

Next Week's Topic

"The Great Recession: Causes and Consequences"

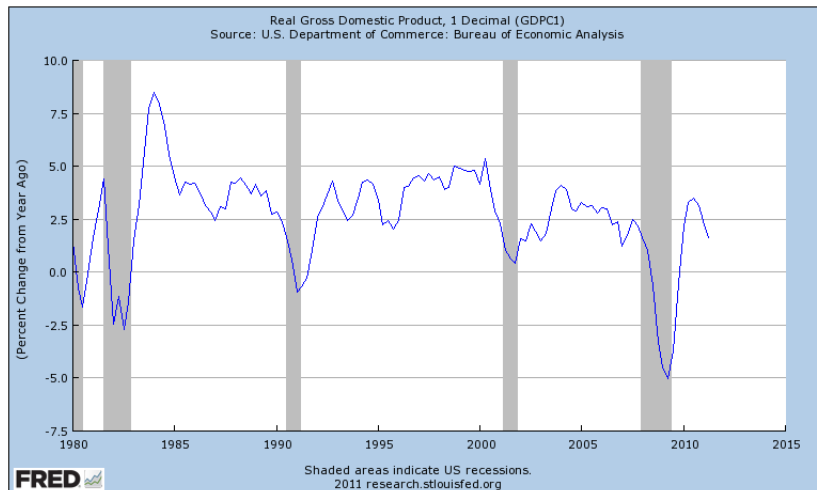
- ▶ Next Week Professor Mian will discuss
 - ▶ Mian, Atif R. and Sufi, Amir, "The Consequences of Mortgage Credit Expansion: Evidence from the U.S. Mortgage Default Crisis,"
 - ▶ Mian, Atif R. and Sufi, Amir, "Consumers and the Economy, Part II: Household Debt and the Weak U.S. Recovery,"
 - ▶ Mian, Atif R. and Sufi, Amir, "House Prices, Home Equity-Based Borrowing, and the U.S. Household Leverage Crisis,"
 - ▶ Mian, Atif R., Sufi, Amir and Trebbi, Francesco, "Foreclosures, House Prices, and the Real Economy."
- ▶ Today, I will motivate the next week's topic
- ▶ Remember, First Research Paper due October 26, before 5:00 pm!

The Great Recession

- ▶ So, what happened between 2002 and 2010?

