HFCS: Future of Macroeconomics! (If ...)

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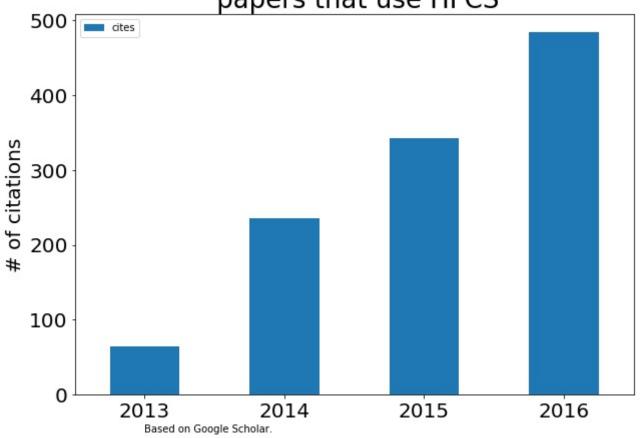
6th Conference On Household Finance and Consumption ECB, Dublin, December 2019

Central Banks:

- 0.0001 percent chance of avoiding another Great Recession?
- Excellent use of taxpayer money!

HFCS: Doing Great!

Total number of citations of papers that use HFCS



Much (Most?) of Increase is from Macro

"Better Data Makes Better Theory"

"Macroeconomic Data?"

No Such Thing

For a particular country we might have:

- One Great Depression
- One Great Inflation
- One Great Moderation
- One Great Recession

"The past is another country - they do things differently there"

Empirical Macroeconomics Example

["How Large Are Housing and Flnancial Wealth Effects?"]

- The kind of thing Central Banks really want to know
- Fed commissioned me to estimate this:
 - For an academic consultants' meeting Dec 2004
 - Shiller was my discussant: (He said "bubble is starting!")

Through 2012:

- Carroll, et al (https://www.jstor.org/stable/20870039) estimate as about 0.1
- Many others with similar (or larger) effects

Since 2012 (including paper presented here yesterday):

- Micro literature with totally credible identification
- Answer: Maybe 0.02

Macro literature error?

- 1. The Usual:
 - A. Everything is endogenous
 - B. Very little data
- 2. Micro literature with credible identification:
 - House prices go up when credit is loose
 - When house prices go up, relaxes collateral constraint
 - Small fraction of people borrows
 - Home Equity Loans
 - Renovation

"Structural" Macroeconomics? Two Choices:

- 1. Retain Discipline
 - Terrible Fit to Data (cf. Eichenbaum)
- 1. Relax Discipline
 - Frictions
 - Habits
 - Ambiguity Aversion
 - Adjustment Costs
 - Inattention
 - 'Marginal Utility Shocks'
 - 'Risk Aversion' Shocks
 - ...
- $\bullet 7 \times 6 \times 5 \times 4 \times 3 \times 2?$
- More "plausible" Models Than ∃ Datapoints

Micro Data: More and Better Data Makes Better Theory

"With So Much Data, We Don't Need Theory!"?

- No
- "More is Differerent":
 - Vast data both REQUIRES and ENABLES better theory
 - Only way to distill millions of datapoints
 - Nonsense theories ("MP works via IES") now disprovable

Different Countries ≈ **Natural Experiments?**

Institutions/behaviors: A lot of history dependence

Housing Finance

- 1. 30 Year Fixed Mortgages Dominant in US: Why?
- 2. History: Great Depression ⇒ Fannie Mae
 - Maximum feasible relief: Convert 5 to 30 year mortgages
- 3. "Financial Innovation" of ARMs?
 - Paul Volcker said it best
 - Always had a whiff of fraud in the US

Useful Cross-Country Diffs

- "Exogenous" cross-country diffs
 - Institutional differences
 - housing market structure (e.g., fixed vs floating)
 - financial market rules/structure (Alessandra)
 - labor market rules
 - social insurance systems
 - Demographics (esp immigration)
 - History
 - German hyperinflation
 - Exposure to communism

- "Predetermined" cross-country diffs
 - The structure/distribution of HH balance sheets
 - liquid assets:
 - bank accounts
 - stocks/bonds/financial markets
 - housing wealth
 - o pension wealth
 - Fiscal position (national debt, e.g.)

