

Discussion of McCollum & Upton (2016)  
*'Local Labor Market Shocks and  
Residential Mortgage Payments:  
Evidence from Shale Oil and Gas Booms'*

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Federal Reserve Board

*AREUEA 2016 National Conference*

# Overview

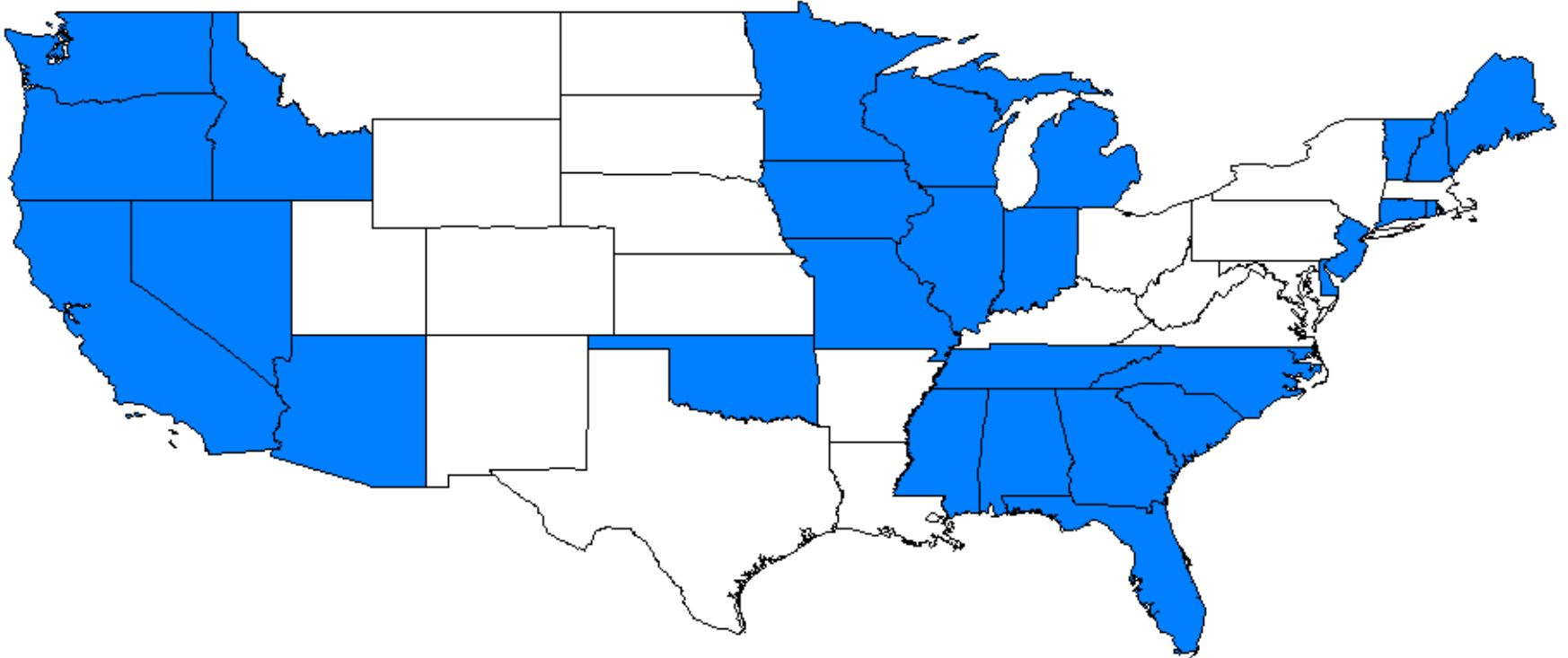
- **Important question:** Resource boom as mitigator of housing crisis
- **Persuasive identification:** Shale boom is plausibly exogenous; match loans in shale areas with observably similar controls
- **Interesting results**
  - 6% lower default rates in treatment areas!

