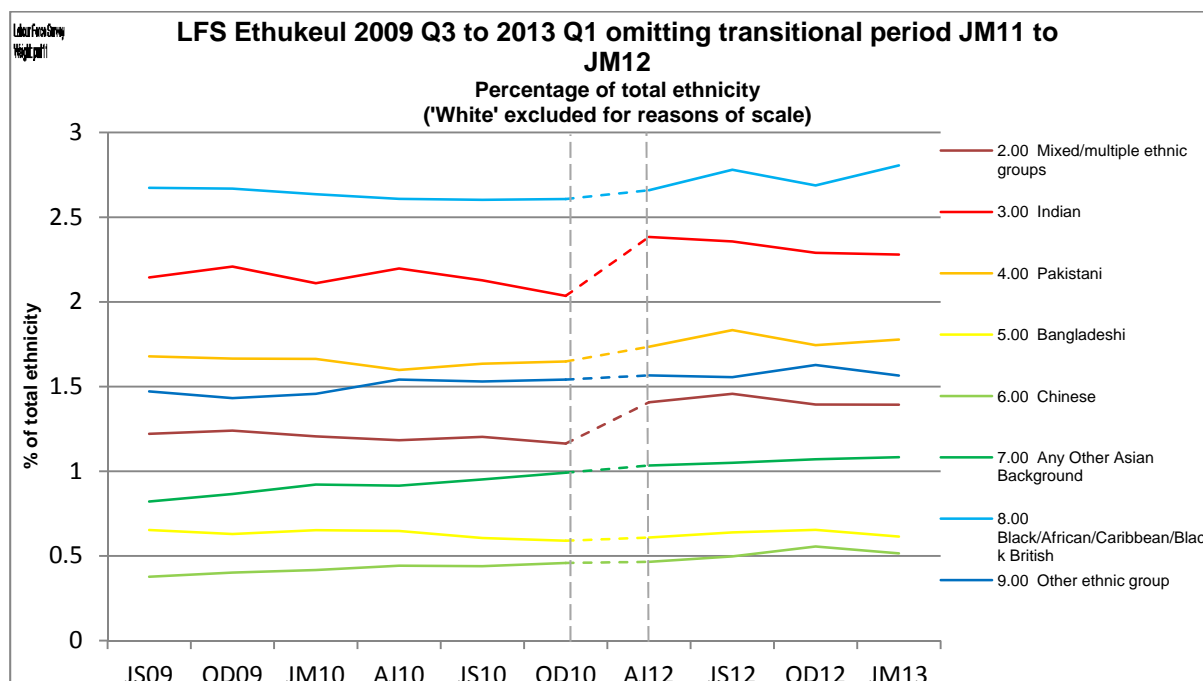
### 5.1 Long term impact on ethnicity reporting

The majority of respondents in the LFS respond that their ethnicity is 'white'. Prior to the question changes in early 2011 the proportion of ethnic reporting as white was very stable, in the range 88.87% to 88.96% during the period JS09 to OD10. However, from OD10 (the last period using the old question) to AJ12 (the first period in which all respondents had only been asked the new question) the proportion fell from 88.96% to 88.14%.

Period prior to question change		Period during question change		Period post question change	
Period	% of total ethnicity 'white'		% of total ethnicity 'white'		% of total ethnicity 'white'
JS09	88.96	JM11	88.74	AJ12	88.14
OD09	88.89	AJ11	88.47	JS12	87.83
JM10	88.94	JS11	88.29	OD12	87.98
AJ10	88.87	OD11	88.31	JM13	87.97
JS10	88.91	JM12	88.32		
OD10	88.96				

Figure 2, below, plots %s responding for all other ethnic groups. Note that, to highlight only the long term picture, it excludes JM11 to JM12 (the period of question transition). It highlights that there was some increase in % responses of 'Indian', 'Mixed/multiple ethnic groups' and 'Pakistani' which were not in keeping with trends either side of the transition period. None of the other ethnic groups experienced a change in response over this period that was out of line with longer term trends.

