

Know more, spend more? The impact of financial literacy on household consumption

Milena Dinkova, Adriaan Kalwij, Rob Alessie

Discussion by Serena Trucchi

UCL and CeRP-CCA

Mopact Workshop,
Moncalieri, September 8, 2016

Purpose of the paper

- **Focus:** effect of financial literacy on individual/hh behaviour
- **Research question:** how does financial literacy affect the shape of the life-cycle consumption profile?
- **Contributes** to the analysis of the role played by FL for the decision making process of individuals and households, focusing on consumption

The paper: theoretical framework

- **Framework:** intertemporal optimization (Euler equation)
 - FL affects return to saving (better performing portfolios)
 - $\Delta \ln C_{t+1} = \sigma \ln \beta + \sigma \ln f(\phi_{t+1}) + \varepsilon_{t+1}$ (Jappelli & Padula, WP 2013)
 - $f(\phi_{t+1})$ interest rate
 - ϕ_{t+1} financial literacy
 - σ elasticity of intertemporal substitution (EIS)
 - Consumption growth is positively correlated with stock of FL (through EIS: σ)
- **Underlying assumption:**
positive effect of FL on (household specific) interest rate

The paper: empirical analysis

- **Data:** Dutch panel (LISS)
 - Two measures for FL: objective (3 basic + 1 advanced)/self-assessed
- **Analysis:**
 1. Link between FL/portfolio composition
 2. Link between FL/C level
 3. Link between FL/C growth
- **Method:**
 - Simultaneous equations for FL and outcome var (owning bond/stocks, C level, C growth)
 - By now: two stage estimation/ OLS estimation
- **Results (preliminary):**
 - Positive correlation between FL/probability of owning stocks or bonds
 - Positive correlation between FL/consumption level

Comments: Theoretical framework & literature I

- Idea: FL \rightarrow hh interest rate \rightarrow C growth (Euler eq.)
See also Guiso&Viviano (Rev of Fin, 2015)
- Related paper: Jappelli &Padula (WP 2013) “starting point for the model”
- To which extent your paper is similar/differs wrt J&P?
 - J&P model investment in FL; you: FL is exogenous
 - You: focus also on C level; J&P: focus only on growth of C
 - What else?
- Suggestion I: shorten the theoretical part (Section2) and put the theoretical framework more into the literature (notably J&P, 2013)

Comments: Theoretical framework & literature II

- Suggestion II: further explain the (positive) link between FL and consumption *level*

Does it depend on the age of the consumer?

- Suggestion III (minor):
 - Which assumptions for simulation (Fig.1)? (uncertainty? retirement?)
 - Interpretation for the slope of the life-cycle C path (\uparrow at age of 40)?

Comments: data/variables I

- FL indicator(s):
 - Is “SALF” self assessed FL? Not defined!
 - How is self assessed FL measured in the survey?
 - $\Pr(\text{SALF} > 4)$: is 4 median value of the alternatives or sample distribution?
 - Which correlation between observed/self-reported FL?

- Why using self-assessed FL?

$$\text{SAFL}^* = \text{FL}^* + \varepsilon \quad (\text{eq.4.1})$$

$$\text{SAFL}^* = \alpha + \sum_j \alpha_j \text{Lusardi}_j + \alpha_5 Z' + v + \varepsilon \quad (\text{eq.4.3})$$

Not obvious (to me): is *objective* or *self-assessed FL* the relevant one for hh choices?

- Exploit distinction between basic/advanced FL?
- (Minor): typo (??) in eq. 4.1, control vars are nor reported on RHS

Comments: data/variables II (minor)

- Sample: age restrictions?
- Consumption: which dataset? *LISS* or *Consumption & Time use*?
- **Definition of Consumption:** include mortgages and loans but not clothes or food eaten out: why? Justify!
- Descriptives on correlation FL/covariates (Tables 1-3): Probit instead of tables of FL by age, education, gender?
- Descriptives on Consumption (Fig.2): plot age profile by education level and family type

Comments: empirical analysis I

General comments:

- FL of two spouses enter **separately** as regressors in the equation(s)

Assumption: no interaction between FL of wife and husband.

Check alternatives: $\max(\text{FL}^w, \text{FL}^h)$? $\text{FL}^{\text{HH head}}$? ...?

- **Controls** (in eqs for investments): “position in the asset distribution (balance of savings/current accounts)”

Does it refer to only ‘some’ assets? Endogenous wrt investment choices!

Comments: empirical analysis II

- **Endogeneity of FL indicator:** discuss the issue and explain how your identification strategy deals with it
- **Simultaneous equations (in progress):** discuss the assumptions behind the identification strategy and the extent to which this strategy allows to cope with endogeneity (allow correlation between error terms in the two eqs)
- **Two stage analysis:**
 - are FL questions used as “instruments” for the self-reported measure of FL?
 - Which exclusion restrictions? Are they robust to unobserved heterogeneity and reverse causality?

Comments: results

- Table “Estimating the FL index – first stage”
 - What do “*q1 women FL*”, *q1 men FL*”, etc., mean?
 - How to interpret their negative coefficients in the “first stage” table?
- Table “Investment – probit estimations (marginal effects)”
 - How to interpret the *size* of the coefficients?
 - Which is the average value of the dependent var? What do coeffs > 1 mean?
- Table “Pooled OLS Estimation closed form solution for consumption”
 - How to interpret coefficients? Causal effect Vs correlation (unobserved heterogeneity!)

Know more, spend more? The impact of financial literacy on household consumption

Milena Dinkova, Adriaan Kalwij, Rob Alessie

Discussion by Serena Trucchi

UCL and CeRP-CCA

Mopact Workshop,
Moncalieri, September 8, 2016