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

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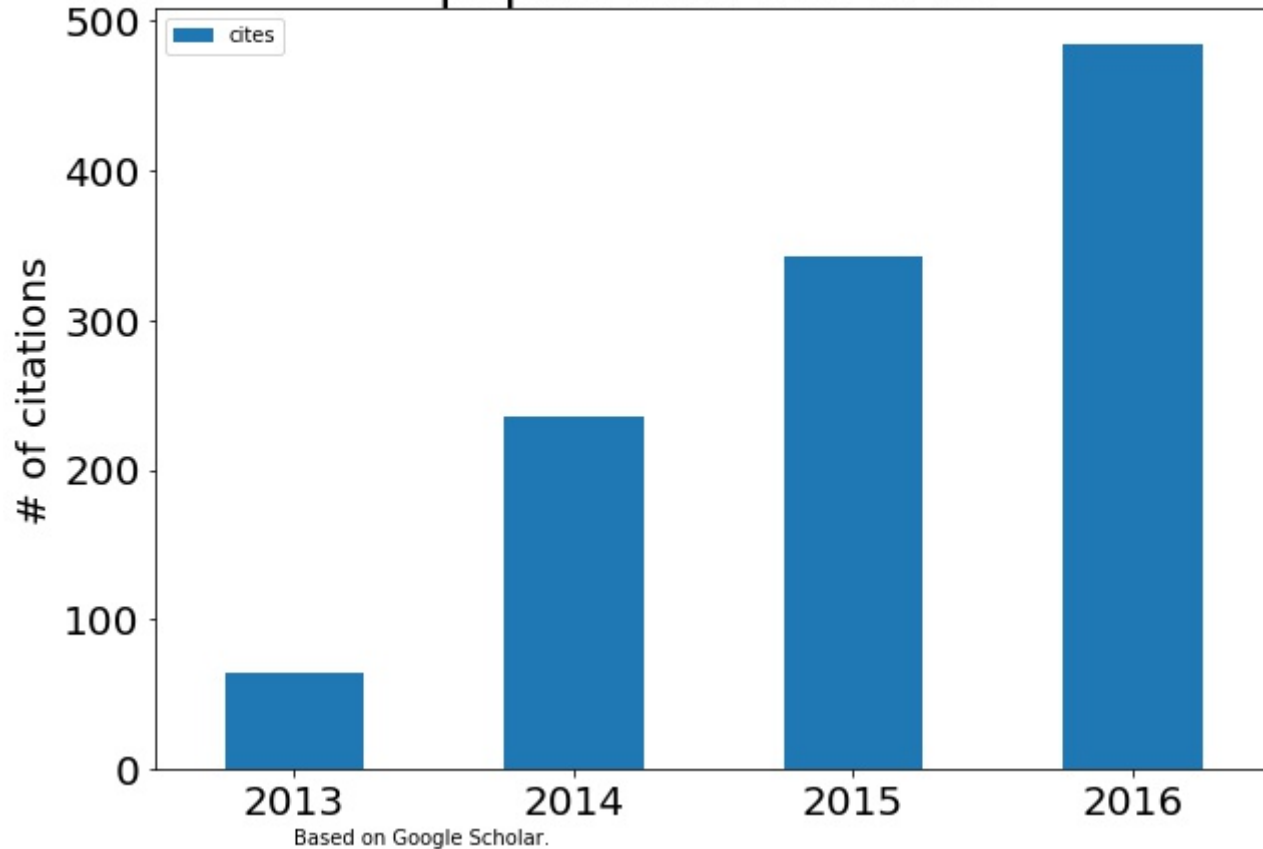
**6th Conference On**
**Household Finance and Consumption**
ECB, Dublin, December 2019

# 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 FInancial 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)](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**
- **...**
  - $7 \times 6 \times 5 \times 4 \times 3 \times 2$?
  - **More "plausible" Models Than $\exists$ 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 $\Rightarrow$ 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**
    - **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 ⇒ 𝔼 About Future