Figure 2



It is not possible to determine the exact nature of any impact on responses because, in the transition period for which we have longitudinal data, the unknown impact of multiple question administration makes it impossible to isolate the impact of the question wording change. However, some indication may be gleaned from looking at how responses given in OD10 (the final quarter prior to making any question change) changed when respondents were re-contacted in JM11. Table 3a, below, demonstrates that:

- There was some movement from 'white' to 'Mixed/multiple ethnic groups' over this period. Of the 89.5 thousand estimate for 'Mixed/multiple ethnic groups' in JM11, 26 thousand had given a response 'white' in their previous interview (OD10).
- There was very little movement between 'Indian' and other ethnic groups and between 'Pakistani' and other ethnic groups during this period. However, this in itself does not indicate that the question change had no impact on the number of people stating these groups, only that there was minimal net movement during the transition period when respondents were asked the ethnicity question multiple times.

- There was quite substantial movement between 'other ethnic groups' and other response options. This suggests that stability of this ethnic response group is possibly lower than is the case for other ethnic groups.

Table 3a – volatility of ethnic group identification amongst personal responders (ioutcome = 1) OD10 to JM11

Thousands	Response in JM 11									Total
	ethukeul_calc_JM11 Ethnicity (9 categories) - UK level (from ethuk16)									
Response in OD10 ethukeul_calc_od10 Ethnicity (9 categories) - UK level (from ethcen15)	1 White	2 Mixed / multiple ethnic groups	3 Indian	4 Pakistani	5 Bangladeshi	6 Chinese	7 Any Other Asian Background	8 Black/African/Caribbean/Black British	9 Other ethnic group	
1 White	12014.6	26.0	1.2	0.5	0.7	0.0	2.3	1.8	49.3	12096.5
2 Mixed/multiple ethnic groups	8.6	38.1	5.2	0.0	0.0	0.0	5.5	5.4	3.8	66.6
3 Indian	0.6	1.1	190.4	3.7	0.0	0.0	4.8	0.0	9.7	210.3
4 Pakistani	0.0	0.6	1.3	108.3	0.0	0.0	0.8	0.0	1.7	112.6
5 Bangladeshi	0.0	0.0	0.0	0.7	37.4	0.0	1.8	0.0	0.8	40.6
6 Chinese	2.8	0.3	0.0	0.8	0.0	46.1	2.3	0.0	1.9	54.2
7 Any Other Asian Background	2.5	2.4	7.6	0.9	0.0	7.0	63.3	1.7	20.3	105.7
8 Black/African/Caribbean/Black British	6.2	9.1	0.8	0.0	0.0	0.0	0.0	240.5	9.3	265.9
9 Other ethnic group	29.8	11.8	7.6	2.4	0.0	2.1	29.6	25.4	59.4	168.1
Total	12065.1	89.5	214.0	117.3	38.1	55.1	110.3	274.9	156.2	13120.5

Filter: ioutcome\_OD10 = 1 AND ioutcome\_JM11 = 1

Weight: PWT11 (OD10)

### 5.1.1 Long term impact of the introduction of the category 'Arab'

The introduction of the 'Arab' top level category in AJ11 appears to have had only a marginal impact on the total coded to 'Other Ethnic Group'. Of respondents recorded as 'Arab' in AJ11 in England and Wales, 85% were coded to 'Other' in JM11. Similar findings were reported in the development and testing of the 2011 census questions:

