

# 1 Sample selection

I am restricting the sample to people:

- Aged 20-60.
- Not in the armed forces.
- With non-missing occupation.
- Non-missing educational level.
- At least one year of work after leaving full-time education.

# 2 Regarding weighting

- The dataset comes with sampling weights.
- According to the documentation the weights apply to people aged 20-60 years old. Even within this sample some observations in 2006 and 2012 have missing weights. The documentation does not say why this could happen.
- Without weighting, the dataset has too few mean and young people.
- For now, all results are weighted.

Table 1: Share with missing weights

	Year				Total
	1997	2001	2006	2012	
Share missing	0.00	0.00	0.14	0.00	0.06

Table 2: Representativeness of the SES sample, 2006-2012

Demographic	(1) Unweighted	(2) Weighted	(3) LFS
<b>2006</b>			
Share female	0.49	0.47	0.46
<i>Breakdown by age bracket</i>			
20-29	0.16	0.22	0.22
30-39	0.24	0.25	0.27
40-49	0.28	0.27	0.28
50-60	0.26	0.23	0.23
<b>2012</b>			
Share female	0.53	0.46	0.47
<i>Breakdown by age bracket</i>			
20-29	0.16	0.23	0.23
30-39	0.24	0.25	0.24
40-49	0.31	0.28	0.29
50-60	0.28	0.24	0.24

*Note:* weights correspond to `weightall` variable. The third column comes from table A1 in [http://doc.ukdataservice.ac.uk/doc/7645/mrdoc/pdf/7645\\_ses\\_technical\\_briefing\\_may\\_2014.pdf](http://doc.ukdataservice.ac.uk/doc/7645/mrdoc/pdf/7645_ses_technical_briefing_may_2014.pdf)

Table 3: Summary statistics people with missing weights

Variable	Mean	Std. Dev.	Min.	Max.	N
AGE OF RESPONDENT	41.786	10.877	20	60	1037
SEX OF RESPONDENT	0.518	0.5	0	1	1037
EDUCATION LEVEL HELD	2.555	1.429	0	4	1036
DATASET	2006	0	2006	2006	1037

### 3 Occupations to keep

- Not all occupations appear in all years. It's unclear to me if this is a result of new jobs appearing, or whether this is a result of people in this occupations not being sampled.
- For now I restrict everything to occupations appearing in all waves.

Table 4: Occupation counts

	1997	2001	2006	2012
Number of occupations	180	219	232	207
<i>Occupations appearing in all waves</i>				
Number of occupations	154	154	154	154
Employment share	0.94	0.92	0.89	0.89

## 4 Selection of skill

- I am using the variable `edlev` as a measure of education. This is the one coded most simply + it is consistent across all years.
- It shows the level of NVQ qualification of the worker.
- Raw classification is given by:
  - No qualification.
  - Level 1
  - Level 2
  - Level 3
  - Level 4-5
- I group the categories based on how similar their occupational employment distribution is.
- This results in the grouping:
  - **Low-skill:** no qualification-Level 1.
  - **Mid-skill:** Level 2-3.
  - **High-skill:** Level 4-5.

Table 5: Welch index of the occupational employment by education level

	0	1	2	3	4
0	1.00				
1	0.60	1.00			
2	0.16	0.27	1.00		
3	-0.13	0.05	0.27	1.00	
4	-0.64	-0.67	-0.72	-0.45	1.00

Table 6: Correlation in occupation employment distribution by education level

	0	1	2	3	4
0	1.000				
1	0.765	1.000			
2	0.586	0.725	1.000		
3	0.445	0.630	0.797	1.000	
4	-0.031	0.098	0.250	0.329	1.000

## 5 Boundary jobs

- I am defining the boundary jobs by year.
- I define a job as follows:
  - For each occupation, I first take the two skills with the highest employment share and compute the total employment shares accounted by these two skills:  $sh_1 + sh_2$ .
  - The job is in the border if the top employment share accounts for less than a given threshold  $R$ , i.e.

$$\frac{sh_1}{sh_1 + sh_2} < R$$

- I use 55% and 60% as possible thresholds.
- 60% seems like a reasonable choice.
- Border jobs are changing from year to year. Only 4 jobs are in the boundary over the whole period under the 60% definition.
  - Almost all jobs (91) are in the boundary at some point in the period.
  - These jobs are in the three types of borders.

