Volatile Work, Vulnerable Minds: Evidence from the SHED Data

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Rising Uncertainty: Volatile Work & Financial Vulnerability

- The Context: U.S. households face increasing economic uncertainty, driven by volatile employment (gig economy, part-time work, rapid turnover) and high inflation.
- The Impact: This instability threatens both structural (income, savings) and behavioral (decision-making, planning) financial resilience.
- The Gap: Existing research often treats different types of financial strain (e.g., hardship vs. liquidity stress) in isolation.

Integrating Scarcity: Research Goal

Goal: To examine how employment volatility and behavioral vulnerability jointly structure household scarcity responses and forward-looking financial insecurity.

Novel Approach: Integrate three distinct behavioral domains of scarcity: Hardship, Inflation-Adaptation, and Liquidity Stress.

Main Contribution: Demonstrating that employment volatility operates as both a structural constraint and a behavioral catalyst that shapes expectations and coping strategies.

Data & Key The Drivers

- Data Source: Microdata from the 2022 Survey of Household Economics and Decision-making (SHED).
- **IV 1**: Employment Volatility: Differentiated as Involuntary (e.g., job loss, hours cut) and Voluntary (e.g., quit, changed jobs) separations.
- **IV 2**: Subjective Financial Fragility (Self-assessed financial well-being index).
- **IV 3**: Loss Aversion Dimensions (Measures related to sensitivity to downside risk).

JSI & SFW

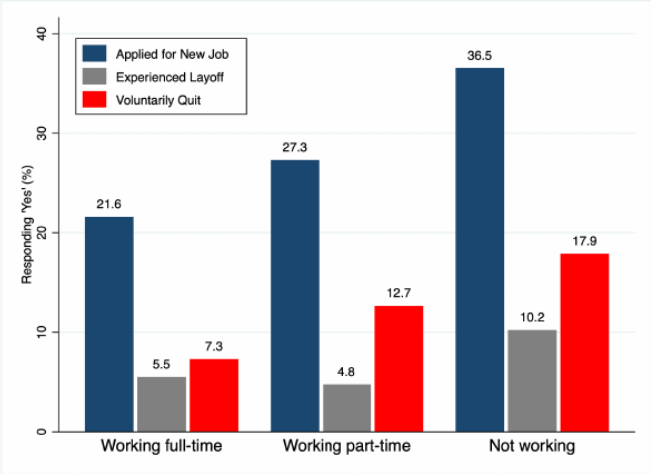

Figure 6: Job Security Indicators by Employment Status (%)