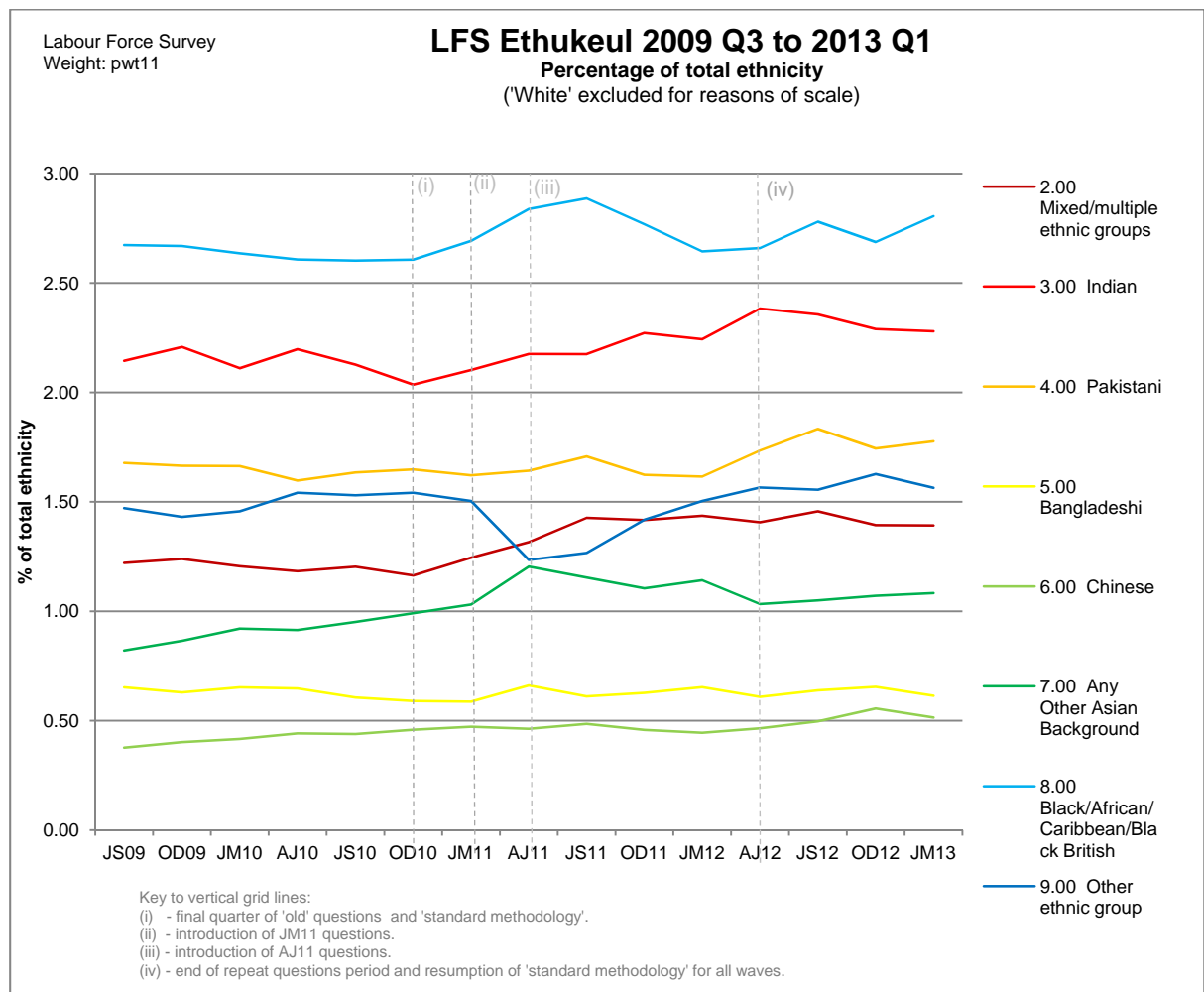
*Data from the 2001 Census suggests that many British Arabs ticked one of the 'Other' categories. For example, in 2001, 82 per cent of people born in Iraq ticked one of the 'Other' options. Some parts of the Arab population will also have ticked specific tick-boxes such as 'African'. However, data from the 2007 Census Test suggests that the introduction of the 'Arab' tick-box appears to have had little impact on response distribution (ONS, 2009, p. 62).*

## 5.2 Short term impact on ethnicity reporting

Figure 3 shows the trends in LFS ethnicity reporting over the period JS09 to JM13 for all ethnic groups except 'White' (which is omitted for reasons of scale), with a focus on the question transition period, which is highlighted as being within the period OD10 to AJ12. The JS09 start point was determined by the scope of the 2011 LFS reweighting project (person weight = PWT11). For all analysis of ethnic group reporting in LFS data the following caveat should be noted:

