# Medicare and the geography of financial health

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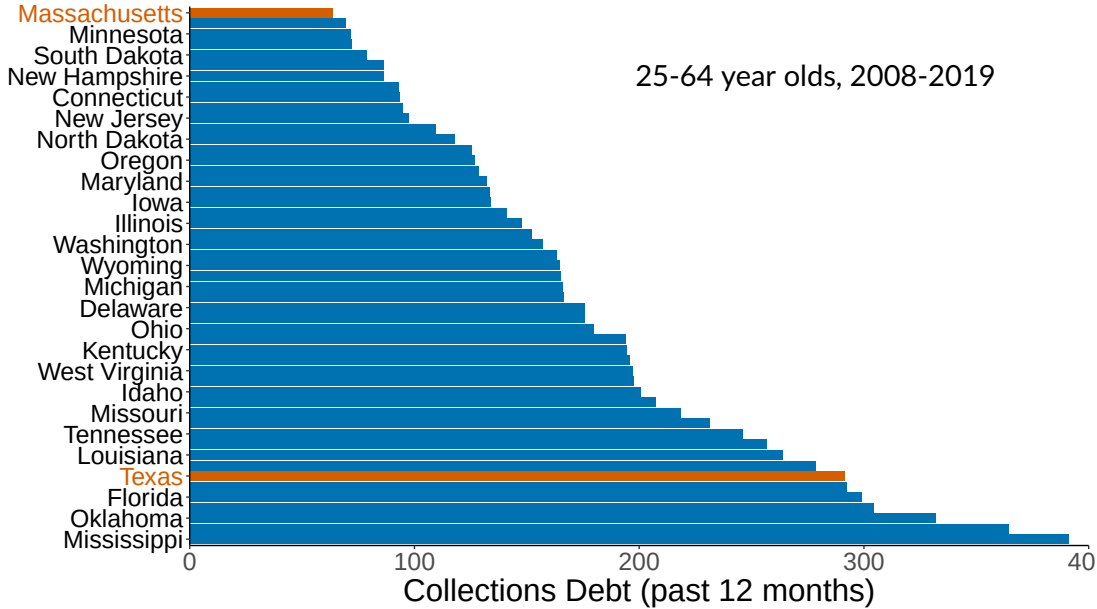
# Consumer financial strain in the United States

- Forty percent of the U.S. population lacks the financial cushion to “subsist at the poverty level for three months in the absence of income.” (SIPP)
- 30 million Americans currently subject to debt collection (CFPB)
  - $1,500 average amount of debt subject to collection
- The level of consumer financial strain varies sharply across the country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Washington
Wyoming
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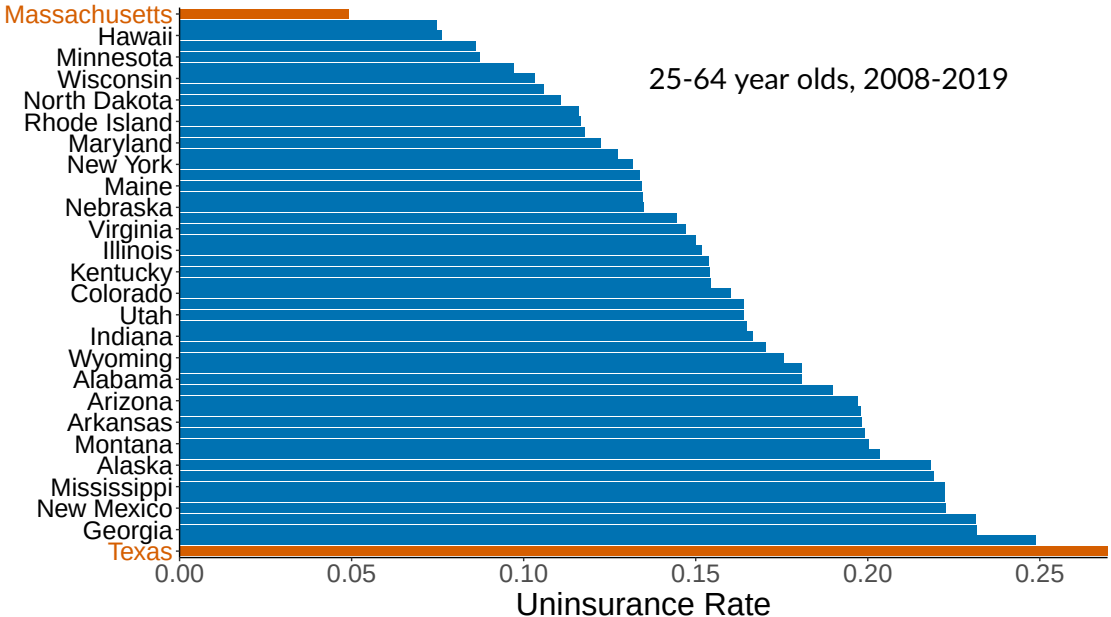
Delaware
Ohio
Kentucky
West Virginia
Idaho
Missouri
Tennessee
Louisiana
Texas
Florida
Oklahoma
Mississippi
25-64 year olds, 2008-2019
0
100
200
300
40
Collections Debt (past 12 months)

