Discussion of Chen, Michaux and Roussanov (2014)
Houses as ATMs?
Mortgage Refinancing and Macroeconomic Uncertainty

Paul Willen, Federal Reserve Bank of Boston

Macro Finance Society, May 31, 2014

The statements and opinions in these notes are those of the authors and are neither the official positions of the Federal Reserve Bank of Atlanta or Boston nor of the Federal Reserve System.
Disclaimer

I am speaking today as a researcher and as a concerned citizen not as a representative of:

- The Boston Fed
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- Cash flowed to three places
  1. To pay builders of new homes
  2. To pay sellers of existing homes
  3. Onto the balance sheets of the borrower
Theory 1 of Consumer Credit: Hedonism

- Households went on a “debt fueled consumption binge.”
  - New Clothes, Dinners out
  - Luxury Sport Utility Vehicles
- Old/new PIMCO Chief Economist Paul McCulley

“There is room for the Fed to create a bubble in housing prices, if necessary, to sustain American hedonism.” (2001)
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- Different combinations of present and future consumption
- Consumption frontier
- Borrowing moves you down and to the right
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Where does CMR fit in?

CMR take Fisher’s model and add
- Risky labor income
- Collateral constraints
- An infinite number of periods
- Long-term fixed rate loans
- Refinancing
- Default

And that makes it impossible to solve graphically ;-)

But this intuition is the same as Fisher (1930)

What do they find?

_We show that a rational model of home equity-based borrowing by liquidity constrained households can quantitatively account for the empirical patterns in household leverage and consumption over the last decade._ (p. 1)
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- Borrowers suffering from transitory income shocks.
- An implication of standard PIH – transitory negative shock leads to positive borrowing.
- Generates a negative correlation between debt growth and income growth (see Mian and Sufi (2009)).
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- Households suffering bad shocks borrow more
- And set it aside for a worse shock
- High leverage results from bad shocks not the other way around.
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Households suffering bad shocks borrow more

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The recession

- Rational response to the worst recession in 75 years
- Borrow and dissave
- And pay it back later.
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The boom

- High house prices...
- Enable households to do more consumption smoothing.
- No binging here
- No luxury SUVs.

Panel A. House price growth, relative to 2001

Panel B. Total debt growth, relative to 2001

Panel C. Change in debt-to-income ratio, relative to 2001

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- Table 7 of the paper.
- Relaxes the LTV and DTI constraints
  - Does not increase overall consumption
- But it has to increase utility
  - Because this is partial equilibrium
- All these features of the recent economy
  - high leverage
  - defaults
  - slow consumption after the recession
- Welfare is still higher!
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Why?

Because there doesn’t appear to be much of a boom in the data.
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A. Real consumption growth
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Components of growth

- Consumption growth has followed income very closely.
- If consumption was the driver,
  - Why is investment growing so much faster than consumption in the boom?
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![Graph showing components of growth over time.](image-url)
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- In the recession, consumption
  - fell less than income...
  - returned to peak by 2010
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- But if you just saw this figure, would you...
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Discussion of Chen et al.

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- Consumption accounts for exactly its normal share.
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### The Housing Bust, 2006-2009

#### Variable Growth × Share = Contribution

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Theories of Consumer Credit
CMR Results

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EXPERIMENT IN ACCOUNTING

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- If we define income as “National Income”: income earned
- Fall in saving rate in 2005 is because of an increase in retained earnings – “income earned but not received.”
- Saving went up in the boom, down in the bust and is still low...
- Fisher would say to focus on income earned.
Theories of Consumer Credit
CMR Results
“...the ‘consumption boom’ of the mid-2000s,...”

Expenditure Accounting
Saving rate

The slide you’ve all been waiting for...

The end.
The slide you’ve all been waiting for...

- The end.