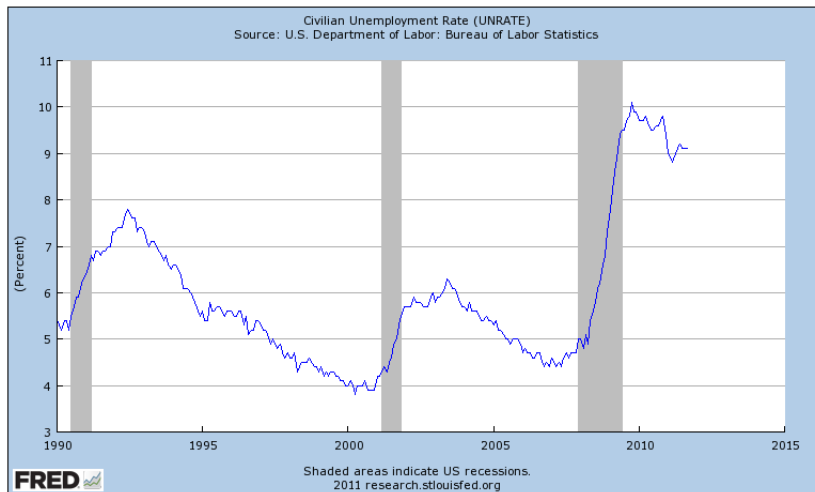
The Great Recession

Figure: Output



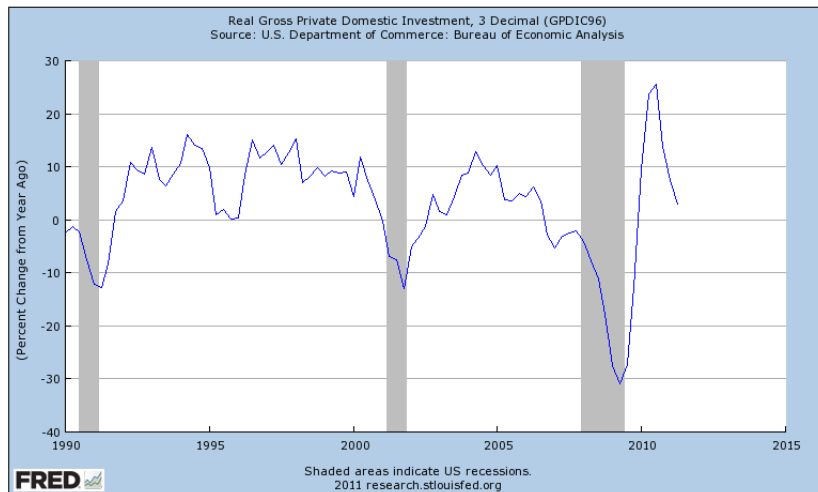
The Great Recession

Figure: Unemployment



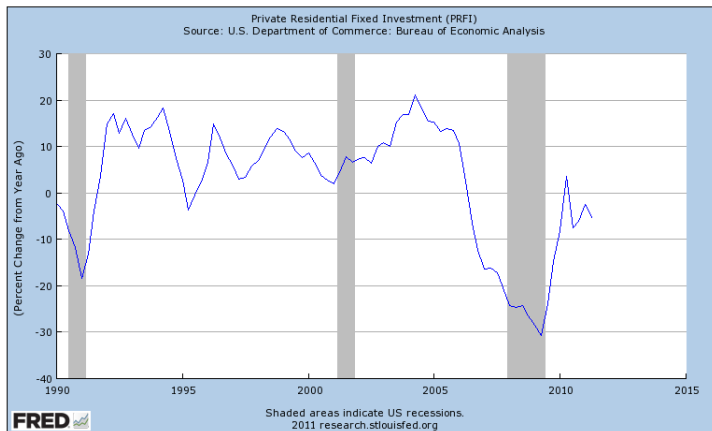
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Figure: Investment



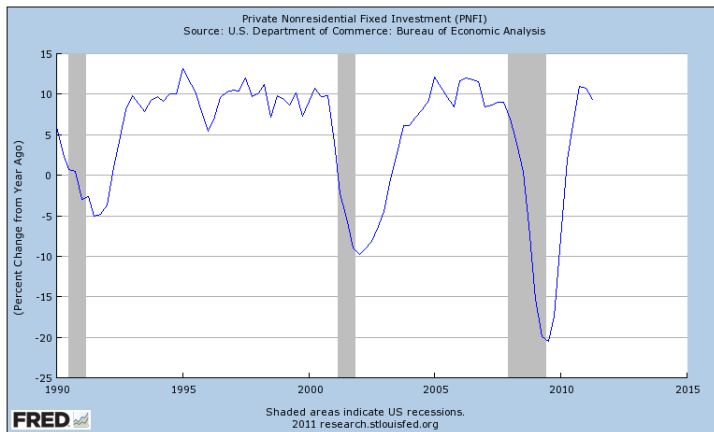
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Figure: Residential Investment



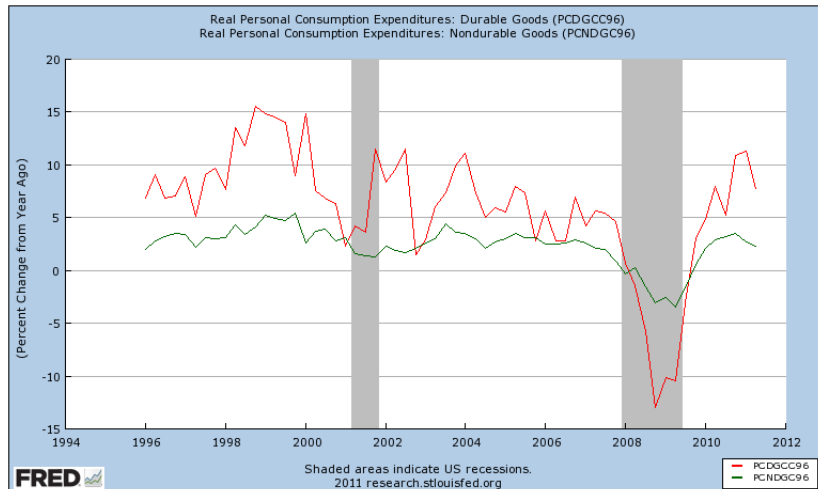
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Figure: Non-Residential Investment



