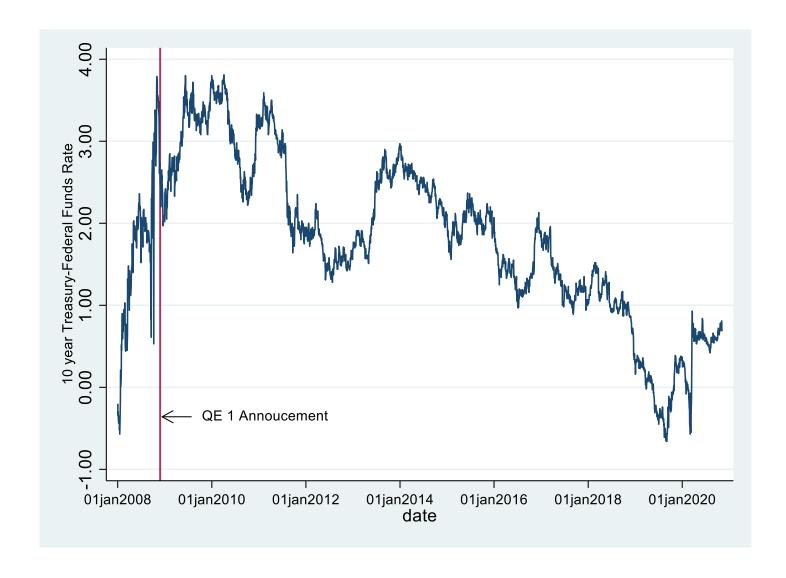
Long Run Effects of QE: Evidence from Microdata

Rodney Ramcharan USC

Yield curve management and asset purchases are the new normal



How does it work

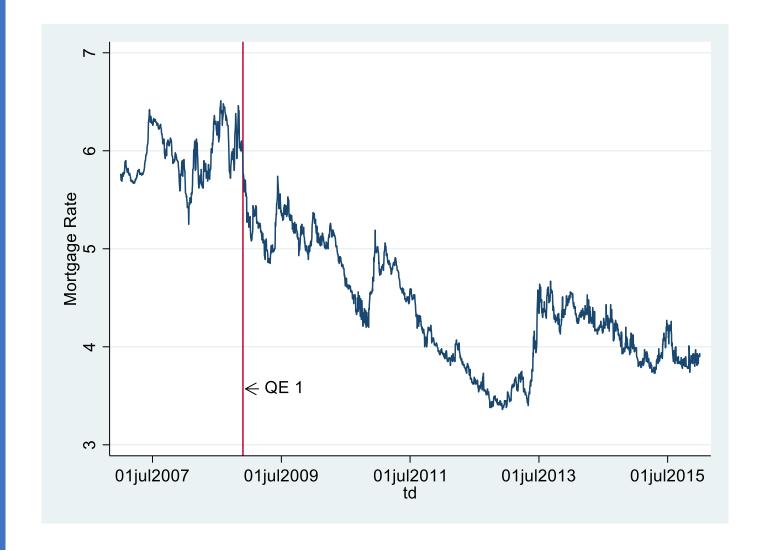
- Provide liquidity to banks to make loans (EU)
- Investors rebalance portfolio into riskier assets (CRE)
- Boost asset prices (reduce long run discount rate)
- Mortgage market!!!