# State and federal programs aim to protect against financial strain

- Major source of consumer financial strain is unexpected shocks
  - E.g. healthcare costs, job loss
- Substantial federal and state policies to alleviate these shocks
  - Food and housing (e.g. SNAP)
  - Income assistance (EITC, TANF, SSI, Unemployment insurance)
  - Healthcare (e.g. ACA, Medicare, Medicaid, CHIP)
- Our focus: health insurance ( $ 1 trillion annually)
  - Substantial heterogeneity across states in access to healthcare
  - Due in part to differences in state laws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Mississippi
New Mexico
Georgia
Texas
25-64 year olds, 2008-2019
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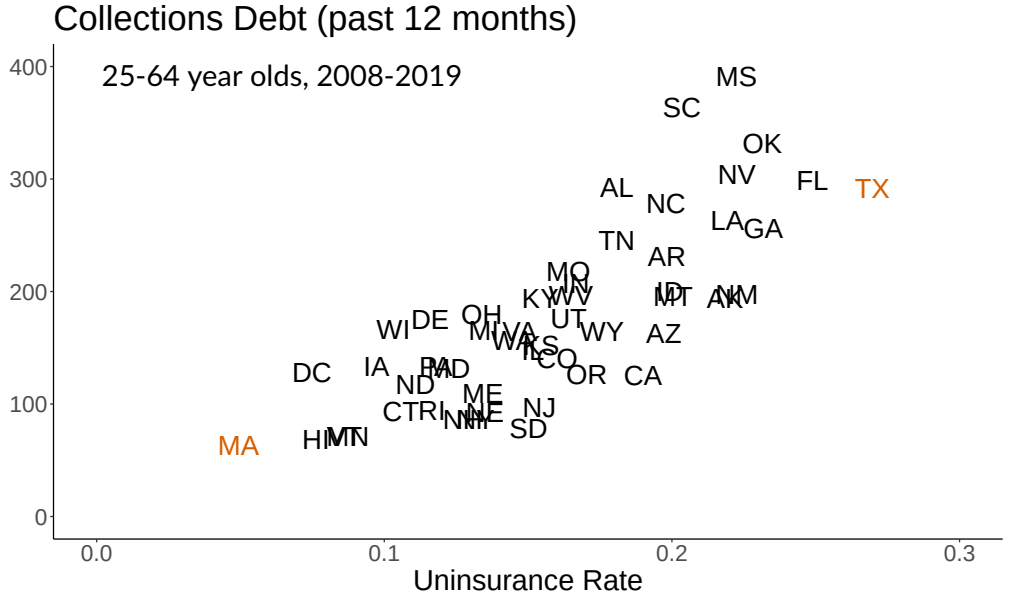
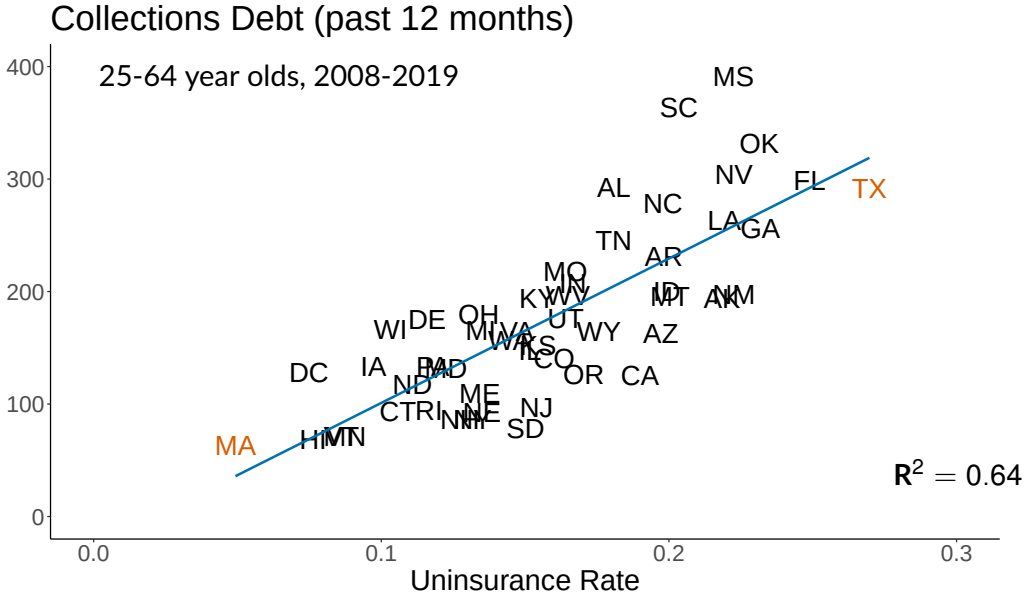
0.25
Uninsurance Rate