*In interpreting changes over time, users should bear in mind that the results for ethnic minority groups tend to be more volatile than for the White group. Being based on a smaller number of observations, they tend to have higher sampling variability than for the White group. (ONS, 2002).*

Figure 3



For most ethnic groups there is a fairly consistent trend (either flat or gradually increasing during this period). However, three ethnic groups show short term variability which suggests that the multiple question approach and/or asking a new ethnicity question over the telephone rather than face to face, had some impact on responses during this period. For each of these

groups the response levels at the end of the period had returned to being very similar to those at the start of it. The groups are:

1. 'Other ethnic group' which fell in AJ11 before rising back to pre 2011 levels by the start of 2012.
2. 'Any other Asian background' which rose in AJ11 before falling back to pre 2011 levels by the start of 2012.
3. 'Black/African/Caribbean/Black British', which rose in each of JM11, AJ11 and JS11 before falling back to its approximate pre 2011 level in JM12.

It is notable that for each of these three groups the largest % change was in AJ11 when 60% of respondents were asked ethnicity for a third time (and in a third way).

To explore the effects of question repetition and interview mode separately from any possible effect of the changes to the questions themselves we have conducted analysis which splits each quarter's sample into two elements:

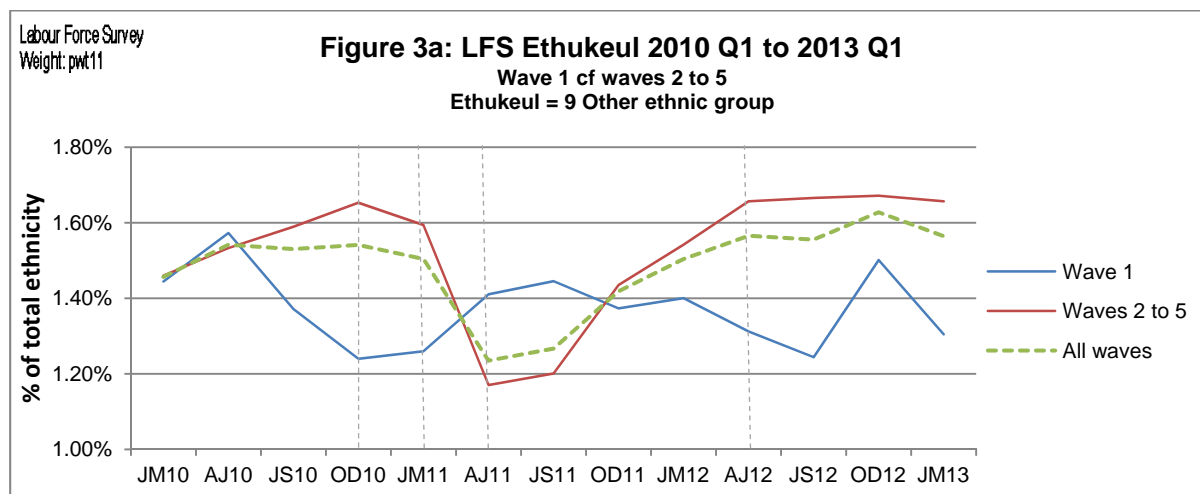
- a wave 1 element which by definition is asked only one ethnic group question version;
- a waves 2-5 element which through 2011 was asked two or three ethnic group questions.

Both elements were subjected to the same type of question (relative to the period) and both subject to the same influence, if any, of external factors such as the census itself. The two modalities of a) single v multiple asking of question(s) and b) face-to-face v telephone interviewing are not separable precisely because the re-presentation of the ethnicity questions was overwhelmingly carried out by telephone interviews. The question-repetition/wave modality associated with data coded to the 'Other', 'Other Asian' and 'Black/African/Caribbean/Black British' ethnic groups are represented in figures 4a-c, below together with a discussion of the possible underlying causes.

It will be seen that all three ethnic groups display the same basic pattern, which is that the wave 2-5 element displays a short term deviation, broadly in line with the 'total' but the wave 1 element does not deviate from its usual pattern (albeit with some strong short term variability).