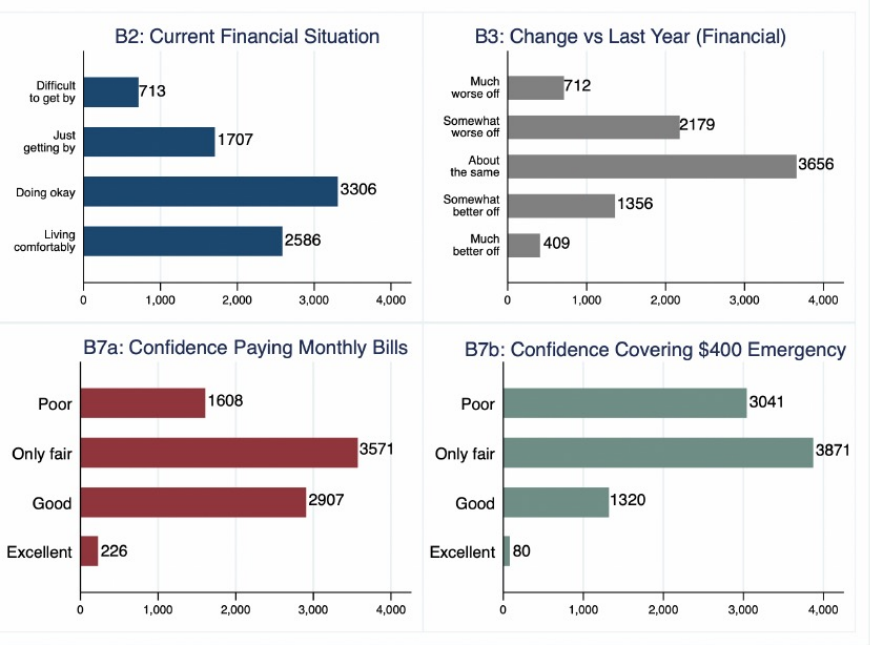

Figure 7: Distribution of Subjective Financial Well-being Items

$$\text{SFW} = \frac{1}{4}\left(z_{B2} + z_{B3} + z_{B7a} + z_{B7b}\right)$$

Two Dimensions of Loss Aversion

- **Behavioral Dimension** (BNPL1): Captures use of deferred-payment tools (e.g., Buy Now, Pay Later); Reflects how individuals delay immediate financial loss
- **Attitudinal Dimension** (FL0_rev = 10 − FL0): Captures self-reported discomfort with financial risk; Reflects psychological aversion to uncertainty

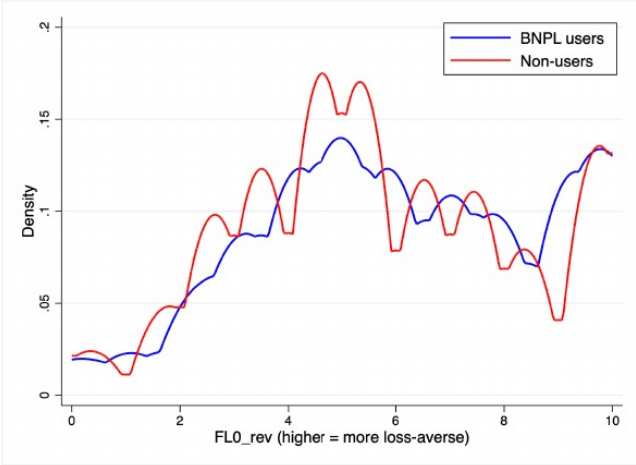

Figure 9: Kernel density of attitudinal loss aversion (FL0_rev) by BNPL use

Dependent Variables (Outcomes) & Model

- Primary Outcomes (Dependent Variables):
  - ✓ **Scarcity Bias Indicators (SBIs)**: Hardship, Inflation-Adaptation, and Liquidity Stress.

Table 2: Pairwise correlations among Scarcity Bias Index (SBI) indicators

Variable	i20_more	e1_a	e1_b	e1_c	e1_d	e1_e	inf3_a	inf3_b	inf3_e
i20_more	1.000								
e1_a	0.174***	1.000							
e1_b	0.203***	0.527***	1.000						
e1_c	0.167***	0.411***	0.524***	1.000					
e1_d	0.201***	0.403***	0.591***	0.403***	1.000				
e1_e	0.186***	0.537***	0.634***	0.512***	0.503***	1.000			
inf3_a	0.120***	0.152***	0.196***	0.151***	0.189***	0.161***	1.000		
inf3_b	0.142***	0.158***	0.216***	0.164***	0.221***	0.180***	0.567***	1.000	
inf3_e	0.172***	0.191***	0.251***	0.204***	0.258***	0.217***	0.366***	0.404***	1.000

Notes. $N = 8{,}312$. Pearson correlations. $^{***}p < .001$. All variables are binary, where 1 indicates a scarcity-consistent behavior.

