Comments on "Exploring Differences in Household Debt across Euro Area Countries and the US"

D. Christelis, M. Ehrmann, and D. Georgarakos

ECB Conference on Household Finance and Consumption, October 17-18 2013

Carol Bertaut Federal Reserve Board of Governors

The views expressed are solely the responsibility of the author and should not be interpreted as reflecting the view of the Board of Governors of the Federal Reserve System or of any other person associated with the Federal Reserve System.

Exploring Differences in Household Debt

- Careful, well-done comparison of household debt in the United States (using the 2010 SCF) and 11 euro area countries (using Wave 1 of the HSCF).
- Looks systematically at the propensity to hold debt (collateralized and non-collateralized).
- And amounts of debt held, conditional on holding debt.

Decomposing source of differences

- "Counter-factual" exercise using relatively new decomposition technique (re-centered influence function regressions (RIF).
- Decompose differences between US and euro area countries into those arising from:
 - Covariate effects: differences in composition of household characteristics across countries (age, education, income, etc.).
 - Coefficient effects: differences in how these characteristics relate to differences in debt holdings in across countries (differences in *economic environments*).

Question: What do we mean by differences in economic environments?

- Can be the result of credit supply or demand factors:
 - US financial institutions are more likely to grant loans to certain types of households than are financial institutions in euro area countries.
 - US households more likely to want (or think they need) loans from financial institutions than are households in euro area countries.
 - Euro area households less likely to want (or think that they need) loans from financial institutions.

Differences in *environments* that can affect household borrowing

- Example: Treatment of pension wealth and wealth in retirement accounts.
 - Shift over time to portable, defined contribution pension plans in the U.S. raises typical U.S.
 household wealth as measured in the SCF because these types of thrift-type pensions are included.

- Future values of defined benefit pensions are not.

Are these differences at play when results suggest greater responsiveness to financial wealth in some countries?

- Do households with significant wealth in thrift-type pension plans think of themselves as wealthier than ones expecting generous future defined benefit pensions (either occupational or government provided)?
- Affects interpretation of coefficient effects as well as covariate effects
- Challenge for researchers: tendency if decomposition results support "differences in environments" to stop there.

Explaining results for collateralized debt

- Household real assets as explanatory variable for having collateralized debt.
- Significant positive *coefficient* effects: US households are more likely to have collateralized debt.
 - US financial institutions are more likely to grant loans backed by collateral than are euro area financial institutions.

Collateralized debt (cont'd)

- Yet *covariate* effects indicate households in Luxembourg, Spain, Greece, and Cyprus would be even more likely (than are US households) to have collateralized debt if they were transplanted to the US.
- Why is it that Spain, Greece have negative covariate effects for collateralized debt?
 - When Spanish, Greek households are on average older, less educated, lower income and lower financial wealth?
 - Because they have higher real asset wealth.

Basically talking about home ownership

- Home ownership higher in many euro area countries than in the US, especially for young households.
- Home ownership rate remains higher across all ages for Spain and Greece. Percent Homeowners, HFCS and SCF



• But young US homeowners are more likely to have mortgages than are euro area homeowners.



Percent Homeowners with mortgage, HFCS and SCF

Real assets and collateralized debt

- In presentation of the decomposition exercise, there's a seeming presumption
 - that euro area home-owner households would still want to be homeowners if they relocated to US.
 - and would take out mortgage loans if they did.
- Do we need to first understand what drives home ownership decision?

Why is home ownership rate lower in the US for younger households?

- Greater mobility of younger US households means less interest in acquiring houses when young?
- Greater interest in households in some euro area countries in accumulating wealth in the form of real assets unencumbered by debt?
- In addition to US financial institutions being more willing to extend credit to younger households? (although less so now than previously)
- Results tell us something about differences in economic environments, but it's often not clear just what they are telling us.

Results for noncollateralized debt

- Results are perhaps less surprising: "economic environment" in the US favors holding noncollateralized debt.
- and US households have characteristics that make them more likely to acquire debt.

Significance of education

- Education significant for both covariate effects and coefficient effects (supporting higher prevalence of debt in the US).
 - US households are on average younger and more highly educated.
 - US financial institutions are more likely to regard education as signal of ability to repay noncollateralized debts than are euro area financial institutions.

Significance of education

- But another factor is likely at play:
- Increasingly difficult for young people in the United States to attend college without a significant financial commitment.
- Rapid rise in student loan debt for US households with at least some college education.

Relatively stable percentages of US households with any non-mortgage debt 1992-2010

0.9 0.8 0.7 0.6 0.5 <35 35-44 0.4 all 0.3 0.2 0.1 0 1992 1995 1998 2001 2004 2007 2010

percent of households with non-mortgage debt

Declining percentage with outstanding credit card debt in 2010

percent of households with credit card debt



But rising share of younger collegeeducated with student loans

percent of households with college/some college education that have student loan debt



C Bertaut Federal Reserve Board of Governors

And typical amounts of student loan debt are substantial

Amount of student loan debt, for households with such debt

| | Mean (2010 \$) | Median (2010 \$) |
|------|----------------|------------------|
| 1992 | 12,408 | 5,609 |
| 1995 | 11,321 | 5,524 |
| 1998 | 17,368 | 9,337 |
| 2001 | 16,940 | 9,803 |
| 2004 | 19,348 | 10,586 |
| 2007 | 22,551 | 12,572 |
| 2010 | 25,865 | 13,000 |

C Bertaut Federal Reserve Board of Governors

Why has student loan debt risen?

- Both demand and supply factors likely at work.
- Financial institutions are willing to grant student loans.
- Idea that going to (the "right") college "requires" taking out student loans is likely a factor.
- Again, in a situation where we want to think about what some of the differences in *economic environments* may mean.

Concluding remarks

- Overall, a great start to understanding differences in the interplay of household characteristics and economic situations in accounting for household indebtedness.
- Demonstrates the importance of doing systematic analysis using data collected under a consistent methodology.
- Challenge for us as researchers is to think a little more fully about what underlies some of the conclusions.