## 5.2.1 Other Ethnic Group

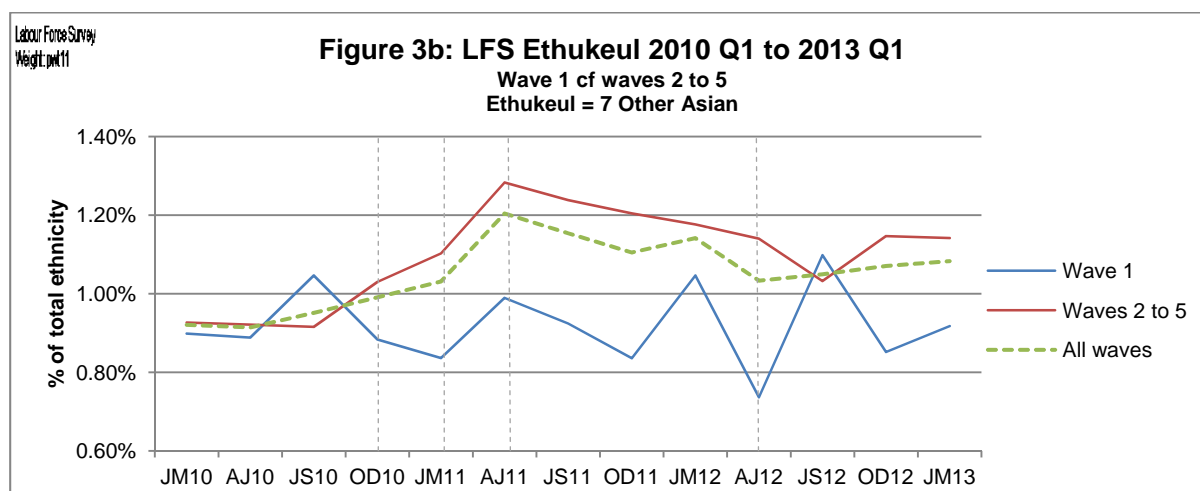
Figure. 4a - repetition/wave modality for ethnic group 'Other'.



- In JM11 (introduction of new questions for all waves and repetition of ethnicity questions for waves 2-5) there is a small decrease in the total coded to 'Other ethnic group' from 1.54% to 1.50%. In AJ11 this decline becomes more pronounced, falling to 1.23%.
- The waves 2-5 element follows this trend (as expected given that it comprises almost 80% of the total) although it tends to exaggerate the fluctuations. The wave 1 element moves in precisely the opposite direction; a small increase in JM11, reversing a previous decline, followed by a larger gain in AJ11, from 1.26% to 1.41%.
- Assuming a similar degree of sampling variability throughout the period JS10 to JM13 it is notable that either side of the 'short term' period reporting for this ethnic group follows a consistent trend. This suggests then that the volatility identified in the 'Other' ethnic group through 2011 is not primarily attributable to sampling variability.

## 5.2.2 Other Asian Ethnic Group

Fig. 4b - -repetition/wave modality for ethnic group 'Other Asian'.