# Main comments

1. Control group
2. Mechanism
3. Heterogeneity

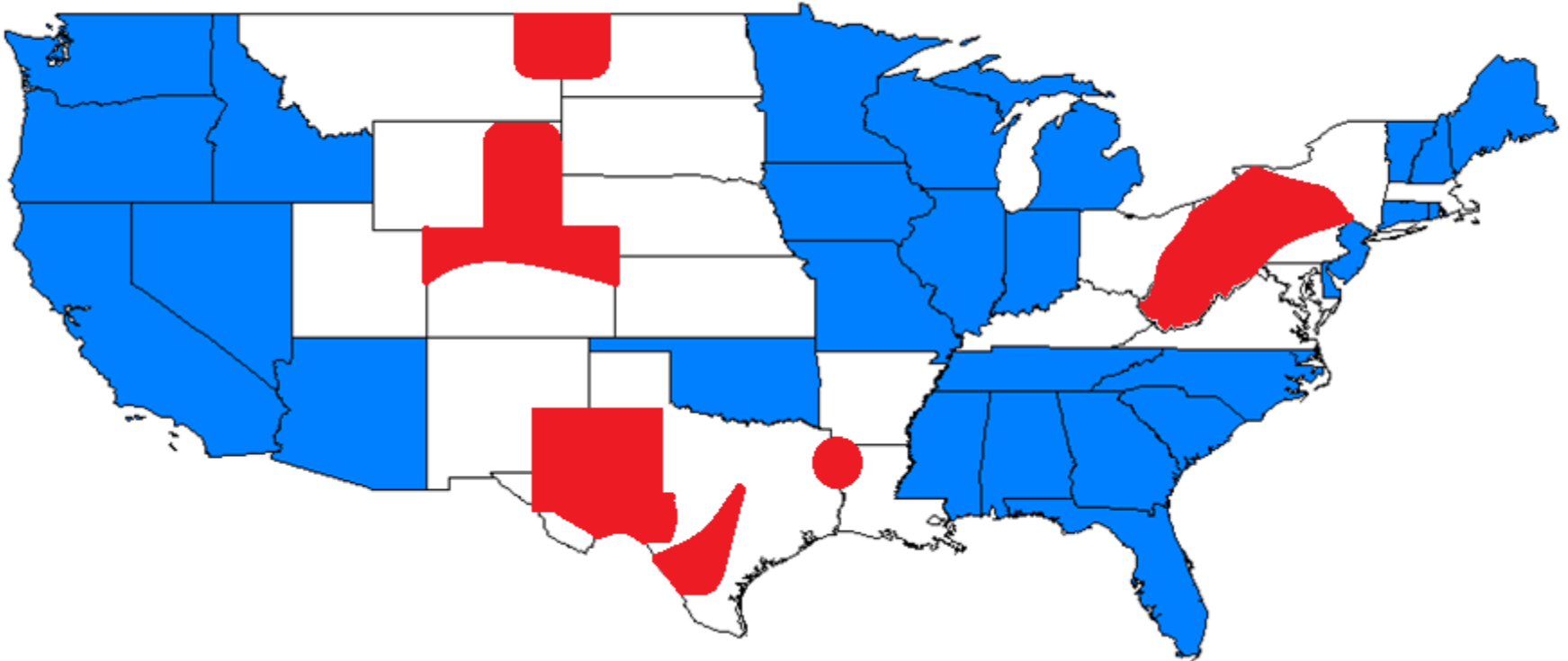
# 1. Control group

Control states



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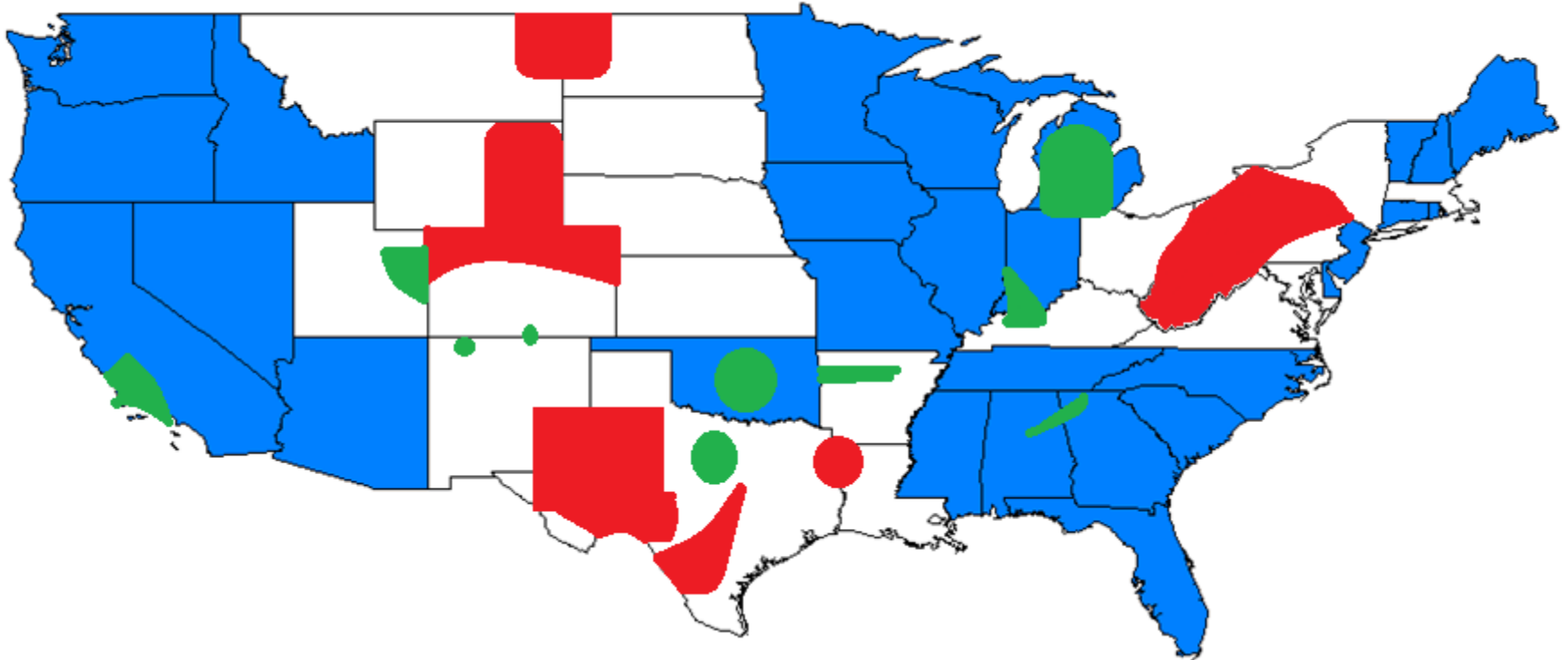
Control states



- Included plays (plus Permian)