Kinds of Questions HFCS 1.0 Can (Help) Resolve

- Common MP shock has different effects across countries
 - Depending on institutions, balance sheets, ...
 - As we saw yesterday
- Constant MP but different country-specific shocks
 - Minimum Wage/"Incomes" Policies
 - Fiscal shocks multipliers
- Leaving cyclical policies aside, consequences of institutions
 - Debt, asset market frictions (Alessandra; Bover)

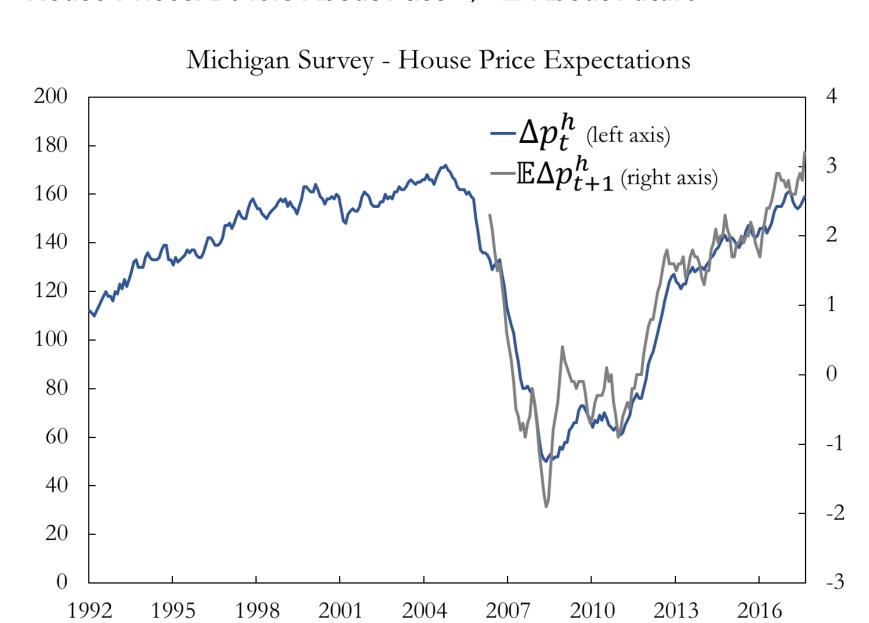
Remaining Class of Problem

- But some phenomena are unique to macro
 - Correlated (and mutually causal) expectations
 - Based on mutually shared experiences

If ... HFCS Agenda for Macro?

1. Expectations, Beliefs, Narratives ...

House Prices: Beliefs About Past \Rightarrow \mathbb{E} About Future



Euro Version of NYFed Survey of Consumers?

No: Do Even Better!

At a Minimum: Richer Background of Respondents

- 1. Start with a good sampling frame
 - Like HFCS!
 - If not HFCS, Credit Registry or National Registry or ...
 - Whose House Price Beliefs?
 - Yesterday's paper on German housing market shows importance
 - Don't just ask what; ask "why"
 - Collect Narratives

A Long Time Ago, in a Galaxy Far Far Away ...

... my first job was at the Federal Reserve, starting in 1990

Specifically, I was in charge of C:

- Suite off the shelf models were way underpredicting $oldsymbol{\mathcal{C}}$
- Only indicators that matched?
 - Big decline in expectations component of consumer confidence
 - Especially Unemployment Expectations

What was going on?

Narratives

1990-91 Recession in US:

- ASSA Session (1992):
- Blanchard:
 - "Large Autonomuos Negative Innovation in Consumption Equation in VAR"
- Hall: "Consumers Freaked Out (for some reason)"
- Prescott: "Basel II regulatory agreement reached"
 - "consumers anticipated future negative productivity shock"

Narratives

Shiller (2009, 2019):

- Oil Prices Quadruple after Iraq Invaded Kuwait
- Last 2 times that had happened:
 - 1973 followed by worst recession since WWII
 - 1979 followed by even worse double-dip

Surveys: Ask Not Just "What" But "Why" (Narratives)

- 1. "My Facebook friend's house price collapsed"
- 2. "I remember the last time there was an oil price shock"
- 3. "Cable News shows keep talking about a recession"
- 4. "Why pay attention to milk and bread prices?"
 - I buy them often enough that I can remember the last price
 - My friends pay attention to these prices and we can gossip

Hypotheticals

- 1. Homeowners:
 - If Interest Rates Were Lower:
 - Would you refinance?
 - Would you upgrade?
 - Would you buy an "investment property"?
- 2. 60 year olds:
 - "If stock market fell by 20 percent would you delay retirement?"

HFCS 2.0: Add Rich Expectations/Beliefs/Narratives/Hypotheticals

Potential Outcomes:

- 1. Which Models of Expectations Work Well In Which Circs?
- 2. Causality:
 - From events to expectations
 - From expectations to events

Prospects

Why Can't A Survey Win the Nobel Prize?

• Maybe it can -- "Medcins sans Frontiers" Won Peace Prize ...

References

Resources

- 1. <u>HFCS Core Questionaire</u> (https://www.ecb.europa.eu/home/pdf/research/hfcn/HFCS_Core_and_derived_vari8d19475a7edb8ff7de6d99a885e527ec)
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