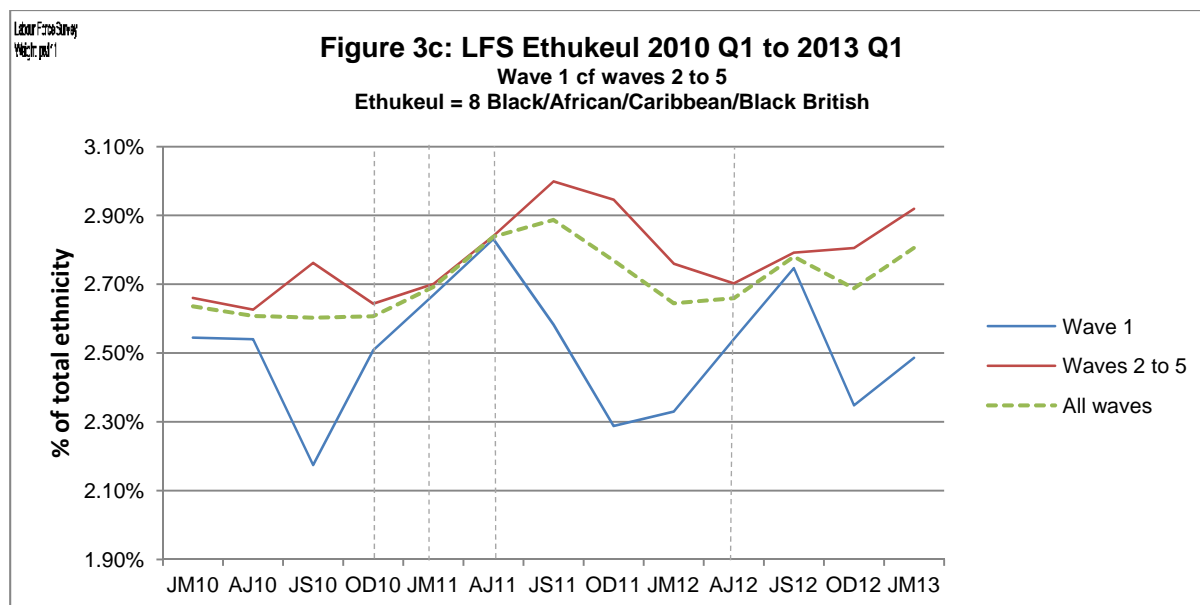
- The category 'Other Asian' showed an increase from 0.82% to 1.08% of total ethnicity in the four years JS09 to JM13. The overall trend, excluding 2011, is a broadly consistent quarter on quarter increase of approximately 0.02% of total ethnicity, representing an average increase of 13,000 persons per quarter.
- However, in the second quarter of 2011 the category Other Asian increased its share of total ethnicity by 0.17%, over 100,000 persons, to then return to its JM11 level by AJ12.
- Table 3a highlighted a fair amount of movement between this ethnic group and 'Other ethnic group' during the transition period. Census research further supports the suggestion of mutual transfers between these categories.

*Analysis of 2001 Census data showed that people of East and South East Asian origin (for example Japanese, Malaysian and Vietnamese) were inconsistently recorded, because some classified themselves as 'Other Asian', while others classified themselves as 'Other ethnic group' (ONS, 2009, pp. 51-52).*

- Further, analysis of the 2001 census reported that 70% of Filipinos recorded their ethnicity as 'Asian Other' and 30% as 'Other Ethnic Group'; while 34% of Japanese recorded their ethnicity as 'Asian Other' and 66% as 'Other Ethnic Group'. It is likely that the lack of definitional clarity associated with these categories in the minds of respondents is a contributory factor in the volatility recorded through this period.

### 5.2.3 Black/African/Caribbean/Black British Ethnic Group

Figure. 4c - repetition/wave modality for ethnic group 'Black/African/Caribbean/Black British'.



- From the earliest survey period covered in this study, JS09, to the final period before the changes in ethnicity questions and methodology, OD10, the total coded to the ethnic group then defined as 'Black or Black British' remained fairly constant at just over 1.61 million ( $\pm 15,000$ ) which equates to 2.6% of the total ethnicity count.
- However, in JM11 this figure rose by 50,000 to 2.69%, in AJ11 by another 100,000 and in JS11 by another 30,000 to peak at 1.78 million, or 2.89%. Over the next two quarters the total fell back by over 140,000 to 1.64 million.
- The pattern of movement in % terms was more pronounced among the waves 2 to 5 group, whereas the wave 1 group displayed its typical pattern of quite strong volatility.



## 6. Conclusions

1. The changes to the ethnicity questions appear to have had an impact on reporting of some ethnic groups, with some evidence of a fall in responses of 'white' and an increase in 'Mixed/multiple ethnic groups', 'Indian' and 'Pakistani'.
2. There also appears to have been a short term impact in 2011 for some ethnic groups, namely 'Black/African/Caribbean/Black British', 'Any other Asian background' and 'Other ethnic group'.
3. Therefore, caution is expressed when analysing both long and short term trends for these groups.
4. It is not possible to identify the characteristics (e.g. age, sex, employment status) of people who respond with a different ethnic group to different question wordings. Although we have been able to identify some people who switched groups during the question transition period in 2011, not all people would have switched during the LFS (instead, the new question may impact on 'new' respondents). This appears to be the case for the ethnic groups 'Indian' and 'Pakistani' which had an apparent uplift associated with the new question format but very little response movement among people who were interviewed in both OD10 and JM11.

