The Association between Income Volatility and Perceived Levels of Health among Individuals Living Alone and Living with Someone Else

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INTRODUCTION

- Hourly earnings have become more volatile, and hours worked are also fluctuating more today than they were a few decades ago (Dynan, Elmendorf, and Sichel, 2012).
- High income volatility and recurrent drops in income twice fold the risk of cardiovascular disease and mortality in midlife adults (Elfassy et al, 2019).
- Older adults under consistent income changes and living without children had increased levels of depression compared to older adults co-residing with children (Kim & Subramanian, 2019).
- While there is clear evidence that income volatility is strongly associated with poorer physical and mental health, the current literature does not consider the impact of living arrangements on the breadwinner's volatility and health levels.

RESEARCH QUESTIONS

1. Is there a relationship between volatility and living arrangements?
2. Does age have an impact on the association between volatility and an individual's living arrangemens?

METHODS

SAMPLE

- Data (n=6,394) were drawn from the National Financial Well-Being Survey (NFWBS), a nationally representative survey of non-institutionalized U.S. adults using probability-based recruitment (sampling with landline/cell RDD) in English and Spanish.

MEASURES

- Volatility represents self-assessed household income volatility on a scale from 1 (mostly stable) to 3 (mostly volatile).
- Living arrangements were measured with a multiple choice question where responses ranged from 1 (alone), 2 (living with spouse/partner/significant other), 3 (living with parents), 4 (living with other family, friends, or roommates).
- Liveswsomeone is 0 when the response to the above variable is 1 (alone), and 1 when the response is anything else.
- Health was assessed with the question "In general, would you say your health is..." with responses ranging from 1 (Poor) to 5 (Excellent).

RESULTS

UNIVARIATE

- A total of 18.1% of the sample declared living alone. The rest recorded living with someone else.
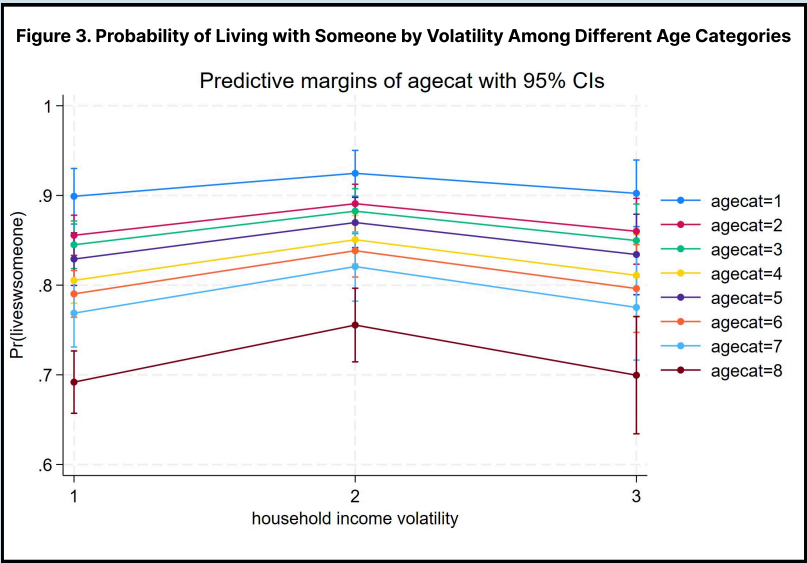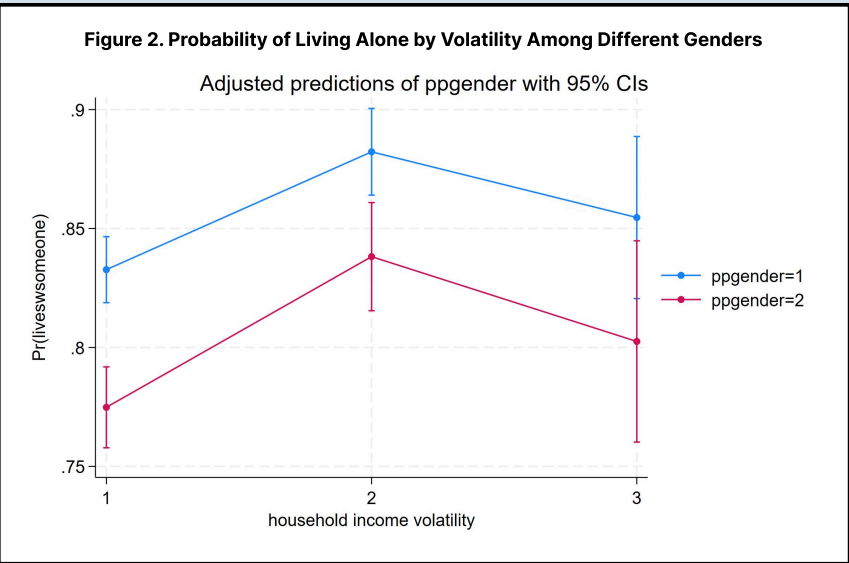
BIVARIATE