The Great Recession

Figure: Consumption

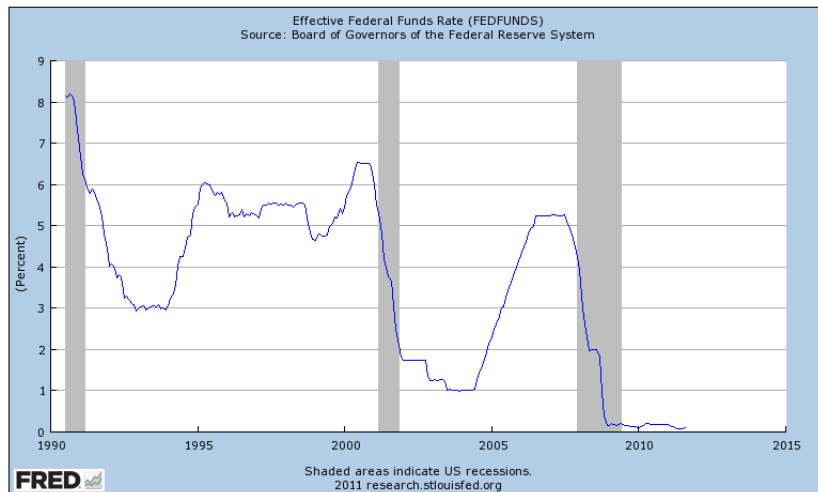


The Great Recession

- ▶ What did the policy-makers do?

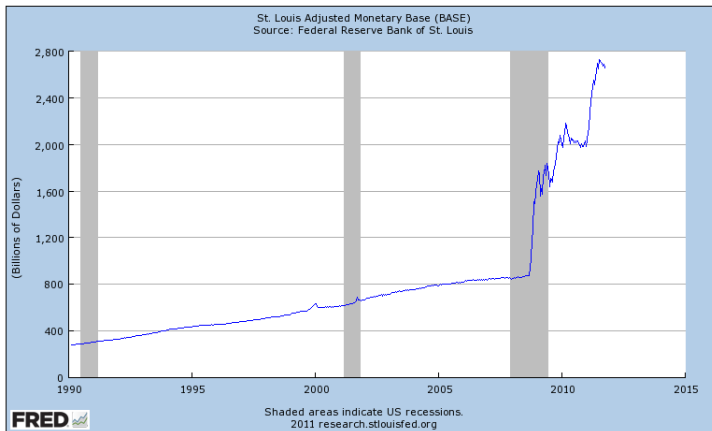
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Figure: Fed Funds Rate



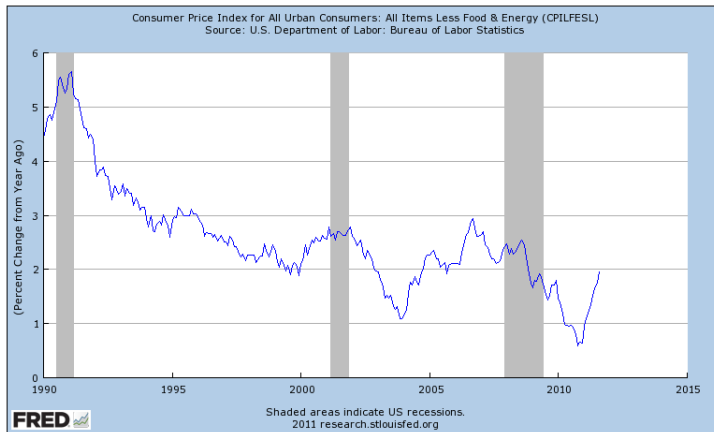
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Figure: Monetary Base