## References

- ONS (2002) 'The new ethnicity classification in the Labour Force Survey', *Labour Market Trends*, December 2002, Office for National Statistics.
- ONS (2009) *Final Recommended Questions for the 2011 Census in England and Wales: Ethnic Group*, Office for National Statistics.
- Simpson, L. and Akinwale, B. (2007) 'Quantifying Stability and Change in Ethnic Group', *Journal of Official Statistics*, Vol. 23, No.2, 2007,

## Appendix 1

Derivation of ETHUKEUL equivalent on pre-2011 data.

ethcen15 Ethnicity revised	ethukeul_calc Ethnicity (9 categories) - UK level (from ethcen15)
1 British 2 Other White -6 White Northern Irish*	1.00 White
3 White and Black Caribbean 4 White and Black African 5 White and Asian 6 Other Mixed	2.00 Mixed/multiple ethnic groups
7 Indian	3.00 Indian
8 Pakistani	4.00 Pakistani
9 Bangladeshi	5.00 Bangladeshi
10 Other Asian	7.00 Any Other Asian Background
11 Black Caribbean 12 Black African 13 Other Black	8.00 Black/African/Caribbean/Black British
14 Chinese	6.00 Chinese
15 Other	9.00 Other ethnic group

\* - Please note that respondents in Northern Ireland who state that their ethnicity is white are not asked the detailed level question EthWh. They are therefore listed as missing, 'not applicable – white Northern Irish' in Ethcen15 (LFS User Guide Vol. 3, 2008, p. 48)

### Syntax

\*Recode ethcen15 (pre 2011) to ethukeul.

RECODE

ethcen15

(1=1) (2=1) (-6=1) (3=2) (4=2) (5=2) (6=2) (7=3) (8=4) (9=5) (10=7) (11=8) (12=8) (13=8) (14=6) (15=9) INTO  
ethukeul\_calc .

EXECUTE .

\*Add labels.

VARIABLE LABEL

ethukeul\_calc 'Ethnicity (9 categories) - UK level (from ethcen15)'.

VALUE LABELS ethukeul\_calc

1 'White'

2 'Mixed/multiple ethnic groups'

3 'Indian'

4 'Pakistani'

5 'Bangladeshi'

6 'Chinese'

7 'Any Other Asian Background'

8 'Black/African/Caribbean/Black British'

9 'Other ethnic group'.

EXE.

MISSING VALUES ethukeul\_calc (-9, -8).

Derivation of ETHUKEUL equivalents on JM11 data.

<b>ethuk16_jm11 Ethnicity 16 values UK</b>	<b>ethukeul_calc Ethnicity (9 categories) - UK level (from ethuk16)</b>
1 White	1 White
2 Gypsy, Traveller or Irish Traveller	
3 White and Black Caribbean	2 Mixed/multiple ethnic groups
4 White and Black African	
5 White and Asian	
6 Any other Mixed/Multiple ethnic background	
7 Indian	3 Indian
8 Pakistani	4 Pakistani
9 Bangladeshi	5 Bangladeshi
10 Chinese	6 Chinese
11 Any other Asian Background	7 Any Other Asian Background
12 African	8 Black/African/Caribbean/Black British
13 Caribbean	
14 Any other Black/African/Caribbean background	
16 Any other ethnic group	9 Other ethnic group

Syntax

\*Recode ethuk16 (JM11 only) to ethukeul.

RECODE

ethuk16\_jm11

(1=1) (2=1) (3=2) (4=2) (5=2) (6=2) (7=3) (8=4) (9=5) (10=6) (11=7) (12=8) (13=8) (14=8) (16=9) INTO  
ethukeul\_calc\_JM11 .