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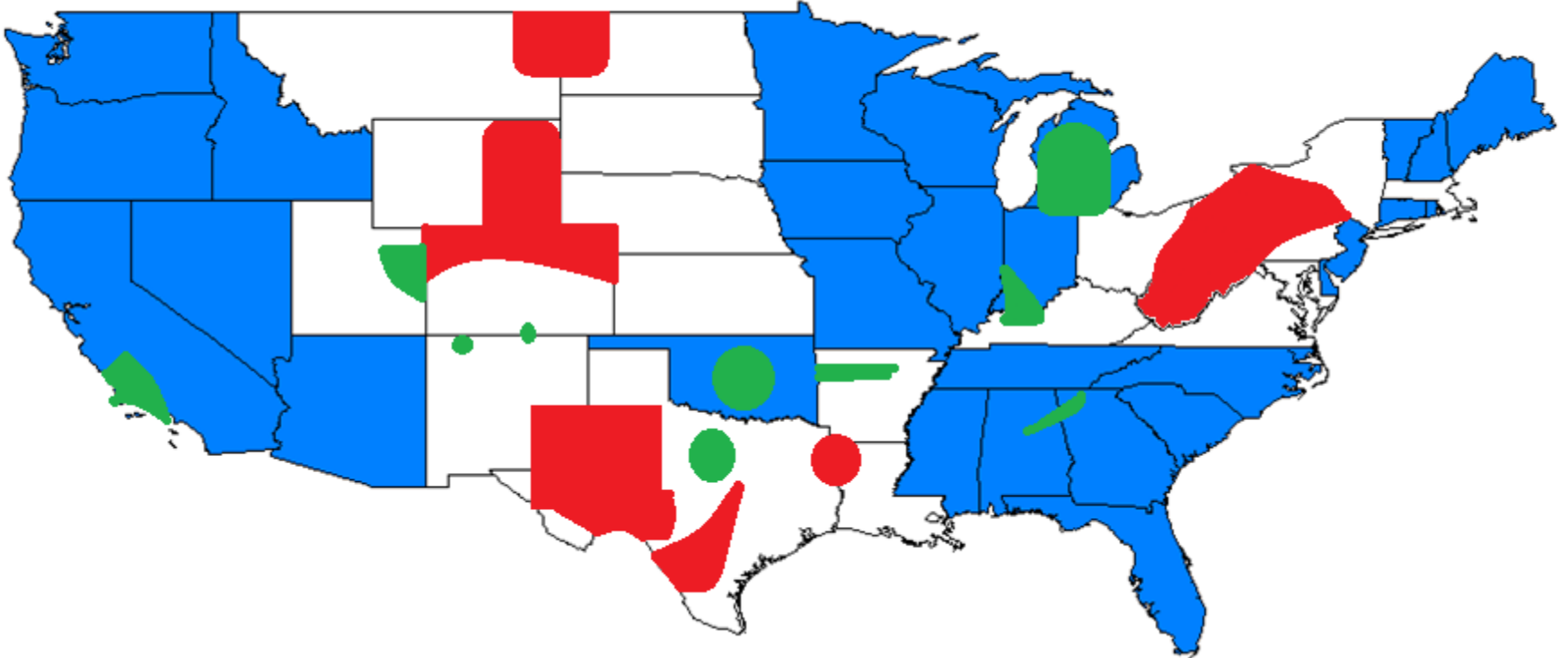
Control states



- Included plays (plus Permian)
- Other shale plays (EIA)