The Great Recession

Figure: CPI Inflation

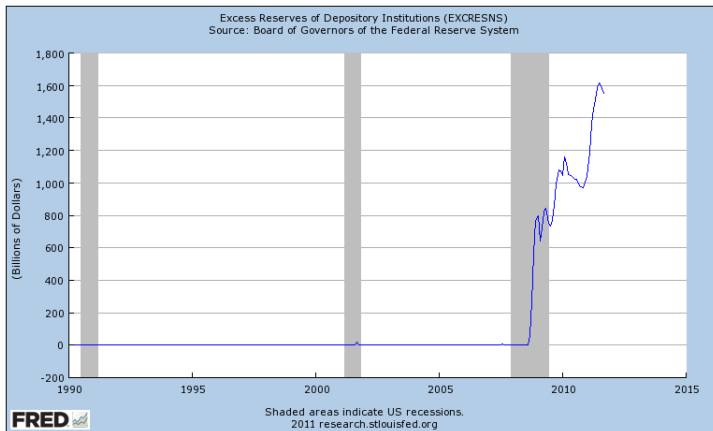


The Great Recession

- ▶ So where does all the cash go?

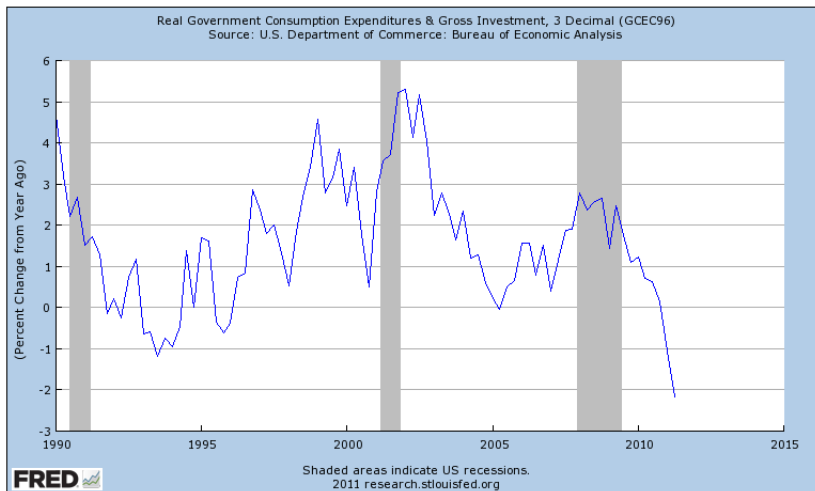
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Figure: Reserves



The Great Recession

Figure: Fiscal Policy



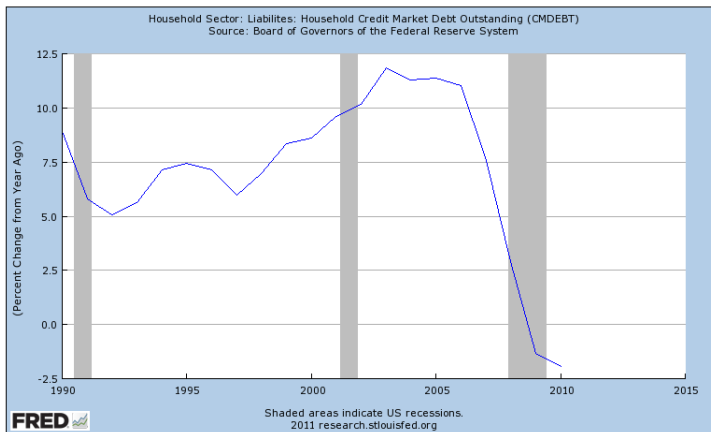
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▶ Questions

- ▶ What caused the boom in the first place?
- ▶ Why was the recession so deep and why is the recovery so slow?
- ▶ Policy-makers have tried numerous “unconventional” policies (within political limits)
- ▶ What else can policy-makers do?