EXECUTE .

\*Add labels.

VARIABLE LABEL

ethukeul\_calc\_JM11 'Ethnicity (9 categories) - UK level (from ethuk16)'.

VALUE LABELS ethukeul\_calc\_JM11

1 'White'

2 'Mixed/multiple ethnic groups'

3 'Indian'

4 'Pakistani'

5 'Bangladeshi'

6 'Chinese'

7 'Any Other Asian Background'

8 'Black/African/Caribbean/Black British'

9 'Other ethnic group'.

EXE.

MISSING VALUES ethukeul\_calc\_JM11 (-9, -8).

## Appendix 2

Gross totals (000s) and %s for figure 2.

LFS Ethukeul		000s													
Weight: pwt11	JS09	OD09	JM10	AJ10	JS10	OD10	JM11	AJ11	JS11	OD11	JM12	AJ12	JS12	OD12	JM13
1.00 White	54240	54297	54416	54481	54587	54692	54528	54584	54560	54669	54776	54747	54649	54802	54920
2.00 Mixed/multiple ethnic groups	744	757	738	725	739	715	765	812	882	877	891	874	907	868	869
3.00 Indian	1307	1349	1291	1347	1306	1252	1292	1343	1344	1406	1391	1481	1466	1426	1423
4.00 Pakistani	1023	1017	1018	979	1004	1013	996	1013	1055	1005	1002	1077	1141	1086	1109
5.00 Bangladeshi	398	384	399	397	372	363	360	408	378	388	405	378	397	407	383
6.00 Chinese	230	245	255	271	269	282	290	286	300	283	276	289	309	346	321
7.00 Any Other Asian Background	500	528	563	561	584	609	634	743	713	684	708	642	653	667	676
8.00 Black/African/Caribbean/Black British	1630	1630	1613	1599	1598	1603	1654	1751	1784	1714	1640	1652	1730	1674	1752
9.00 Other ethnic group	897	874	891	945	940	948	924	762	783	878	933	972	968	1014	977
Total	60970	61082	61184	61305	61399	61475	61444	61701	61800	61905	62023	62112	62219	62291	62430

LFS Ethukeul % of total ethnicity															
Weight: pwt11	JS09	OD09	JM10	AJ10	JS10	OD10	JM11	AJ11	JS11	OD11	JM12	AJ12	JS12	OD12	JM13
1.00 White	88.96	88.89	88.94	88.87	88.91	88.96	88.74	88.47	88.29	88.31	88.32	88.14	87.83	87.98	87.97
2.00 Mixed/multiple ethnic groups	1.22	1.24	1.21	1.18	1.20	1.16	1.25	1.32	1.43	1.42	1.44	1.41	1.46	1.39	1.39
3.00 Indian	2.14	2.21	2.11	2.20	2.13	2.04	2.10	2.18	2.18	2.27	2.24	2.38	2.36	2.29	2.28
4.00 Pakistani	1.68	1.66	1.66	1.60	1.63	1.65	1.62	1.64	1.71	1.62	1.62	1.73	1.83	1.74	1.78
5.00 Bangladeshi	0.65	0.63	0.65	0.65	0.61	0.59	0.59	0.66	0.61	0.63	0.65	0.61	0.64	0.65	0.61
6.00 Chinese	0.38	0.40	0.42	0.44	0.44	0.46	0.47	0.46	0.49	0.46	0.44	0.46	0.50	0.56	0.51
7.00 Any Other Asian Background	0.82	0.87	0.92	0.91	0.95	0.99	1.03	1.20	1.15	1.11	1.14	1.03	1.05	1.07	1.08
8.00 Black/African/Caribbean/Black British	2.67	2.67	2.64	2.61	2.60	2.61	2.69	2.84	2.89	2.77	2.64	2.66	2.78	2.69	2.81
9.00 Other ethnic group	1.47	1.43	1.46	1.54	1.53	1.54	1.50	1.23	1.27	1.42	1.50	1.57	1.56	1.63	1.56
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100