Table 7: Share of boundary jobs

	(1)	(2)	(3)	(4)
Boundary threshold	1997	2001	2006	2012
55%	0.17	0.16	0.14	0.16
60%	0.24	0.29	0.27	0.24
65%	0.39	0.44	0.50	0.34
70%	0.44	0.58	0.58	0.48
Observations	154	154	154	151

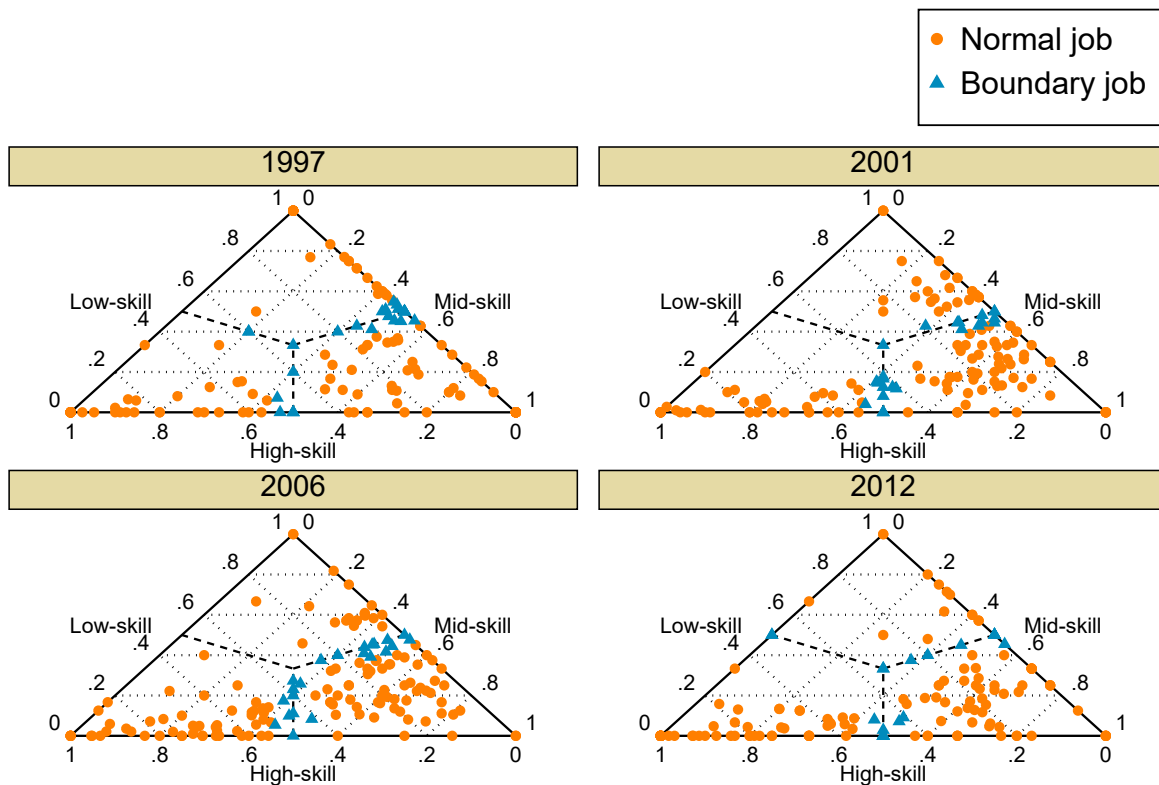
Table 8: Count of border jobs by year

Border type	Year			
	1997	2001	2006	2012
<i>55% threshold</i>				
Low-High	3	1	0	4
Low-Mid	17	11	12	10
Mid-High	6	12	10	10
<i>60% threshold</i>				
Low-High	3	1	1	4
Low-Mid	25	25	21	15
Mid-High	9	18	19	17

Figure 1: Job classification under different boundary definitions

(a)

### Boundary threshold 55%



(b)

### Boundary threshold 60%