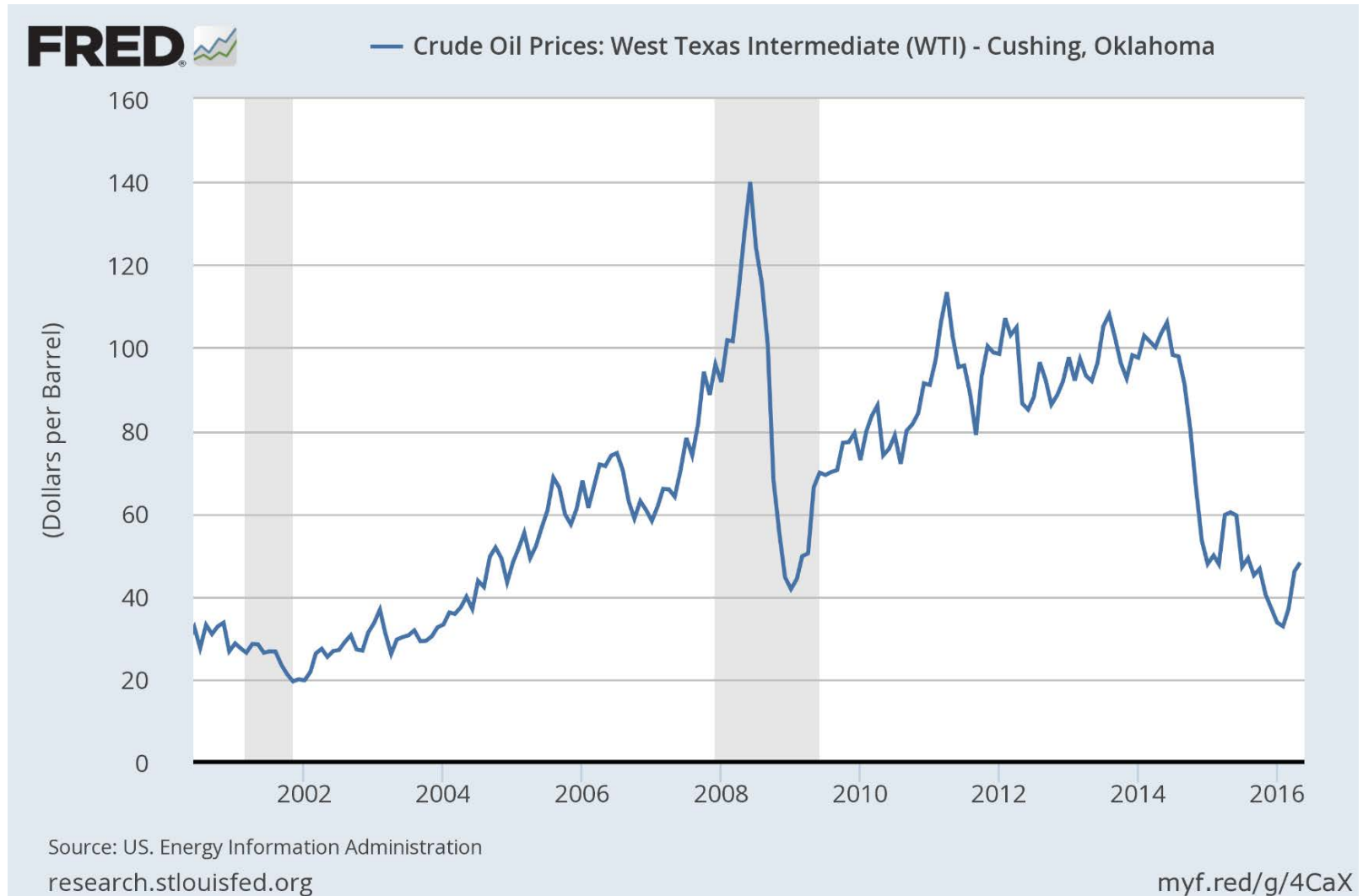
# 1. Control group

Control states



- Included plays (plus Permian)
- Other shale plays (EIA)
- More broadly: oil & gas produced elsewhere

# 1. Control group





# 1. Control group

- ID assumption: Matched controls don't differ from treatments in ways that are related to shale boom
- Presence of oil/gas boom in control areas—bias results against you?
- Omit nearby counties (spillovers)—I agree, but may be independently interesting!
  - Also, might be useful for showing lower bound on estimates
- Potential problems
  - Industry mix? (construction bust, industries with petro input)
  - State policies coinciding with shale boom?