Michigan Survey - House Price Expectations

Legend:
- $\Delta p_t^h$ (left axis)
- $\mathbb{E}\Delta p_{t+1}^h$ (right axis)
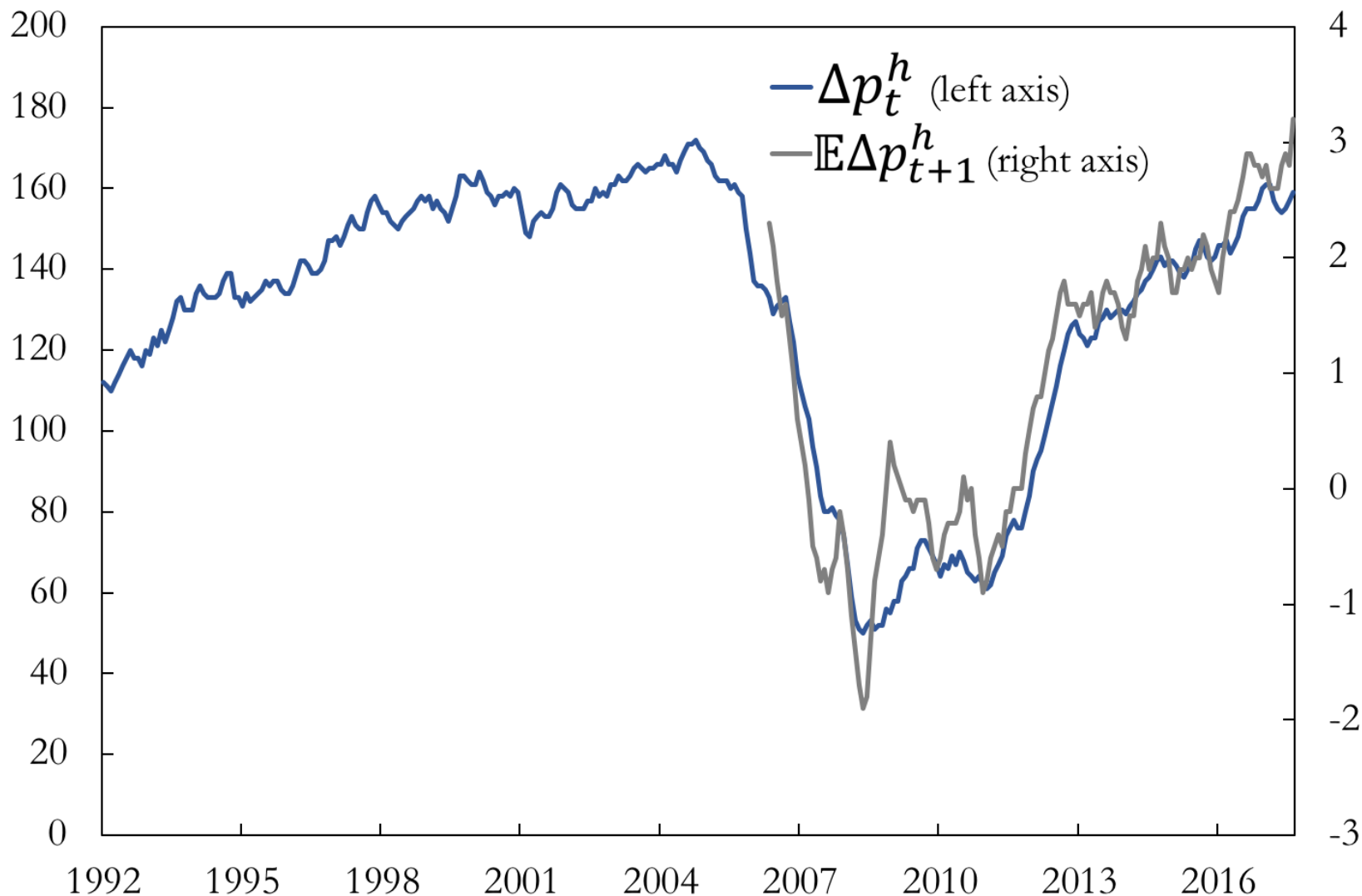
# Euro Version of NYFed Survey of Consumers?

## 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 $C$
- 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. **HFCS Core Questionaire
(https://www.ecb.europa.eu/home/pdf/research/hfcn/HFCS_Core_and_derived_vari
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2. **Bibliography of the HFCS
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6. **Report about the Research Activities of the HFCN since the Release of the Wave 2 D
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