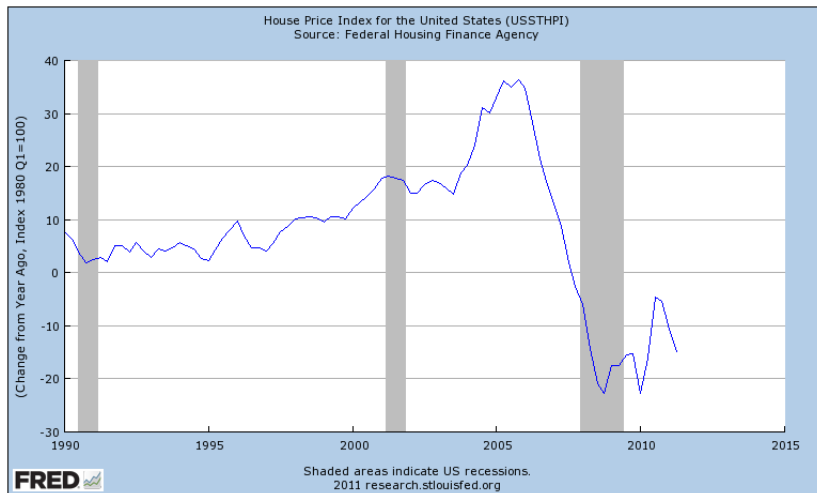
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Figure: Household Debt



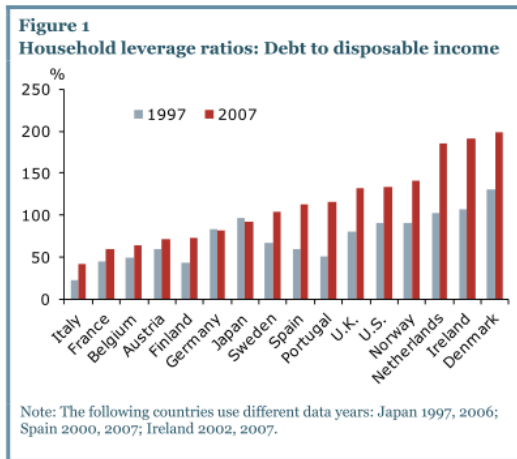
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Figure: Housing Prices



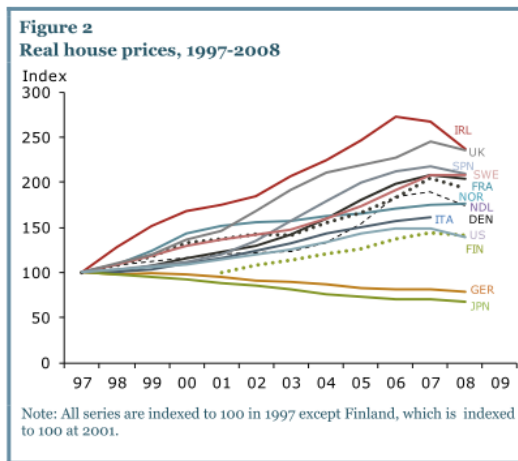
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Figure: Glick and Lansing 2010



The Great Recession

Figure: Glick and Lansing 20010

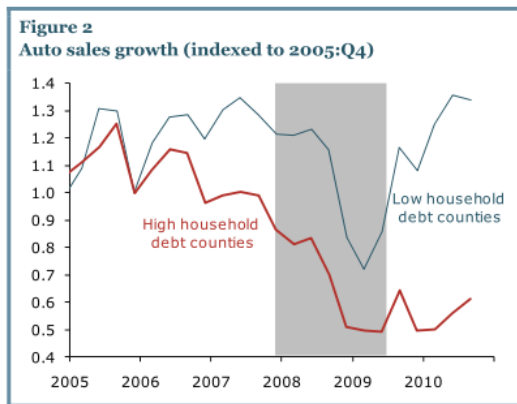


The Great Recession

- ▶ Evidence suggests that the severity of the recession is intimately connected to household indebtedness (e.g. Mian and Sufi (2010,2011))
 - ▶ Borrowers cut their consumption to repay their debts or increase their savings
 - ▶ Savers do not increase their consumption as much
 - ▶ Net result is a fall in aggregate consumption and output (with nominal rigidities) - see Eggertsson and Krugman (2010) for theory

