Uncertainty and Despondency: The Relationship Between Financial Income Volatility and Stress

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Introduction

- The COVID-19 pandemic has made income more volatile and uncertain in various sectors of the economy, as workers struggled with the nature of remote work and whole sectors were shut down (Greig, 2020).
- Income may be volatile due to unstable labor market earning (ex. job loss), unstable non-labor transfers (ex. changes in income that affect receipt of SNAP), and unstable household configurations (ex. birth, death, divorce).
- Income volatility is associated with such stressors as cardiovascular disease (Tali et al., 2019), depression (Kim and Subramanian, 2019; Prause et al., 2009), household poverty and financial stress (Venn, 2011), and divorce (Nunley and Seals, 2010).
- Households that feel financial stress are also likely to have volatile consumption patterns, which depresses spending in the economy. Given that spending and consumption make up more than 2/3 of the GDP, financial insecurity hurts the economy (White, 2015).

Research Questions

- Are those who are faced with income volatility more likely to have feelings of distress?
- Does the relationship between volatility and distress hold after controlling for employment, income, receiving SNAP benefits, and ability to absorb shock?

Methods

Sample

- Respondents (n=6394) were drawn from the 2016 Financial Well-Being Survey.
- Participants were recruited in both English and Spanish to ensure representation of the Latino population.
- 999 surveys were from an oversample of adults age 62 or older.
- Efforts were taken to recruit participants who were African American or below 200 percent of the federal poverty line, as they were initially underrepresented.

Measures

- Household income volatility was assessed using a survey item. Possible responses ranged from 1 (Roughly the same each month) to 3 (Often varies quite a bit).
- Distress, similarly, was assessed using a survey item. Possible responses ranged from 1 (strongly agree) to 5 (strongly disagree). It was coded dichotomously.

Results

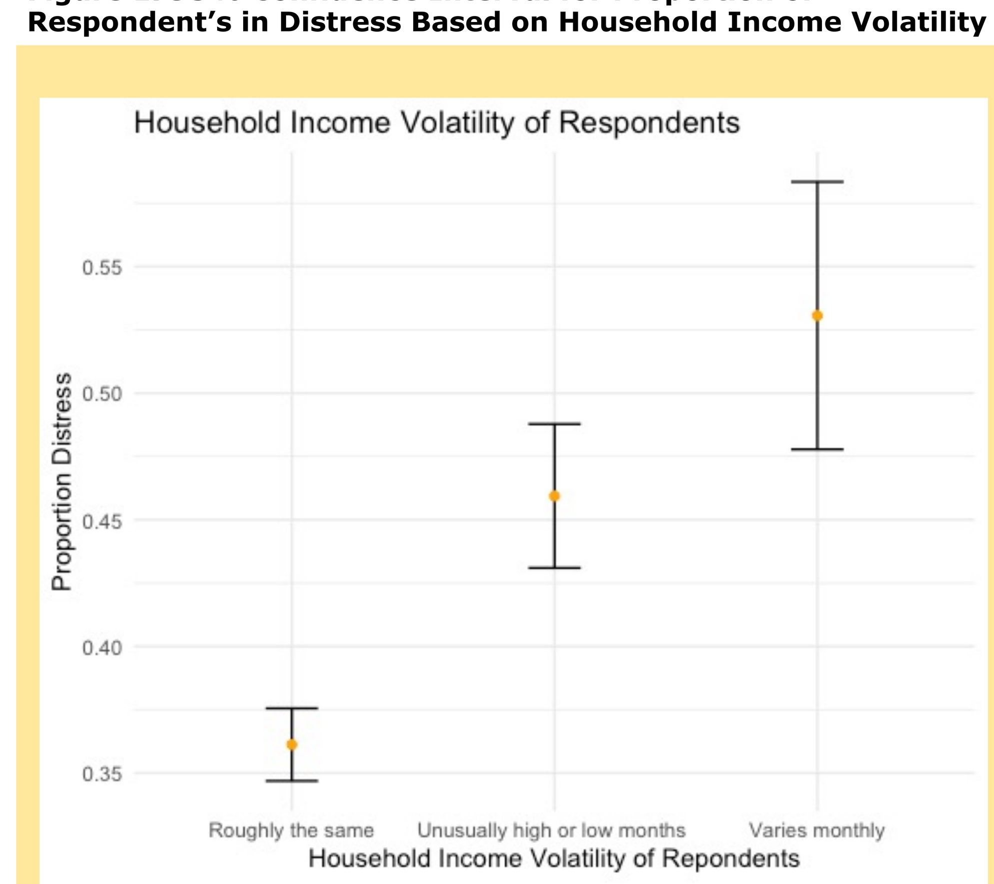
Univariate

- 39.1% of respondents did feel distressed
- 73.891% of respondents had roughly the same income each month, 20.236% had income that was roughly the same but with unusually high or low months, while only 5.872% of the respondents had income that varied monthly

Bivariate

- A Chi-square test of independence revealed that **distress** was significantly and positively associated with **household income volatility** (X2=115.78, df=8, p<0.001).
- Post hoc comparisons of the different levels of income volatility show that volatility is statistically significant when income that is roughly the same each month is compared to income that is unusually high or low or that varies monthly.