# Financial strain and uninsurance rates are strongly correlated



# Financial strain and uninsurance rates are strongly correlated



# This paper's research questions

1. **How much does health insurance reduce consumer financial strain?** [Gross et al. (2011), Finkelstein et al. (2012), Mazumder et al. (2014), Barcellos & Jacobson (2015), Hu et al. (2018)]
   - Host of outcomes
   - Quantify using two identification strategies

2. **What is the reduction in cross-state disparities with universal health coverage?**
   - Exploit rich geographic + demographic info

3. **[In Progress] Can we disentangle *policy* vs. *people* and *places*?**

# This paper's research questions

1. **How much does health insurance reduce consumer financial strain?**
   - \$25 $\downarrow$ in collections debt ($\approx$30%)
   - Driven by decline in the right tail of shocks
   - Non-existant response from all other consumer credit outcomes
   - Estimate causal effect of health insurance coverage on debt collections, $\beta = -324$
2. **What is the reduction in cross-state disparities with universal health coverage?**
   - With full health coverage, variance across states $\downarrow$ 69%.

3. **[In Progress] Can we disentangle *policy* vs. *people* and *places*?**

# Data: New York Fed Consumer Credit Panel / Equifax

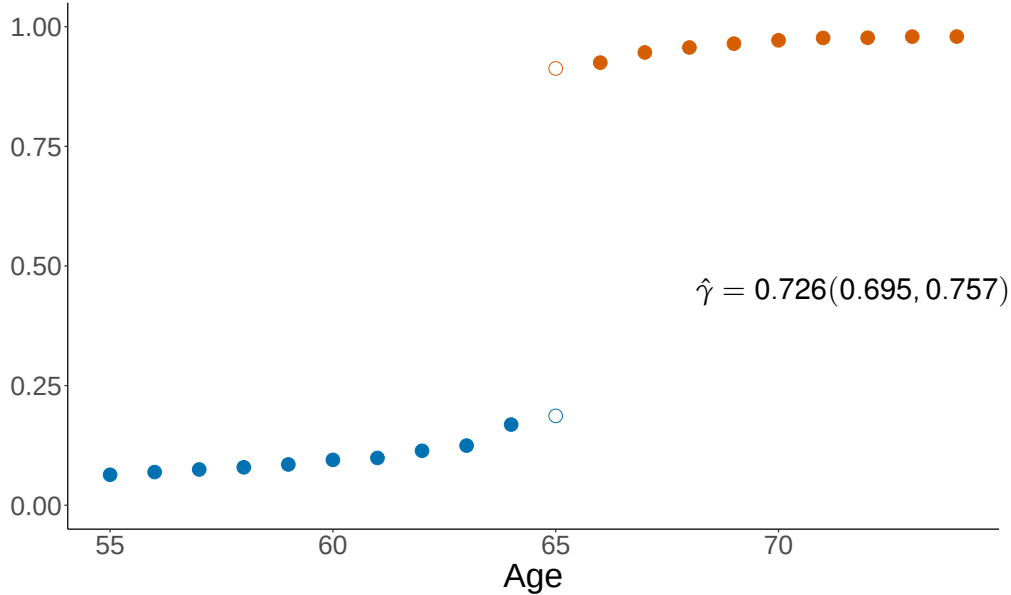

- Panel dataset constructed by the Federal Reserve Bank of New York
- Credit scores (Equifax Riskscore 3.0), unsecured + secured credit lines, collections debt
- Five percent random sample of U.S. population from 1999-2017, quarterly frequency
- Key demographic: birth *year*

# Research design - Medicare eligibility at age 65

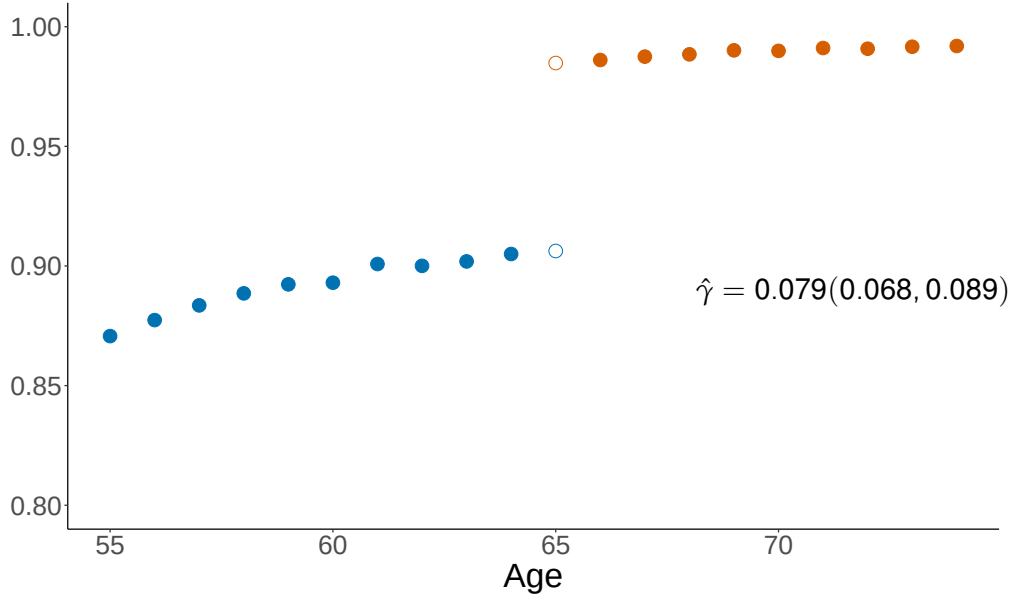
- In the United States, Medicare is near-universal health insurance coverage
  - Eligibility turn on at sixty-fifth birthday
- Implication: after age 65 in the United States, everyone is insured
  - *Regardless* of location or characteristics
- Identify *causal* impact of health coverage on financial health outcomes
  - Approach: compare age $65^-$ to $65^+$ using RD