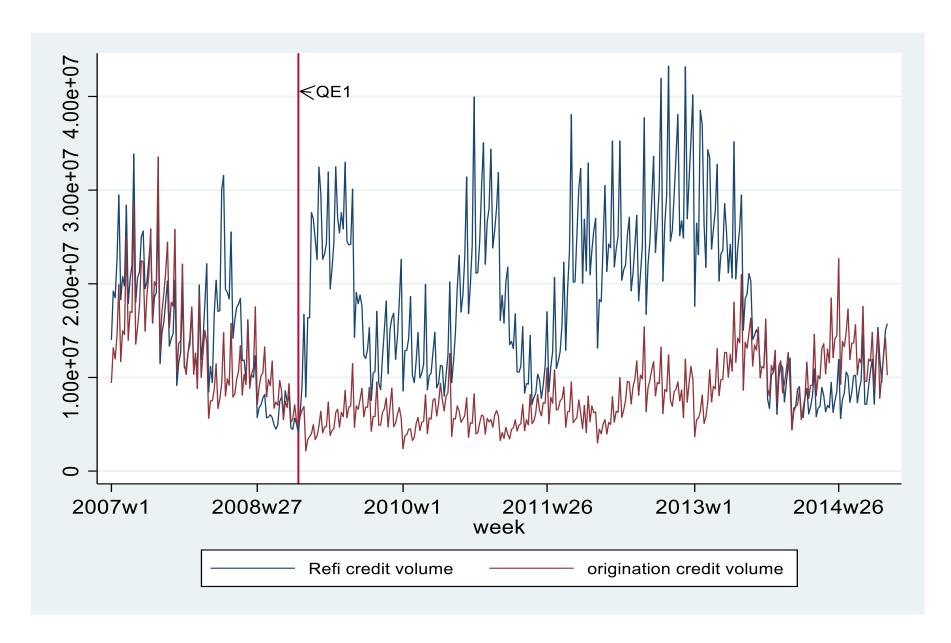
mortgage market

Lower mortgage rates

• Borrowers refinance and lower their monthly payments

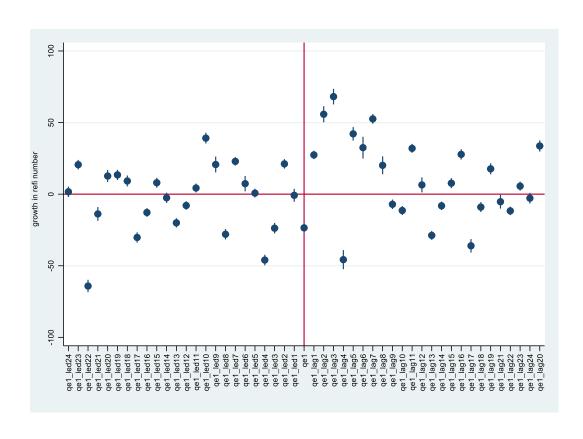
 Boost consumption and house prices

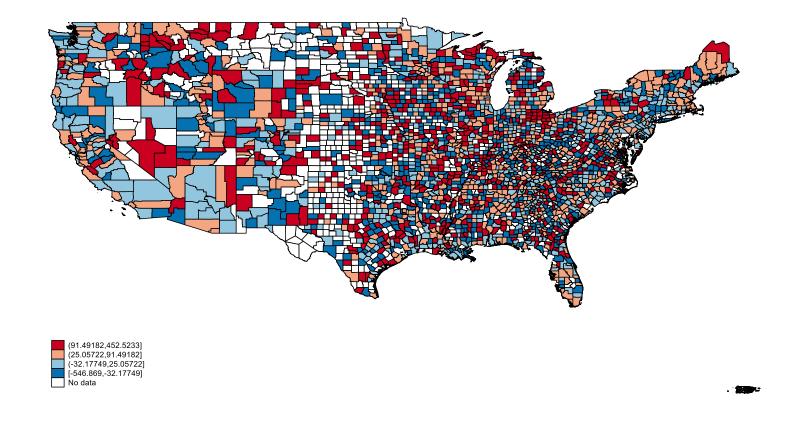




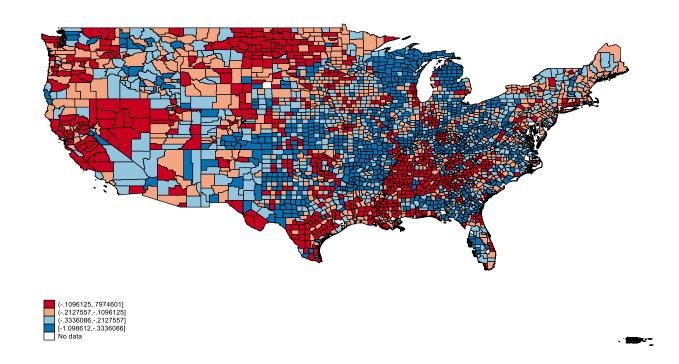
It worked

"Abnormal" change in refis growth

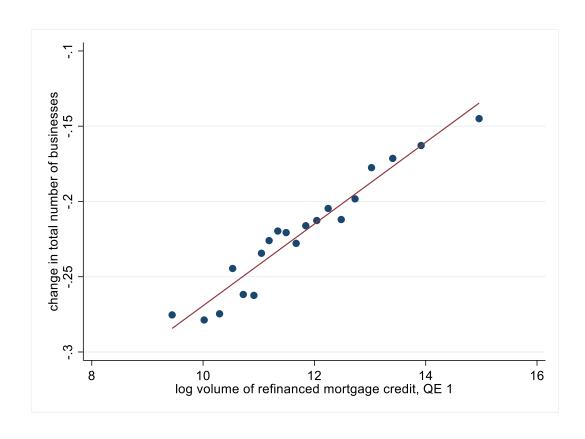




Change in the Number of Businesses, 2009Q4-2015Q4



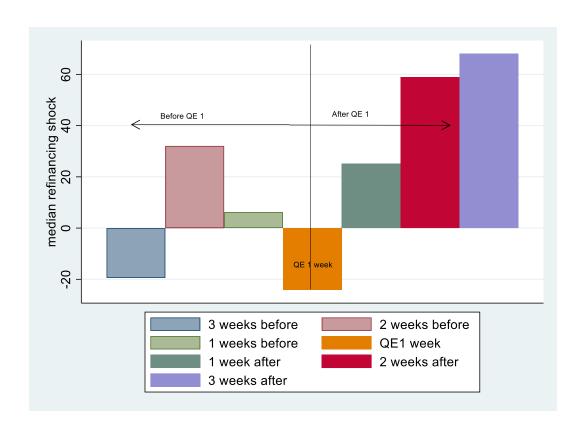
