
Dominant patterns of expenditure among older people in the United Kingdom: Segmenting the older consumer using the Living Costs and Food Survey (LCF)

David Hayes and Andrea Finney
Personal Finance Research Centre
University of Bristol

BSG Annual Conference 2013

www.pfrc.bris.ac.uk/esrc

1

The bigger project: Financial dimensions of wellbeing among older people

- Funded by Economic and Social Research Council
 - Secondary Data Analysis Initiative
- Collaboration with ILC-UK (think tank); and Prof. Kelvyn Jones (methodological expertise)
- Using nine datasets: BSFC; ELSA; EU-SILC; US; WAS; WVS and **LCF**; and two qualitative datasets

Patterns of expenditure among older people in the United Kingdom

- Describe average expenditure by age group and other key variables of interest (descriptive);
- Segment older households based on their patterns of expenditure (cluster analysis);
- Interpret the clusters (descriptive/CHAID analysis).

Data Considerations

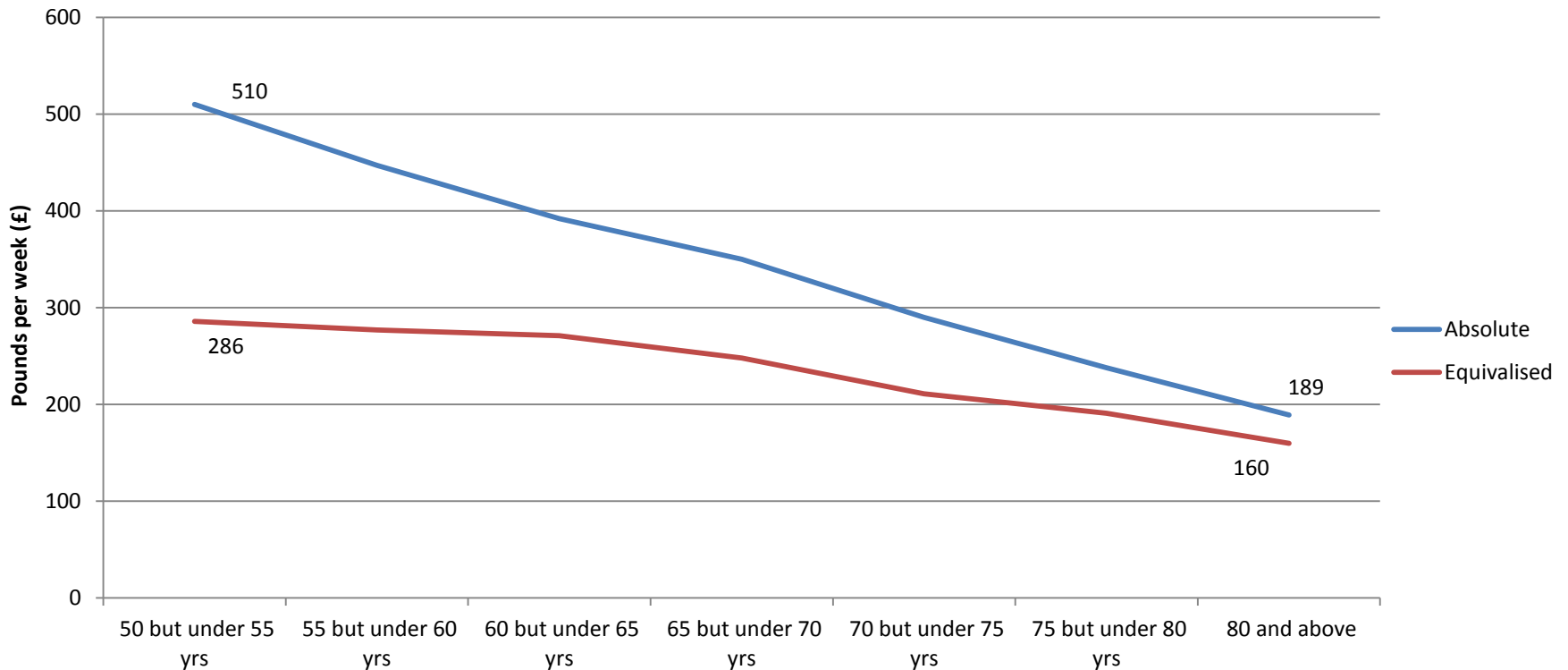
- Detail of expenditure unique to LCF
 - Using the 12 COICOP classifications
- *Household* level equivalised expenditure
- Good sample of *HRPs* aged 50+ (n = 2,931)
 - To cover transition into and beyond retirement
 - Good distribution of age groups (even 80+ ~ 12%)

COICOP Classifications

- Alcohol & tobacco
- Clothing & footwear
- Communication
- Education
- Food & non-alc. drinks
- Health
- Household goods & services
- Housing, fuel & power
- Miscellaneous goods & services
- Recreation & culture
- Restaurants & hotels
- Transport

