

Patterns of Household Overspending

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Hanna background with CE data

- 1973 quarterly expenditure interview data
- Wagner, J. & Hanna, S. (1983). The effectiveness of family life cycle variables in consumer expenditure research. *Journal of Consumer Research*, 10 (3), 281-291.
- 1990 CE Interview data from 1990, consumer units that participated during all four quarters of 1990 who also had complete reporting
- Bae, M., Hanna, S. and Lindamood, S. (1993). Patterns of overspending in U.S. households, *Financial Counseling and Planning*, 4, 11-30.

Overspending background

- Chang (1994) found that 40% of households experienced decrease in non-housing wealth between 1983 and 1986. (SCF Panel dataset)
- Bae et al. (1993) of all households, about 40% spent more than income. (CE Interview dataset)
- Hanna & Yuh (2010) 15% reported that they spent more than income (SCF)
- Charles et al. (2006): PSID vs CE vs SCF

Most recent research: Data and Sample

- Data Source:

- Consumer Expenditure Survey (CE)-Interview Survey**
2004-2005

- CE: 5 interviews each year, a rotating panel sampling design
 - Why use CE: comprehensive expenditure data and imputed income data (the imputation started in 2004)

- Sample:

- Six “panels” of data created by lumping together four consecutive quarters of data
 - Only include consumer units who participate in four consecutive quarters to get 12 month expenditure data.
 - Sample size: 6,113

Composition and Sample Sizes of Six Panels

	Panel 1	Panel 2	Panel 3	Panel 4	Panel 5	Panel 6
2004	1					
	2	2				
	3	3	3			
	4	4	4	4		
2005		1	1	1	1	
			2	2	2	2
				3	3	3
					4	4
2006						1
Sample Size	1,384	1,413	694	695	595	1,332

The first quarter data in 2005 used are from the fifth interview of 2004 CEX. The first quarter 2006 data used are from the fifth interview of 2005 CE, which were conducted in Jan., Feb, and Mar. of 2006.

Dependent Variables

- Spending/income ratio : continuous variable
- Overspend: dichotomous variable
 - '0' if spending $\leq$ income
 - '1' if spending $>$ income
- Composition of spending and income?

Spending and Income

- Spending: sum of quarterly outlays adjusted for expenditures on new vehicles
 - Expenditures vs. outlays
 - Adjustment on new vehicle purchases: take a straight line depreciation of net outlays on new purchased but not financed vehicles (assuming an average life expectancy of 13 years)
- Income: after-tax income – pension contribution
 - After-tax income=before-tax income – tax
 - Before-tax income: wage and salary, nonfarm business income, supplemental security income, unemployment compensation, and etc.
 - Pension contribution: social security contribution, private pension contribution, and etc.

Spending and Income in 2004 adjusted to 2005 \$

Independent Variables

- **Race/ethnicity:** Non-Hispanic White, Non-Hispanic Black, Hispanic, & other races.
- **Age** of the reference person, and age squared
- **Family type:** married, single-male headed, single-female headed, and other families
- **Education:** less than high school, high school, some college, college graduates or above.
- **Presence of a child** under age 19
- **Homeowner**
- **Income**
- **Net financial assets** = sum of amount in saving accounts, checking accounts, saving bonds, securities + other owed to the consumer unit – non-mortgage debt
- **Other monetary receipt**
- **Region:** Northeast, Midwest, South, West, & rural
- **Population size**

Demographic Profile of the Sample

Variables	Means (std. dev.)
Income	56,2140 (2,067,039)
Net financial assets	41,494 (8,256,915)
Spending/income ratio	5.5
Proportion overspending	42.6%

Percentile of Spending/Income Ratio

99%	8.91
95%	2.59
90%	1.83
75% Q3	1.26
50% Median	0.92
25% Q1	0.68
10%	0.51
5%	0.41
1%	0.24

Comparison of 3 Analyses

	CE 2004-2005	SCF Opinion (1992-2007)	SCF panel change (1983-1986)
% overspending	43	15	40
Multivariate effect of age	+ To age 47	+ To age 50-59	negative
Education	+	NS	negative
Assets or net worth	+	negative	+

Conclusions

- Intriguing patterns from CE data
- Could more easily compare to analyses of other datasets if had a few attitude variables
- Overall assessment – spend more, same, or less than income (SCF question)
- Is current income higher or lower than normal?
- Will income increase faster, slower, or about the same as prices?

Questions About Using CE dataset

- Not clear on weight variables – we used `finlwt21 / 9`
- Used mean of implicates for income
- But for hypothesis testing, probably should use RII method (see Montalto & Sung, Financial Counseling and Planning, etc.)

For future research

- SCF has question “Do you spend less than income, about the same as income, or more than income”
- Only 15% say they spend more than income
- Why big difference between the SCF perception and our finding from the Consumer Expenditure Survey that almost 43% overspend?
- Why positive effect of education with CE, but negative with SCF?