Did Refi Activity Impact Business Formation?



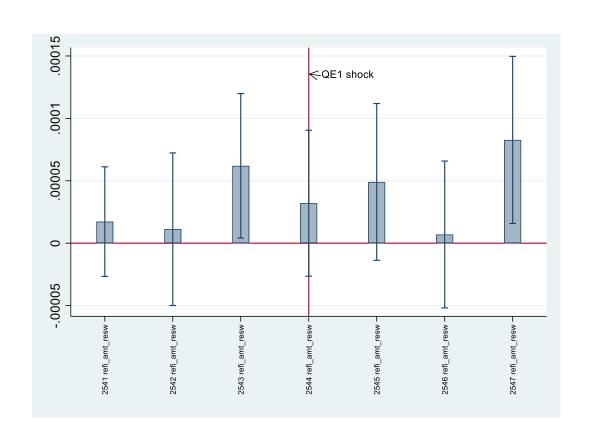
Compute QE Refi Shocks

Weekly refi activity in county *i* on week *t*= constant+coeff*Weekly refi activity in county *i* on week *t*-1 +residual on QE 1 week

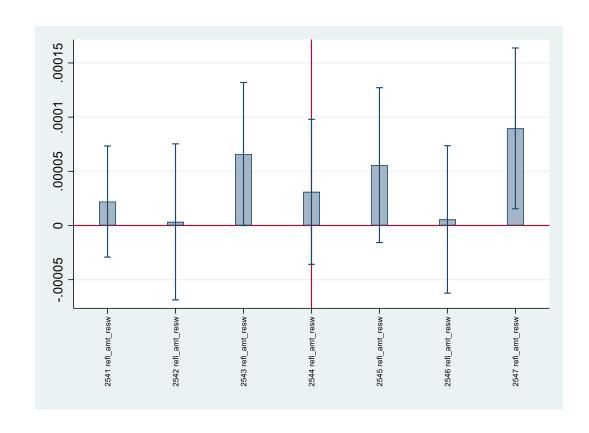
The part of refi activity that cannot be explained by momentum just around QE 1—this is the QE 1 impact on refi activity in the county—refinancing shock