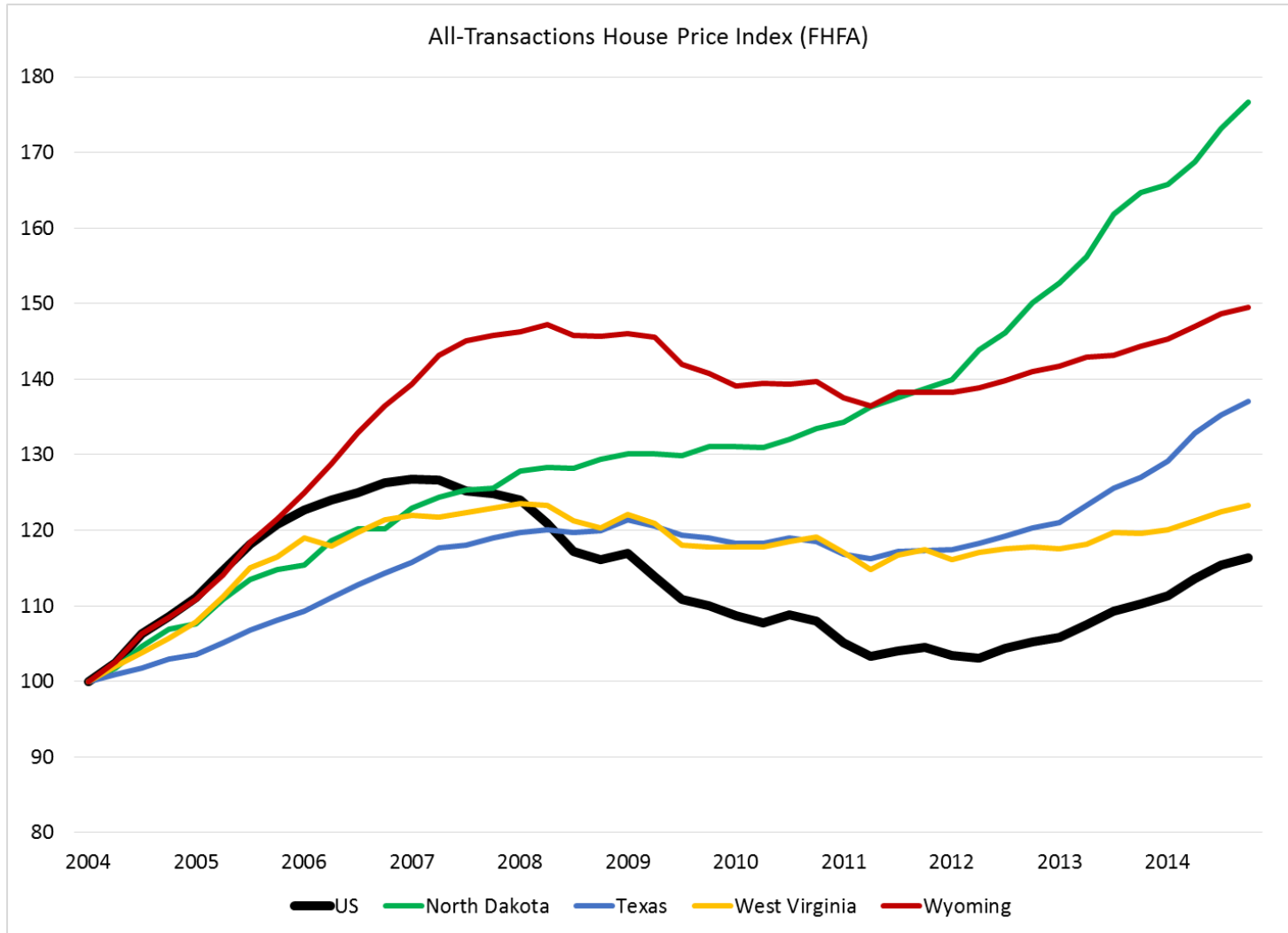
## 2. Mechanism

“There are two plausible channels through which an economic boom may decrease mortgage delinquency rates. The first channel is through increased earnings and employment. . . . The second channel is through a plausible housing price increase.” (p5)

- Related but distinct mechanisms