Figure 1. 95% Confidence Interval for Proportion of Respondent's in Distress Based on Household Income Volatility

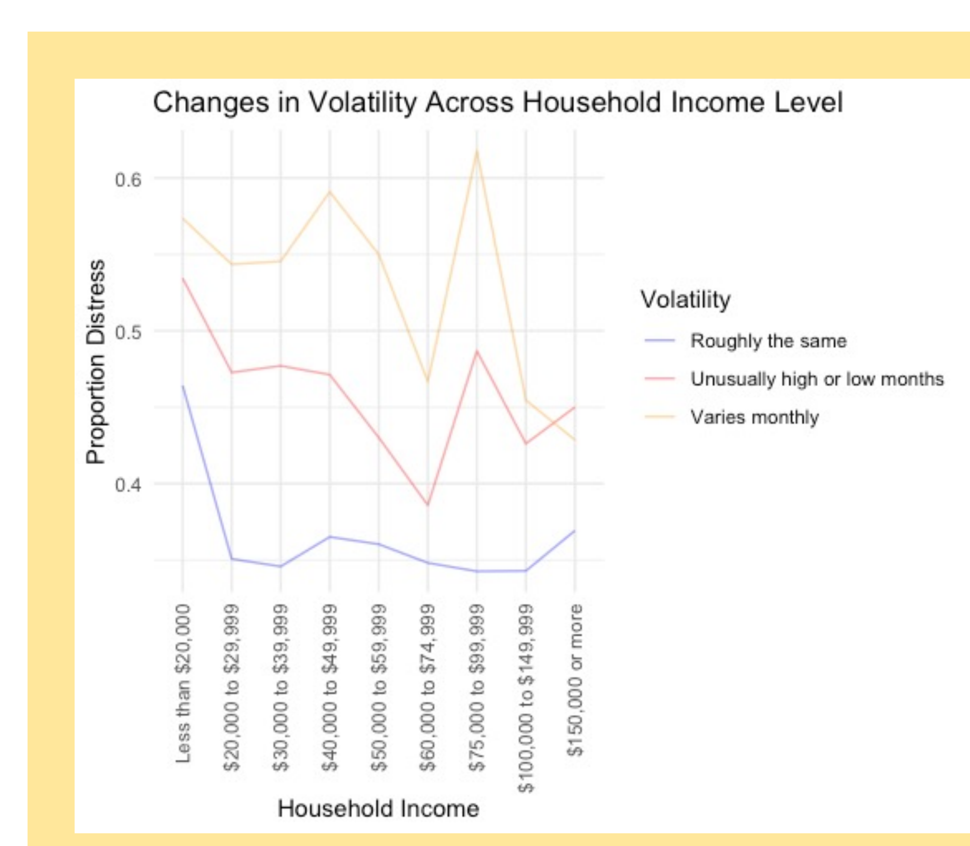


- Additionally, post hoc comparisons showed that when comparing between income that is unusually high or low and income that varies monthly, the relationship is not significant.

Multivariate

- After controlling for income, employment, ability to absorb financial shocks, and SNAP benefits, household income volatility and distress remain **significant** and **positive**.
- Respondents with incomes that are unusually high or low are more likely to feel stress compared to respondents with roughly the same income (OR=1.21, p=.00568).
- Similarly, respondents with varied monthly incomes are more likely to feel stress compared to those with steady income (OR=1.39, p=.00620).
- None of my covariates were confounders or moderators.

Figure 2. Proportion Distress Based on Household Income



Discussion

- Those who face volatile income are more likely to feel distress than those with steady incomes.
- If individuals are facing increased stress due to financial factors, it would provide support for those who call for cash transfer programs as a way of reducing stress. Because stress can be both a public health and economic concern, it is imperative for policymakers to consider structural changes to address sources of volatile income.
- Further research should consider transformations in the American economy that have contributed to income volatility and its relationship to the current levels of anxiety and depression seen in various generations.

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