$$y_{i,a} = \alpha + \underbrace{\gamma \times 1(\text{age} > 65)}_{\text{Medicare}} + \underbrace{g^{\text{age}<65}(\text{age}) + h^{\text{age}>65}(\text{age})}_{\text{local linear effect of age}} + \epsilon_{i,t}.$$

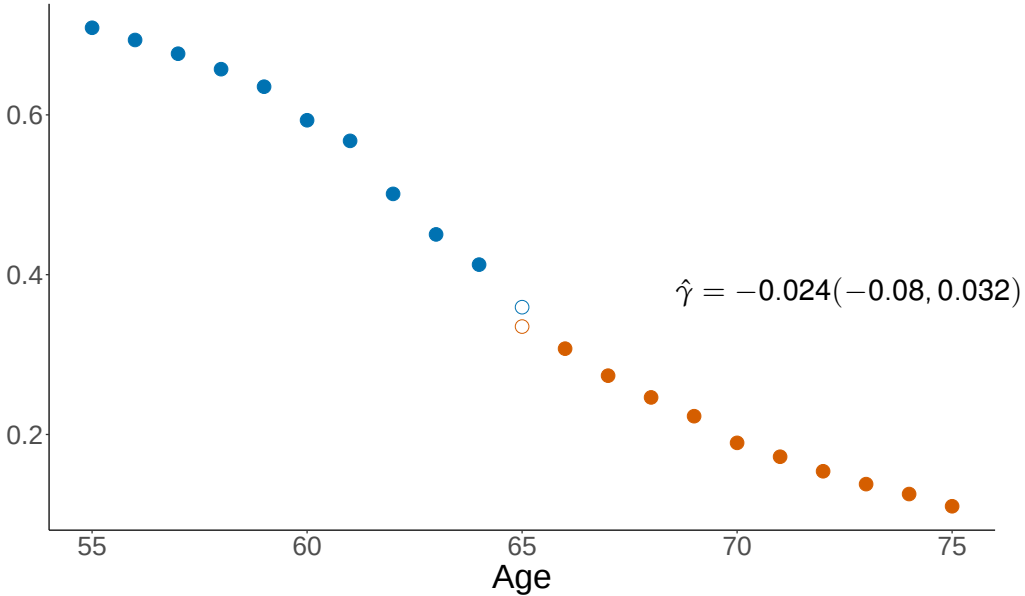