Table 3: Rotated Factor Loadings and Descriptive Statistics for the Scarcity Bias Indicators (SBIs)

Panel A. Rotated factor loadings (varimax) and uniqueness

Item (code and description)	Factor 1: Hardship	Factor 2: Inflation coping	Uniqueness
i20_more (spending > income)	0.285	0.226	0.868
e1_a (skipped prescription)	0.732	0.077	0.459
e1_b (skipped doctor visit)	0.835	0.146	0.281
e1_c (skipped mental health care)	0.719	0.091	0.475
e1_d (skipped dental care)	0.716	0.189	0.452
e1_e (skipped follow-up care)	0.822	0.088	0.316
inf3_a (switched to cheaper products)	0.076	0.823	0.317
inf3_b (used less or stopped using)	0.104	0.837	0.289
inf3_e (delayed major purchase)	0.209	0.674	0.503

Panel B. Subscale indicators descriptive (row means of 0/1 items)

Subscale (code)	Items (k)	N	Mean	SD
Cash-flow pressure (SBI_cashflow)	1	8,312	0.206	0.404
Cost-related hardship (SBI_hardship)	5	8,312	0.148	0.273
Inflation-induced coping (SBI_inflation)	3	8,312	0.628	0.379

Note. Extraction: principal-component factors; rotation: orthogonal varimax. Two factors were retained (eigenvalues = 3.08 and 1.96), jointly explaining 56.0% of total variance. KMO = 0.84; Bartlett's $\chi^2(36) \approx 22{,}000$, $p < .001$. Subscales are constructed as row means of binary scarcity indicators: `SBI_cashflow = {i20_more}`, `SBI_hardship = {e1_a, e1_b, e1_c, e1_d, e1_e}`, `SBI_inflation = {inf3_a, inf3_b, inf3_e}`. Each subscale score ranges from 0–1 (0 = no scarcity-consistent behaviors; 1 = all behaviors present). Sample restricted to adults ages 18–64 ($N = 8{,}312$).

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- ✓ **Financial Insecurity Index (FII):** The composite measure of anticipatory financial insecurity.

$$\text{FII} = \frac{z_{B6} + z_{EF1} + z_{EF7}}{3},$$

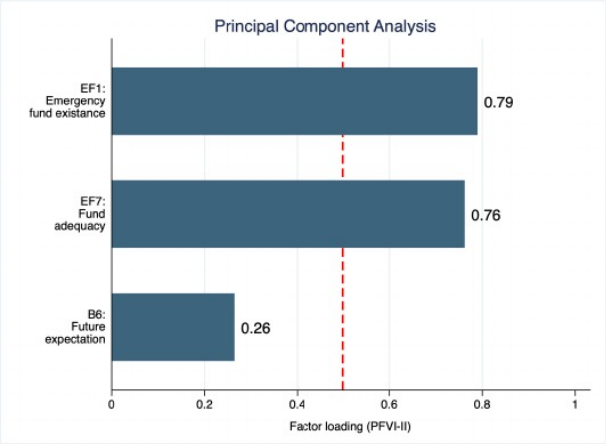

Figure 3: Factor loadings for FII components.

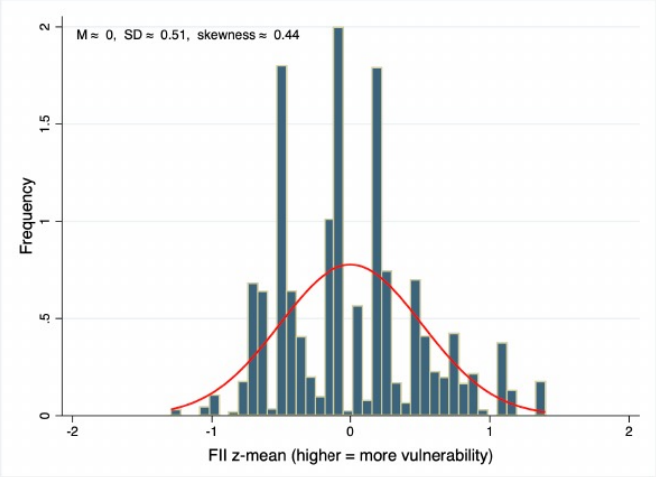

Figure 4: Distribution of the Financial Insecurity Index (Standardized).