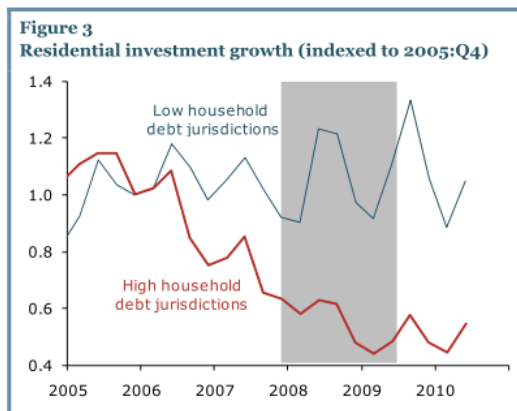
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Figure: Mian and Sufi 2010



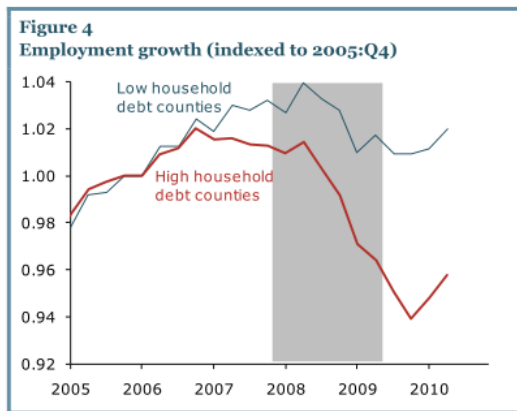
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Figure: Mian and Sufi 2010



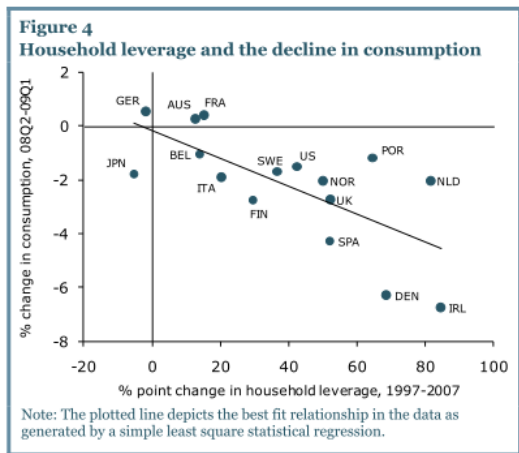
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Figure: Mian and Sufi 2010



The Great Recession

Figure: Glick and Lansing 2010)



The Great Recession

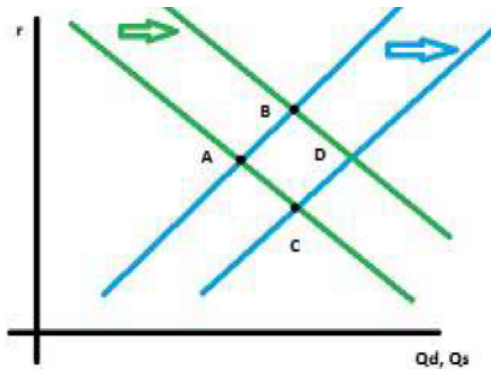
- ▶ Question: What were the reasons for such large buildup in household debt?