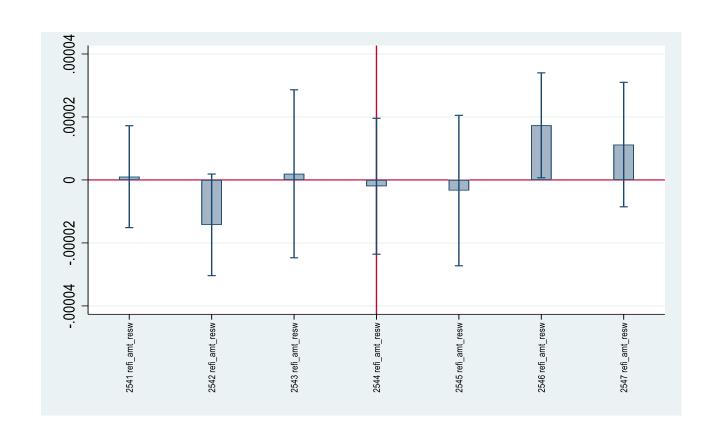
Impact of refi shock on business growth

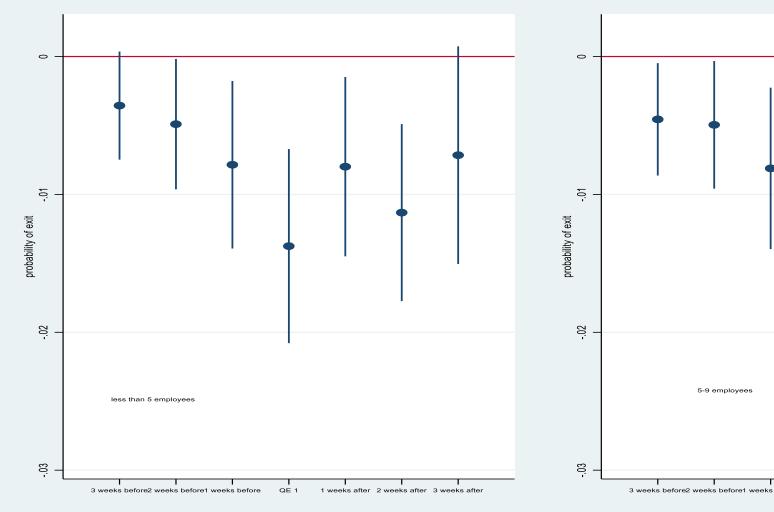


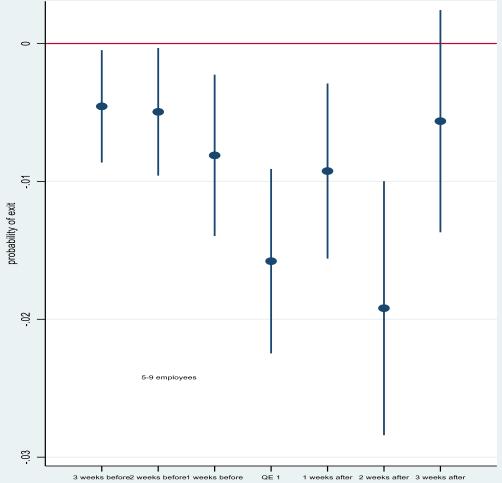
Impact of refi shock on ratio of entrants to exits

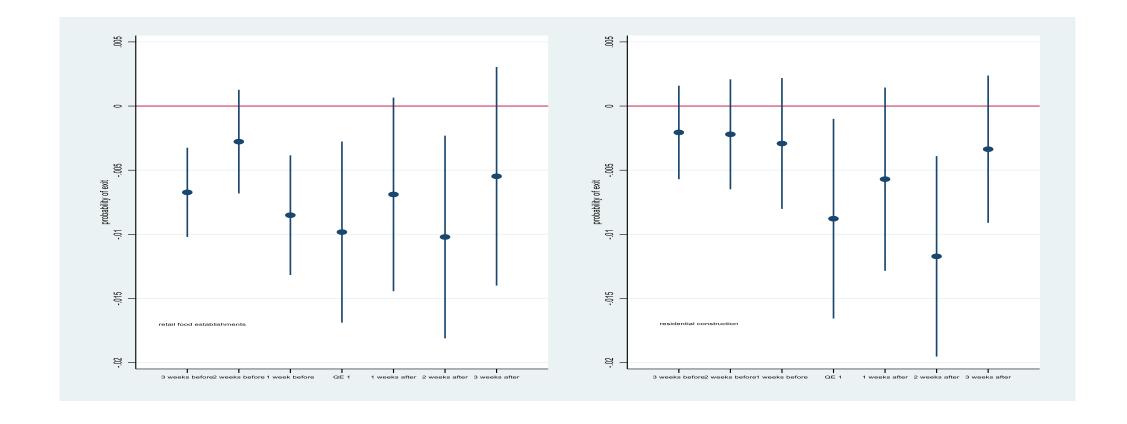


Impact of refi shock on average credit score in county









Discussion/Questions

The housing market is an important channel for monetary policy and yield curve management

The effects seem to last a long time—an opportunity for investors

Not everyone benefits

Economic activity and business formation is slower in 2015 in places where households could **NOT** easily refinance in 2009!

Is (unconventional) monetary policy worsening inequality?

Would fiscal policy/targeted transfers/ or refinancing been more effective?

Is (unconventional) monetary policy worsening political dysfunction?