Step one: Descriptive statistics

Absolute and equivalised expenditure by age



Spending by category: equivalised expenditure

- **PROPORTION** spent on:
 - Food & non-alc. drink increases with age-12% to 19%
 - Housing, fuel & power doubles from 12 to 24%
 - Communication remains constant at 3%
 - Clothing & footwear halves from 6% to 3%
 - Transport decreases from 18% to 7%
 - Recreation drops from 16% to 11%

Step two: Cluster analysis

The cluster analysis process

- Exploring how types of expenditure co-vary
 - Identifies dominant patterns
 - Classifies people into segments based on these
- Cluster variate are the 12 COICOP categories
- Removed outliers (5 SDs) – n of 2,769/mean £217
- Two stage process – hierarchical/k-means cluster

Six cluster solution

	Percentage in cluster (%)	Mean weekly expenditure
Cluster one	46	138
Cluster two	19	228
Cluster three	9	245
Cluster four	11	231
Cluster five	12	405
Cluster six	4	392

The average equivalised expenditure across the sample is £217.

Drivers of cluster membership

- Highly statistically significant variations in expenditure for *all* 12 categories
- Three categories were particularly strong
 - Alcohol and tobacco
 - Clothing and footwear
 - Housing, fuel and power

Step three: Interpreting the clusters

Cluster one – *Conservative Consumers*

- Spend less on non-essentials (recreation, hotels)
- Transport (£18) much lower than average (£32)
- Only 47% connected to the internet
- More likely to be the oldest old (22% cf. 15%)
- 38% in the lowest income quartile; 60% retired
- 56% gave benefits as main source of income.

Cluster two – *The Foodies*

- Very high expenditure on food (£58 to £34 ave)
- Close to average expenditure in other categories
- A half (54%) live in two-adult households
- Very few households are renting (12%, cf.25%)
- Only 18% in lowest income quartile
- Larger houses (58% cf. 50% with 6+ rooms)

Cluster three - *The Smokers*

- Very high spend on alcohol and tobacco (£36 per week/15% of total expenditure, cf. 3%)
- £28 a week on tobacco
- One of the 'younger' clusters (62% under 65)
- Almost a third still in full-time employment
- Home-ownership is relatively low (42% cf. 54%)

Cluster four - *The Burdened*

- Very high housing costs (39%; 16% average)
- All other expenditure is relatively low
- Low transport costs (lowest petrol expenditure)
- 72% in rented accommodation (cf. 25%)
- More single households

Cluster five – *The Socialites*

- Eating out, holidays and recreation (£76)
- 24% (cf.15%) on transport costs
- Three quarters under 65; 41% working full time
- Income – 57% earnings; 33% investments
- More than half in highest income quartile
- 90% of households connected to the internet

Cluster six - *Recreation and Clothing*

- Along with cluster 5, the other high-spenders
- High spend on clothing, transport and recreation
- Only 21 per cent of this cluster are 70 and above
- Two-thirds in larger houses (6+ rooms)
- 20% say benefits main income (cf. 10% socialites)
- Half of the cluster in the highest income quartile

CHAID – Decision Tree Analysis

- Partitions data into mutually exclusive subsets that best describe the dependent variable (cluster membership)
- Housing tenure the most significant predictor
- Followed by income, age and output area classification (within tenure)

Tenure

- Rent from LA/HA – 45% *Burdened*; 24% *Smokers*
- Own outright – 63% of *Socialites*; 60% *Foodies*
- Own with mortgage – 34% *Socialites*; 32% *R&C*
- *Conservative Consumers* in line with average
- Homeowner – 29% *Burdened*; 74% *Conservative Consumers*; 97% *Socialites*

Output Area Classification (2001 Census)

- ONS - groups output areas into clusters based on similar characteristics
- Blue collar - *Smokers & Conservative Consumers*
- Prospering suburbs – *Socialites & R&C*
- City Living – *Recreation and Clothing (10%)*
- Constrained by Circumstances – *Burdened (rent)*

Summing up

- *Equivalised* expenditure decreases with age
- Six clusters of older people emerge
- Often defined by one category (e.g. Smokers)
- Key correlates: tenure, age, and income
- Policy implications for health, expenditure poverty and housing poverty

Limitations/Future work

- Hostels, boarding houses, and institutions such as rest/care and nursing homes are excluded
- Age or generational effects – a need for longitudinal analysis
- CCs potentially a diverse group of households
 - Further analysis to unpack extent to which their spending is driven by positive/negative constraints

Questions and further discussion

- <http://www.bris.ac.uk/geography/research/pfrc/esrc/>
- david.hayes@bristol.ac.uk
- @PFRC_David