Reviews of ECONJOURNAL-D-23-00204R1

Portfolio allocation, risk aversion and digital literacy among the European elderly

Round 1

Reviewer 1

The paper examines the influence of digital literacy of elder persons on their portfolio risk aversion. And offer some results that should help to design policies aimed to reduce the digital divide.

Main comments:

The paper is well written and conducted. The study is properly motivated, and the empirical analysis is performed in a smart fashion. Nevertheless, the discussion of the results could be enriched if the authors link their findings with the assumptions of the life cycle hypothesis of Modigliani and the permanent income hypothesis of Friedman. And how those theories are related to the growth of the population, the dissaving of the old people and the length of the retirement. Those arguments could reinforce some of the conclusions of the manuscript.

Minor comments:

- In the last paragraph of the Introduction section, the description of the contents should be expressed in terms of "sections" instead of "chapters".
- There are several references cited in the main text, that are not reported in the References section: Berman and Litwin 2018, OECD 2001, Czaja et al 2013, Cotton et al 2014, Brunetti and Torricelli 2010, Jeffrey and Kinerson 2005, and Aydemir and Aren 2017.
- In addition, some contributions appear in the References section, but they are not discussed in the main text: numbers 3, 5. 6. 8. 9, 17, 19, 32, 34, 36, 38, 39, 41 and 44.
- Finally, there are some mistakes in the year of Atella et al. and in the case of Angelini and Cavapozzi.

Reviewer 2

This is an empirical paper which examines the effect of digital literacy upon the likelihood of individuals owning risky stocks. Data is used for a single cross section (wave 8) from the Survey of Health, Ageing and Retirement in Europe (SHARE) which is longitudinal data. A multi-level estimation approach is adopted to allow for the different levels of aggregation in the data – individual and country. The paper is well written but I have reservations over the methodology and the covariates used. MAIN POINTS 1. It is not clear why only a single wave of SHARE is used given that it is longitudinal data? Presumably this

is because the question on digital skills is only available for that particular wave, 2019/2020, from the Digital Economy Society Index (DESI)? a. If not then should construct a full panel from SHARE which would then allow you to control for fixed effects (FEs). In the current specification unobserved heterogeneity FEs could contaminate the estimates by being correlated with control variables. This could then potentially allow you to investigate first-second-third digital divide effects, depending on the DESI data? b. Alternatively, if the measure of digital skills is only available to match into wave 8 of SHARE it would be possible to run a first difference model: ΔY =$f(\Delta X, \Delta Z, digital\_w8)$ where Y, X and Z are the outcome, individual and country covariates respectively. Δ is a difference operator across two waves (say 8 and 9) and $digital\_w8$ is the levels indicator of digital skills for wave 8. This specification could be estimated using a multi-level approach but now would sweep out unobservable individual (X) and country (Z) time invariant effects. 2. The empirical specification is very thin in terms of the covariates one would expect to influence the propensity to hold risky assets (based upon the literature). The specification should condition on income. Moreover, SHARE has information on financial literacy, so it would be interesting to see whether the digital skills variables is still statistically significant after its inclusion. 3. I would suggest using Information Criteria to test between specifications rather than solely relying on the LR test. 4. In the random slope model discussed on page 9, Is x just age then, or does it include individual and country covariates? This needs fuller explanation. If not, then why not allow for random slopes for all covariates? 5. Can you have differential slopes separately for individual and country covariates? 6. The results section relates the findings back to the literature which is good. However, the economic magnitude of the findings is not discussed. For example, elasticities could be calculated then it would be interesting to compare the findings for digital skills to other key covariates (such as income, see point 2 above). OTHER POINTS 1. Replace "chapter" on page 3 with sections. 2. Equation (4) first line is incorrect. Presumably it should be $\beta 1j$. 3. More details should be provided on how the DESI is constructed.

Round 2
Reviewer 1

My concerns have been properly addressed in the revised version of the paper.