# “First”-stage: Medicare coverage



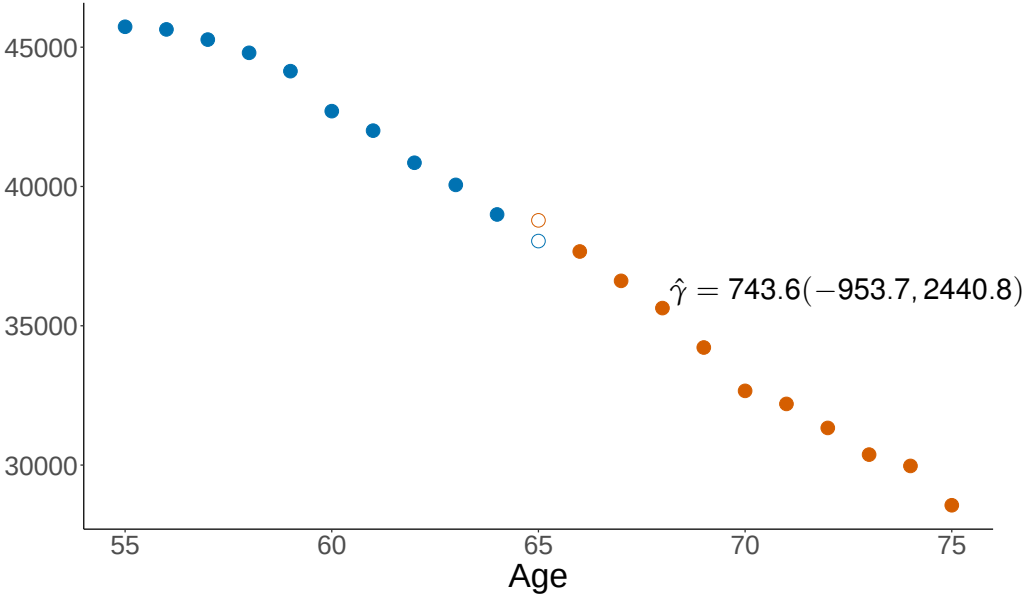
# “First”-stage: has any insurance coverage



# Covariate smoothness: employment status



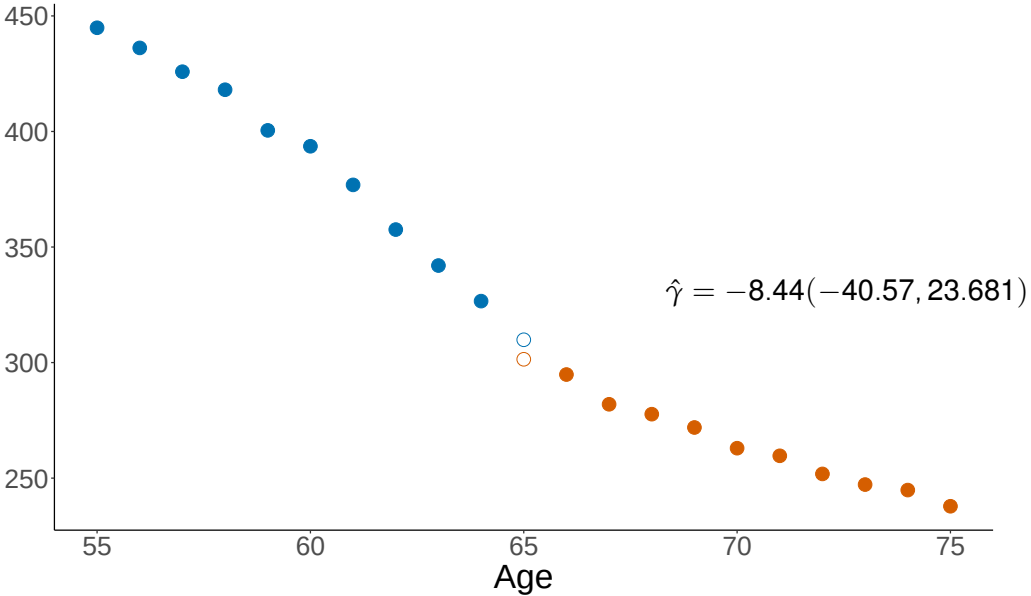
# Covariate smoothness: household income