  - Stronger housing market => More direct mitigation of default risk



# 2. Mechanism



Note: Y axis does not start at zero

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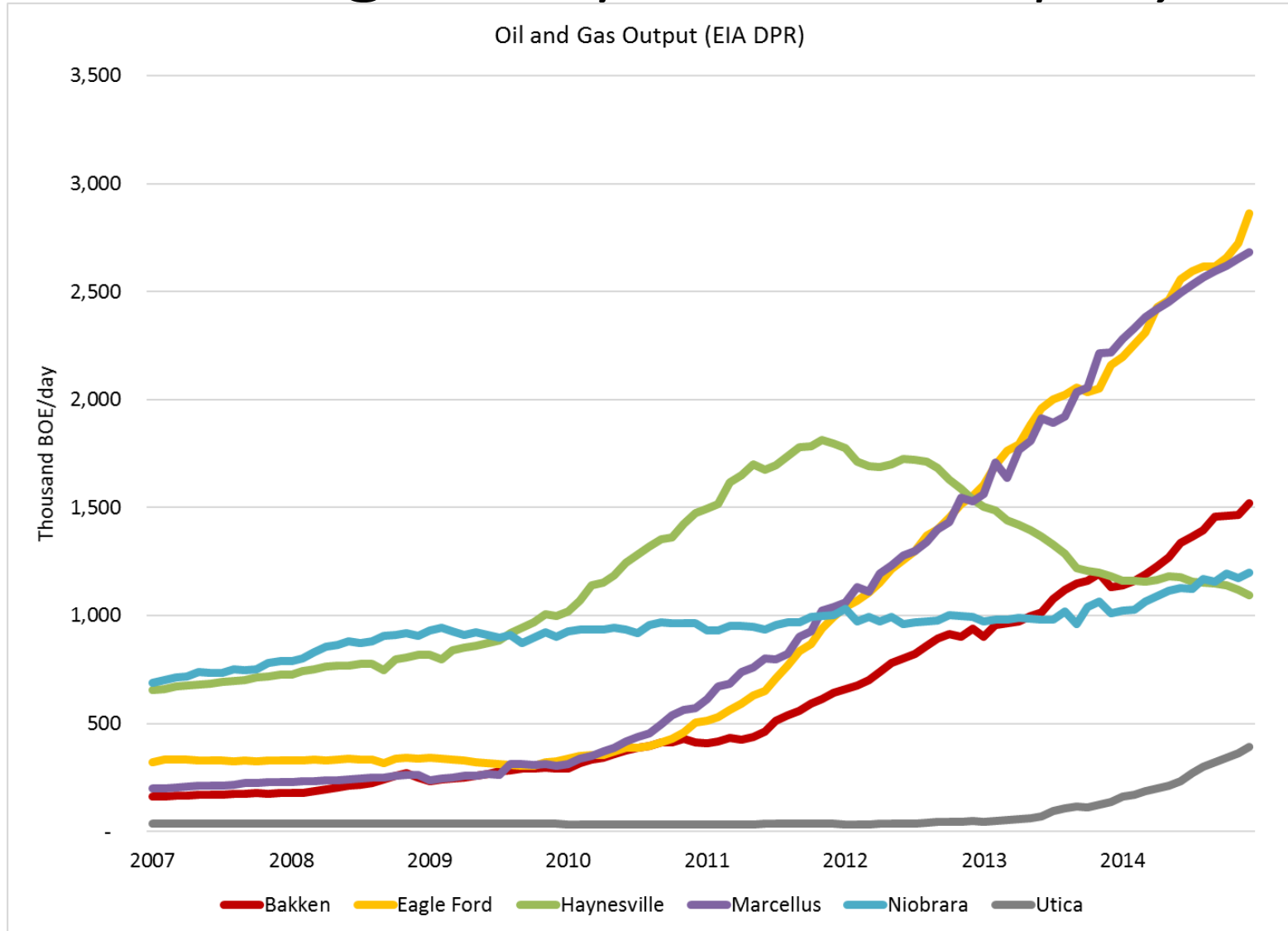
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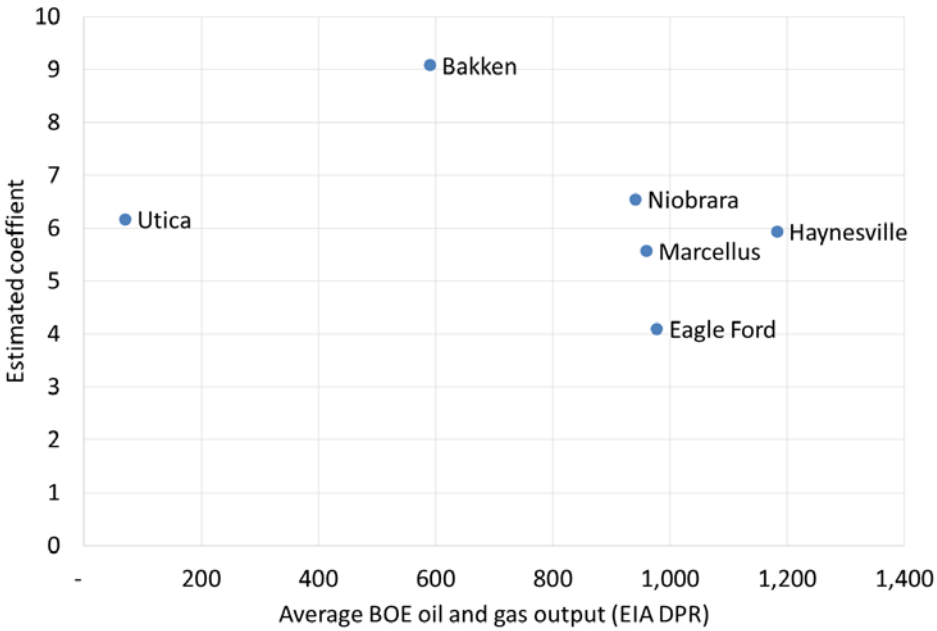
- Hard to disentangle, but relevant (it's in the title of the paper!)