- A chi-square test of independence indicated that among individuals reporting poor health, a significantly higher proportion experienced highly volatile incomes (9.21%) compared to those reporting excellent health, where the proportion with highly volatile income was notably lower (4.85%), X2=37.09, p=0.000.
- The post hoc tests showed there's a significant relationship between income volatility and self-reported health at the extremes (X2=4.50, p=0.034). Individuals with highly volatile income are more likely to report poorer health compared to those with more stable income. However, the relationship is not statistically significant when not at the extremes. In moderate ranges of both variables, the association appears relatively weak or absent.

Figure 1. Mean of Volatility by Health levels
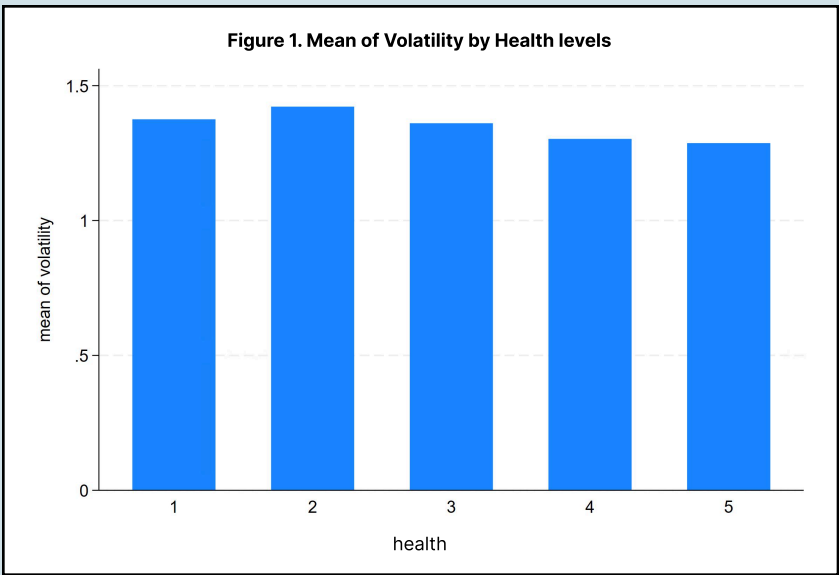
MULTIVARIATE

- Compared to individuals in the lowest volatility category (volatility = 1), those with volatility = 2 showed significantly higher odds of living with someone (O.R. = 1.38, CI 1.15 - 1.65, p<0.001). In contrast, volatility = 3 was not significantly associated with living with someone (O.R. = 1.04, CI 0.79 - 1.37, p = 0.795) compared to volatility = 1.

- Gender was also a significant predictor. Female individuals coded as gender = 2 had lower odds of living with someone (O.R. = 0.70, CI 0.61 - 0.80, p<0.001). This indicates that members of this gender group were 30% less likely to live with someone than male individuals, controlling for volatility and age.

- Several age categories demonstrated significant associations as well. For example, individuals in age category 4 (45-54 years old) had significantly higher odds of living with someone (O.R. = 0.46, CI 0.32 - 0.67, p<0.001), compared to those in age category 8 (75+ years old) (O.R. = 0.25, CI 0.17 - 0.37, p<0.001). These results suggest that older age groups in the dataset tended to show progressively lower odds of living with someone relative to the reference age category, which is 18-24 year olds.

Figure 2. Probability of Living Alone by Volatility Among Different Genders

Figure 3. Probability of Living with Someone by Volatility Among Different Age Categories

DISCUSSION

- Data suggests that higher volatility incomes and poorer levels of health might be associated.
- Research may also suggest that gender is as a significant predictor of living arrangements, with females showing lower odds of living with someone after adjustment.
- Respondents across all volatility levels increasingly lived alone with age. This might suggest that, if living arrangements affect individuals, the effects are felt more by the older generations.
- Further research is needed to determine what other factors influence the relationship between volatility and living arrangements.

REFERENCES

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