Identifying the determinants of household balance sheet stability across wealth distribution

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Young Economists Conference
1. October 2015, Vienna
Outline

- Background
- Research questions
- Methodology
- Future work
Financial sector transformation and rising inequality since 1980s

- General liberalisation policies
  - stagnant wage growth
  - rising credit demand

- Securitisation
  - tranching & seniorage of claims
  - greater involvement of households in financial markets

- Financial deregulation
  - predatory lending practices
  - rising credit supply

These aspects have influenced wealth inequality patterns in advanced countries via differential balance sheet structures along the distribution
Figure 1. Percentage change in net worth of US households 1989-2013, by income percentiles (source: SCF)
Figure 2. Growth rate of mean incomes of US HHs 1998-2013, by income percentiles (source: SCF)
Figure 3. Percentage change in the number of US families holding debt 1989-2013, by income percentile (source: SCF)
Figure 4. Percentage change in US HHs leverage ratio 1989-2013, by income percentile (source: SCF)
Figure 5. Distribution of net wealth, Euro Area 2009-10, (source: HFCN 2013)
Figure 6. Mean and median net wealth deviation, Euro Area 2009-10 (source: Mathä et al. 2014)
**Figure 7.** Financial fragility measures by net wealth decile, Euro Area 2009-10 (source: HFCN 2013)
Figure 8. Asset composition by income decile, EU 2009-10 (source: HFCN 2013)
Research questions

Inequality = not only value but also stability

1. What are the implications of financial sector transformation, i.e. securitisation and financial liberalisation, for financial stability among different households along the distribution?

2. How do balance sheet structures influence households’ capacity to deal with financial distress?

3. What is the relationship between inequality in the levels and possibilities for wealth accumulation and inequality in financial distress capacities?
Economic theory

- Life-cycle / permanent income hypothesis
  - Modigliani/Brumberg 1954, Friedman 1957
  - Optimise consumption spending in each period s.t. intertemporal subject constraint based on future income expectations
  - Overall, lacks socio-institutional context & the analysis of unsustainable indebtedness

- Post-Keynesian consumption theory & relative income effects
  - Veblen 1899, Duesenberry 1949; Lavoie 2014; Cynamon/Fazzari 2015
  - Socially determined consumption behaviour
  - Consumption hierarchy, satiability and growing consumption needs
  - Analysis of overindebtedness
  - More realistic & Important to account for
Previous literature

- **Ampudia et al. 2014a** – heterogeneity in spending responses to macro shocks

- **Ampudia et al. 2014b** – financial fragility responses to interest rate, income & house price shocks
  - Balance sheet composition important

- **Bankowska et al. 2014** – compare household fragility measures across HFCS countries in a life-cycle model

- **Bover et al. 2014** – comparing patterns and determinants of debt distribution across HFCS countries
  - Large differences in debt measures and institutions

- **Chirstelis et al. 2015** – debt distribution and vulnerability in 10 HFCS countries and USA

- **ECB 2014** – cross-country differences in measures of household financial distress in HFCS countries
Methodology

HFCS data, and potentially also SCF data for dynamic analysis

1. Model propensity to default using logistic model
   a) Default defined as leverage ratio greater than 1
   b) Likelihood of default is a binary variable
      =1 if leverage ratio >1
      =0 if leverage ratio <1
   c) Regress likelihood of default against balance sheet variables, controlling for socio-demographic factors and relative income effects

   \[ \text{Risk of default} = \alpha + \beta_i \times \text{Balance sheet components} + \chi_i \times \text{Controls} \]

2. Regress measures of financial distress against balance sheet variables
   a) Debt/Assets ; Debt/Income ; Debt-service-to-income ratio

   \[ \text{Financial distress} = \alpha + \beta_i \times \text{Balance sheet components} + \chi_i \times \text{Controls} \]
Contributions

- Explicit modeling of differential balance sheet structures as a channel of redistribution in the age of financialisation
- Understanding of inequality in terms of personal stability
- One of the few works on the determinants of household financial distress using HFCS
- Guidance for revisiting asset-based welfare policies
Future work

- Develop more precise measures of household financial distress
  - Specific types of debt against specific types of assets
  - Ampudia/Vlokhoven/Żochowski 2014 measure of distress
  - DeVaney/Hanna 1994 definition of insolvency

- Polish the proposed econometric models
  - Endogeneity problems

- Gender & ethnicity considerations
Thank you.

Questions and comments

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References