# 3. Heterogeneity: *Between plays*

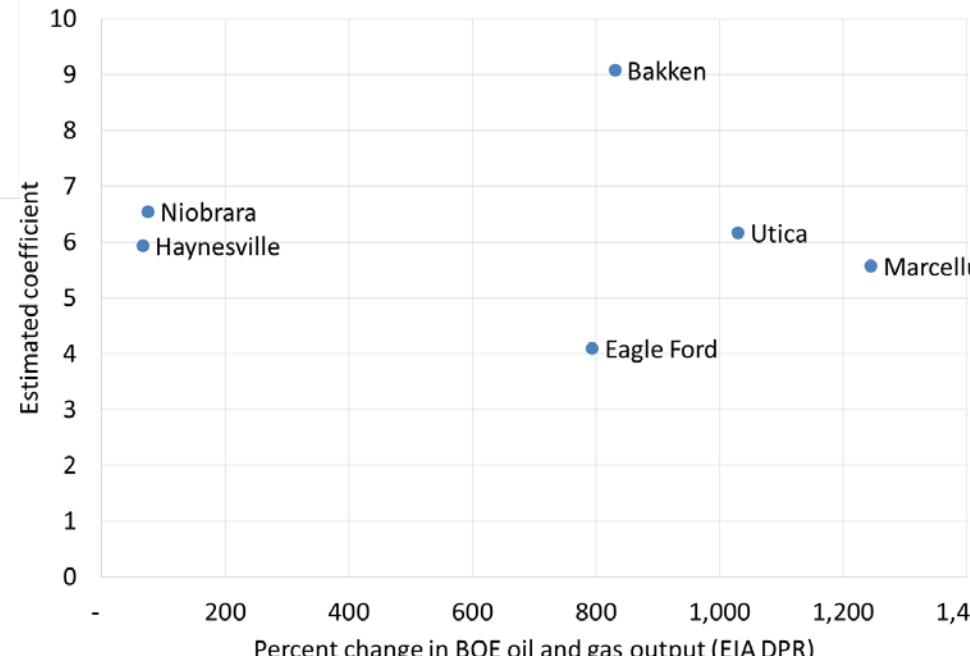


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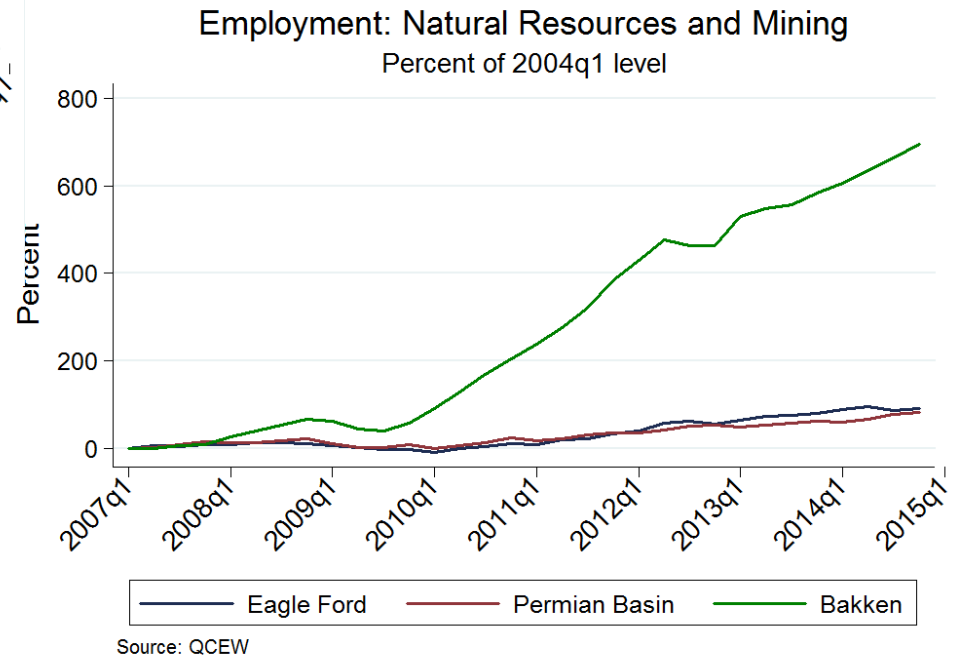
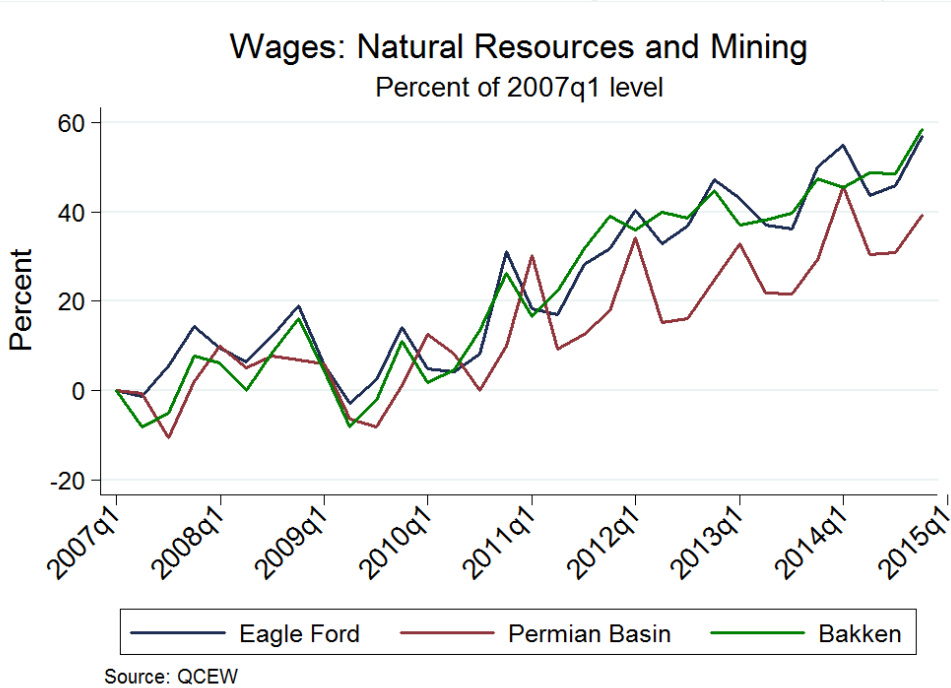
Average Production and Default Reduction



