

# Exploring patterns of expenditure among older people and what explains these

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





## Who we are

- Independent social research centre
- Credit use and overindebtedness; financial exclusion; financial capability and wellbeing
- Quantitative and qualitative research
- Research *usually* funded by government, charities and industry







# Today

- The analysis in context
- The analysis process
- Data considerations
- Findings:
  - Structured around three stages of analysis



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; LCF; US; WAS; and WVS; and two qualitative datasets





# **Research Questions**

- 1. What are the dominant patterns of expenditure among older people and what explains these?
- 2. How do patterns of consumer borrowing, over-indebtedness and financial inclusion vary into and beyond retirement?
- 3. What are the main components of wealth among older people and how do these vary into and beyond retirement?
- 4. What is the relationship between financial well-being and quality of life among older people?







# Three steps to addressing Research Question 1

- 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/multinomial logistic regression analysis).





# **Data Considerations**

- Detail of expenditure unique to LCF
  - Using the 12 COICOP classifications
- Using *household* level 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 expenditure by age

- Overall expenditure decreases with age
  - From £510 (50-54s) to £190 (80+)
- Proportion spent on
  - Food & non-alcoholic drink increases with age
  - Housing, fuel & power doubles over the age range
  - Communication remains constant





# Equivalising expenditure

- Abs. expenditure influenced by household size
- Equivalising adjusts for household size
  - And is commonly used to adjust income
- Used OECD scale in favour of McClements
  - EUROSTAT and UK government standard





Equivalised expenditure by age

- Overall expenditure decreases with age
  - From £286 (50-54s) to £160 (80+)
- Proportion spent on
  - Food & non-alc. drink increases with age (12-19%)
  - Housing, fuel & power doubles (12-24%)
  - Communication remains constant (3%)







# **Further findings**

- The *proportion* spent on:
  - Clothing & footwear halves from 6% to 3%
  - Transport decreases from 18% to 7%
  - Recreation drops from 16% to 11%
- Little variation in expenditure on alcohol & tobacco and household goods & services









.....

#### 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 exp. categories
- Removed outliers (5 SDs) leaving an *n* of 2,769
- A two stage process hierarchical/quick cluster







#### Six cluster solution

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

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 – Older Owners

- Lower than average expenditure (£138, cf. £217)
- Spend less on non-essentials such as recreation (£20, cf. £33), and eating out (£10, cf. £19)
- Largest group, predominantly oldest-old
- Many homeowners retired (60%, cf. 50%)
- 38% in the lowest income quartile









# Cluster two – The Foodies

- Very high expenditure on food (£58 to £34 ave)
- Close to average expenditure in other categories
- Mostly couples
- Very few households are renting (12%, cf.25%)
- Only 18% in lowest income quartile







# Cluster three – *The Socialites*

- Highest expenditure at £405 per week
- Enjoy eating out, holidays and recreation (£76)
- 24% (cf.15%) on transport
- Three quarters under 65; 41% working full time
- Only three per cent of households rented
- More than half in highest income quartile

www.pfrc.bris.ac.uk/esrc

University of BRISTOL

Personal Finance Research Centre



# Cluster four - The Smokers

- Very high spend on tobacco (£36 per week/15% of total expenditure, cf. 3%)
- Otherwise, about average expenditure
- 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 five - Recreation and Rags

- Along with cluster 3, the other high-spenders
- High spend on clothing, transport and recreation
- Only 21 per cent of this cluster are 70 and above
- 22 per cent multiple adult households (cf. 11%)
- A high percentage of self-employed (15% cf. 8%)
- Half of the cluster in the highest income quartile







# Cluster six - The Renters

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





# Summing up

- Equivalised expenditure decreases with age
- Six clusters of older people emerge
- Key correlates: age, income and tenure
- Next steps:
  - Multinomial regression to aid interpretation
  - Review and refine
  - Consider implications for policy











# Questions and further discussion

- <u>http://www.bris.ac.uk/geography/research/pfrc/esrc/</u>
- <u>david.hayes@bristol.ac.uk</u>
- @PFRC\_David