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- ▶ Possible Reasons
 - ▶ Expansion in credit supply (easy monetary policy, regulatory laxes, moral hazard, global imbalances, etc)
 - ▶ Expansion in credit demand (growth in current or expected borrower incomes, etc)
 - ▶ Expectations of rising housing prices
- ▶ Aggregate data is consistent with any of these stories

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Figure: Credit Market Equilibrium



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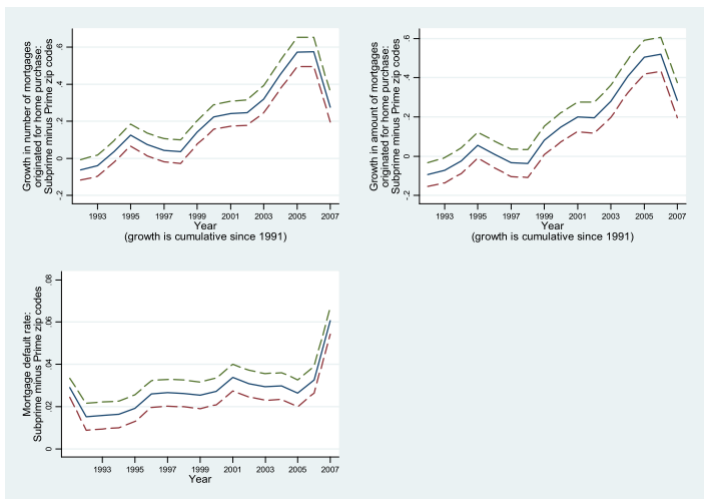
- ▶ Mian and Sufi (2010) use zip code level data to empirically disentangle which of these stories is closer to the truth
 - ▶ Credit Demand - *income-based hypothesis*
 - ▶ Credit Supply - *supply-based hypothesis*
 - ▶ House Prices - *expectations-based hypothesis*

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- ▶ They divide zip codes according to the share of households with credit scores below 660 (call these subprime)
- ▶ They have data on households' debt, incomes, number and value of mortgages issued by various institutions at each zip code
- ▶ The following picture emerges ...

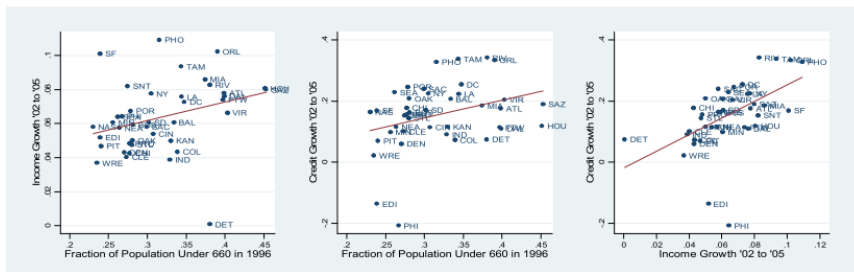
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Figure: Increase in Subprime Lending



The Great Recession - Income-Based Hypothesis

Figure: Aggregated at MSA Level



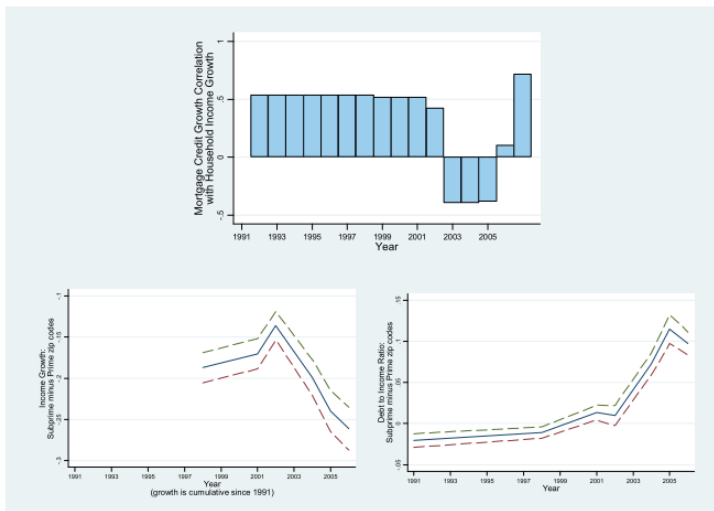
The Great Recession - Income-Based Hypothesis