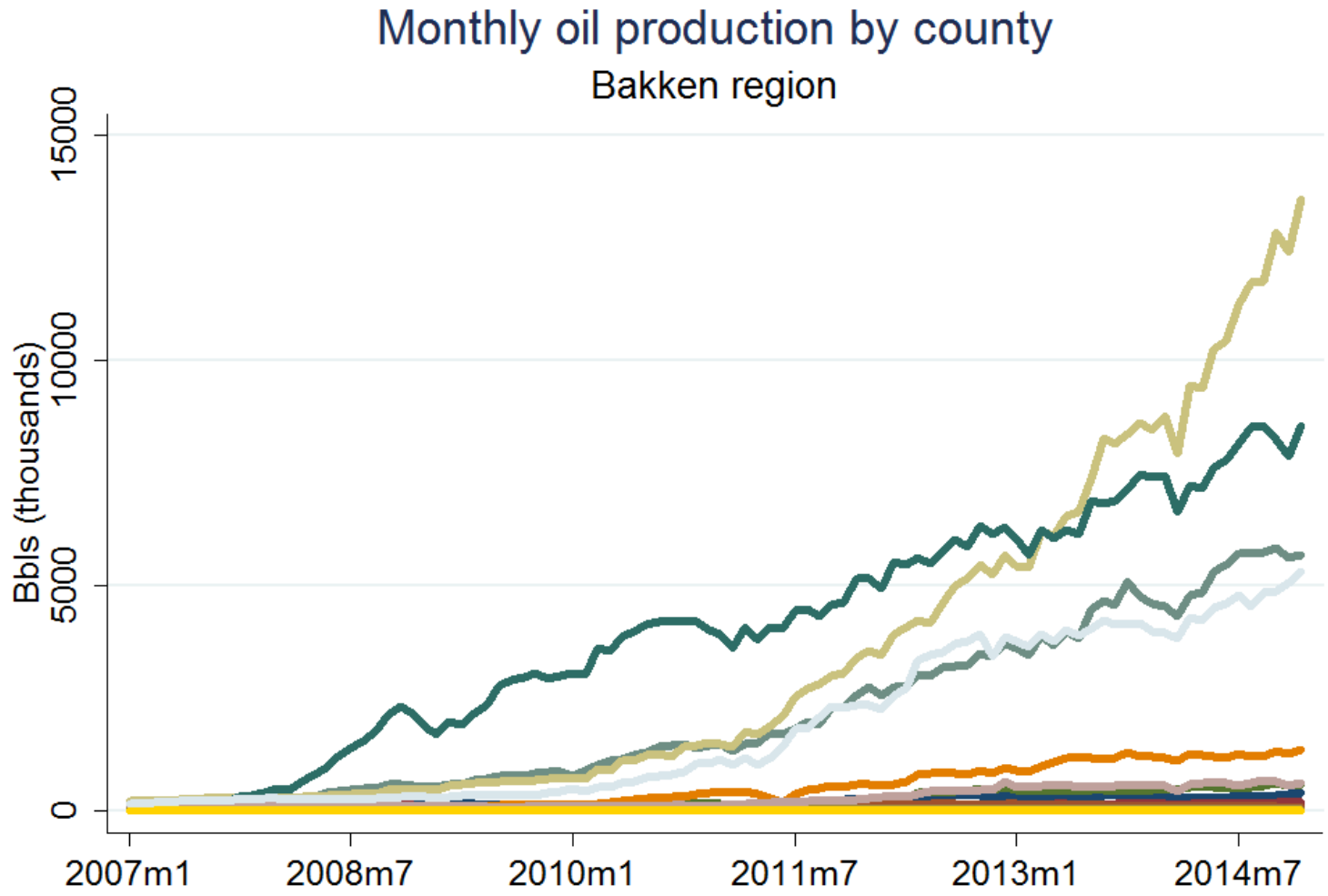
Production Growth and Default Reduction



# 3. Heterogeneity: *Between plays*



### 3. Heterogeneity: *Within plays*

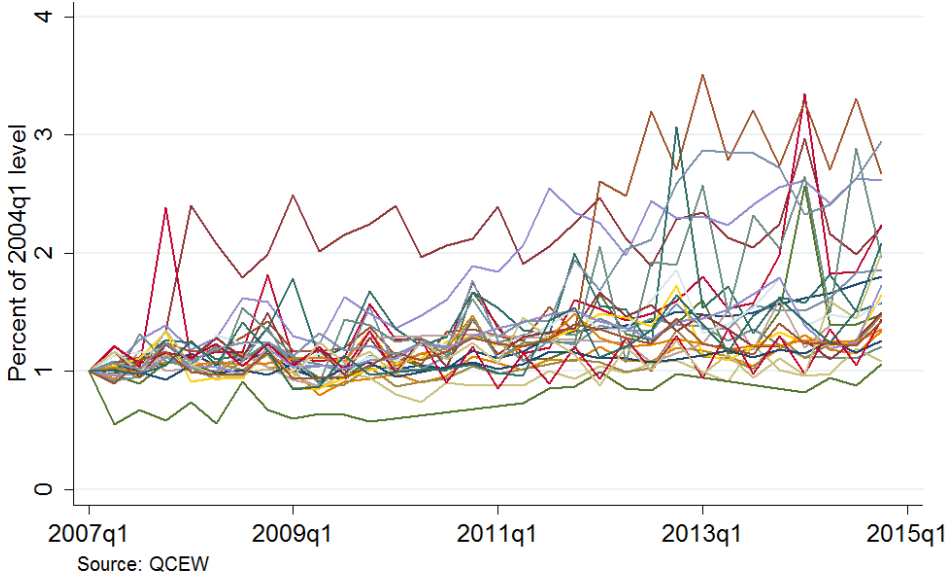


Source: North Dakota Industrial Commission

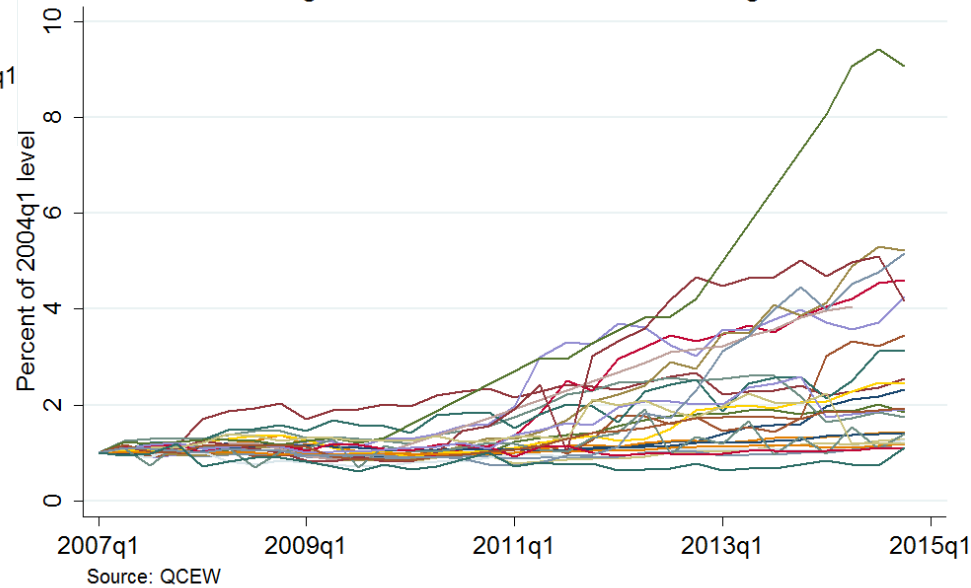


# 3. Heterogeneity: *Within plays*

Weekly wage by county  
Eagle Ford: Natural Resources & Mining



Employment by county  
Eagle Ford: Natural Resources & Mining



# Final thoughts

- Interesting paper; persuasive and useful
- Unsure about specific mechanism (housing vs. labor markets)
  - May matter for policy
- May be opportunities to exploit other sources of variation to test robustness
- Would be useful to (roughly) quantify effect, *e.g.* number of defaults prevented
- Other papers?
  - Loans created *during* the boom
  - Measure spillover effects in nearby counties