Table 8: OLS Regression Results for Scarcity Outcomes & Forward-Looking Financial Insecurity

Variable	(1) Hardship		(2) Inflation-Adaptation		(3) Liquidity Stress		(4) Financial Insecurity	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Behavioral and Financial Indices								
SFW_z	0.10441***	0.00443	0.19359***	0.00536	0.11476***	0.00440	0.38884***	0.00955
LAI_z	0.03269***	0.00336	0.03160***	0.00406	0.01582***	0.00329	0.14516***	0.00713
Job Security Indicators								
Applied for new job	0.05205***	0.00778	0.03927***	0.00974	0.02080**	0.00818	0.08441***	0.01678
Layoff	0.10290***	0.01615	0.07990***	0.01541	0.15323***	0.01619	0.07503**	0.02924
Voluntary quit	-0.00486	0.00976	-0.00075	0.01237	0.06405***	0.01156	-0.05529**	0.02120
Age (Base: 35–44)								
18–24	-0.04494***	0.01221	-0.03126*	0.01614	-0.02305*	0.01292	0.02709	0.02705
25–34	0.00258	0.00876	0.01743	0.01188	-0.01508*	0.00885	0.02623	0.01976
45–54	-0.01279	0.00839	0.00468	0.01170	-0.01883**	0.00860	-0.01516	0.02003
55–64	-0.04003***	0.00775	-0.01690	0.01111	-0.02375***	0.00828	-0.16258***	0.01901
Education (Base: High school graduate)								
No HS diploma/GED	0.06386***	0.01608	-0.04233**	0.01751	0.03878***	0.01451	0.17853***	0.02723
Some college/Assoc.	0.02109**	0.00840	0.04920***	0.01068	0.01820**	0.00858	-0.09380***	0.01955
Bachelor's degree+	-0.01569**	0.00773	0.02947***	0.01067	0.01349*	0.00810	-0.33590***	0.01910
Employment (Base: Not working)								
Working full-time	-0.00862	0.00773	0.01874*	0.00984	-0.04890***	0.00808	-0.14394***	0.01755
Working part-time	0.00531	0.00999	0.02755**	0.01252	0.00361	0.01090	-0.08991***	0.02232
Race/Ethnicity (Base: Black, Non-Hispanic)								
Hispanic	0.00683	0.01221	0.09948***	0.01581	-0.00602	0.01207	-0.07740***	0.02631
White, Non-Hispanic	-0.01719*	0.01011	0.05998***	0.01344	-0.03666***	0.00999	-0.08735***	0.02192
Other, Non-Hispanic	0.00281	0.01352	0.05201***	0.01828	-0.00051	0.01385	-0.06796**	0.02958
Gender (Base: Female)								
Male	-0.02589***	0.00573	-0.03935***	0.00792	-0.02005***	0.00605	-0.02013	0.01359
Housing (Base: Owned/occupied w/o payment)								
Rented for cash	0.03195***	0.00698	-0.02576***	0.00885	-0.00002	0.00694	0.19314***	0.01546
Constant	0.16138***	0.01381	0.54541***	0.01819	0.21515***	0.01387	0.31217***	0.03054

Notes: $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$. Robust standard errors.

Model statistics: Hardship: $R^2 = 0.1878$; Inflation-Adaptation: $R^2 = 0.1792$; Liquidity Stress: $R^2 = 0.1638$; FII: $R^2 = 0.4126$.

Conclusion

Summary: Scarcity is not just a function of low income, but is organized around behavioral vulnerability and the anticipation of employment shocks.

Policy Shift: Interventions should move beyond solely material support (e.g., raising income).

Targeted Policy: Policies must aim to stabilize both material conditions (income floor, unemployment insurance) and psychological security (e.g., behavioral finance training, predictable work schedules).

Thank You

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