Figure: Zip Code Level



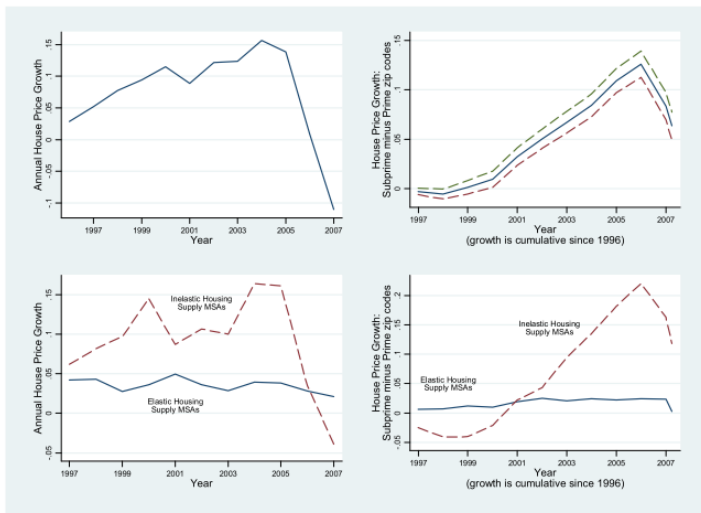
Incomes-Based Hypothesis?

Figure: Unique Period



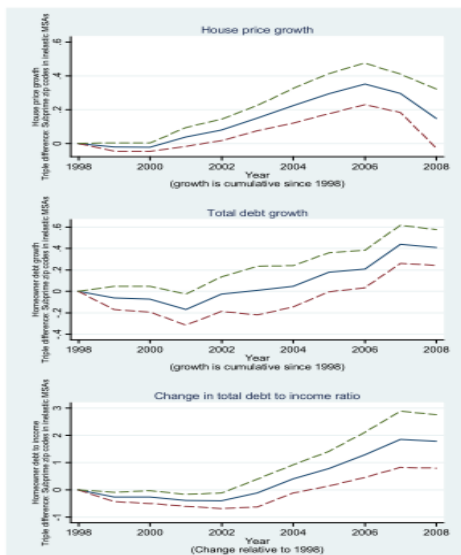
The Great Recession - Expectations-Based Hypothesis

Figure: Housing Prices



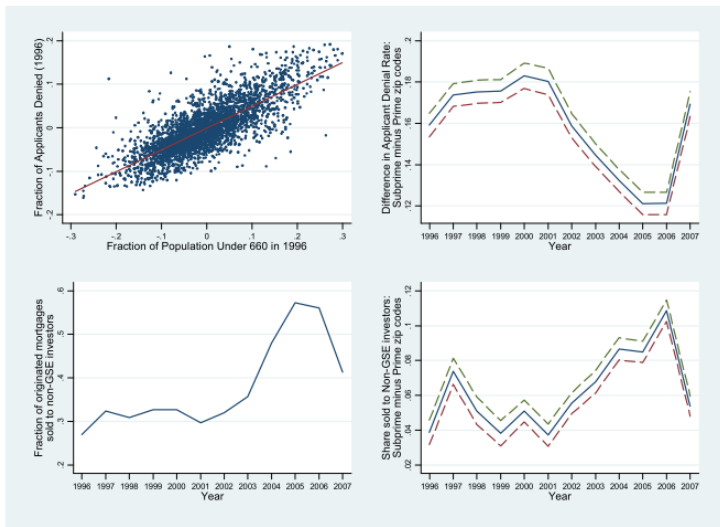
The Great Recession - Expectations-Based Hypothesis

Figure: Credit Growth



The Great Recession - Credit Supply

Figure: Expansion in Credit - Moral Hazard?



The Great Recession

- ▶ Further Readings:
 - ▶ Fisher (1933)
 - ▶ Household Balance Sheets: Mishkin (1978), Olney (1998), Eggertsson and Krugman (2010)
 - ▶ Balance Sheets and Credit Channel: Bernanke (1983), Bernanke and Gertler (1989), Kiyotaki Moore (1997)