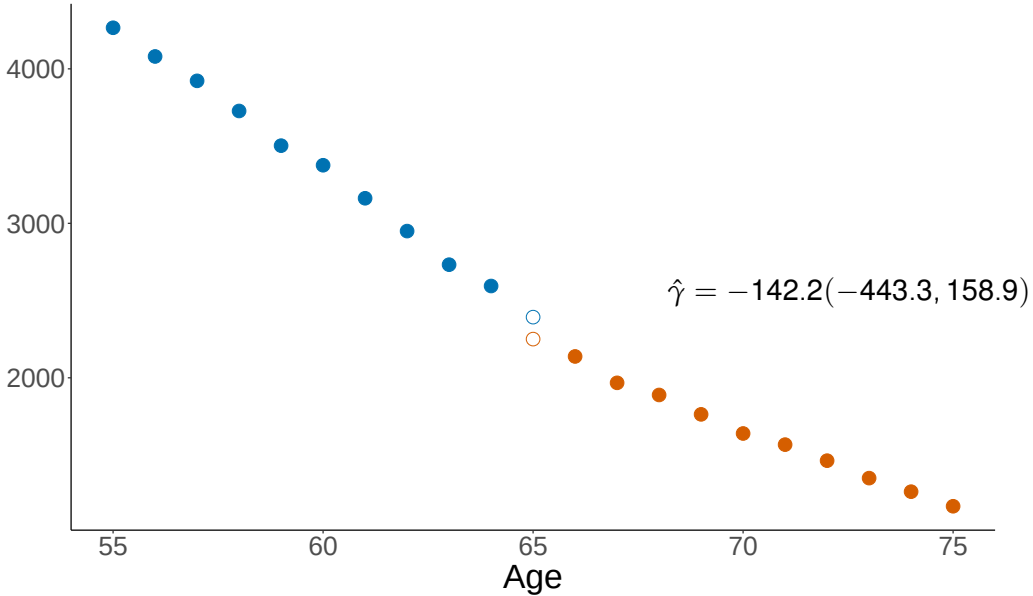
# Covariate smoothness: the kitchen sink

- Test a host of other census outcomes:
  - Homeownership, marital status, gender share, household composition, hours worked per week, mobility, and social security income
  - No significant differences
- Interpretation: at age 65, vast majority of Americans become eligible for Medicare, without other simultaneous shocks
- “Bunching” is not plausible in age design
- Next: impact on credit market distress

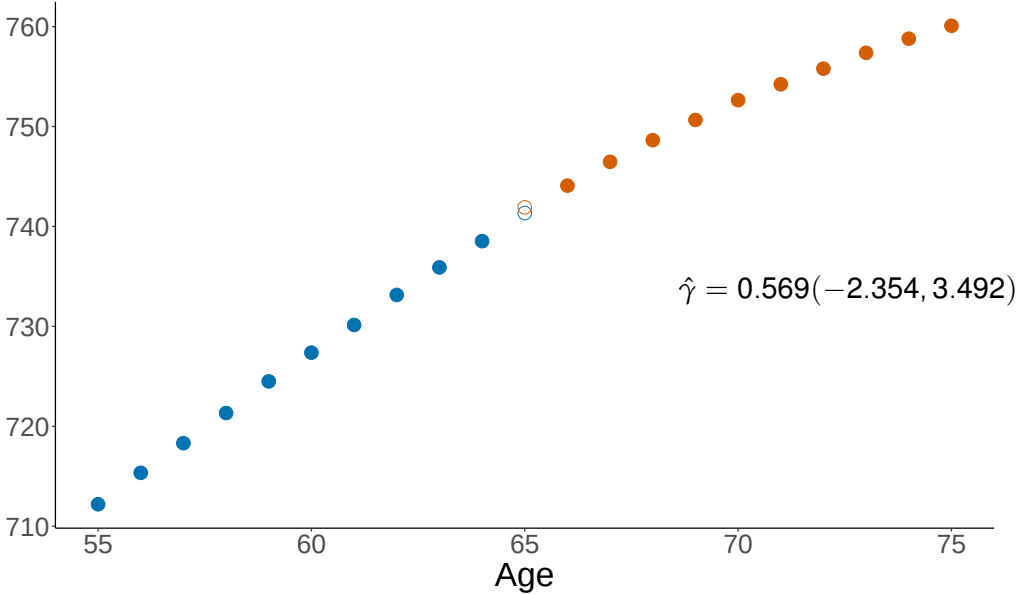
# Credit market outcomes: credit card delinquency



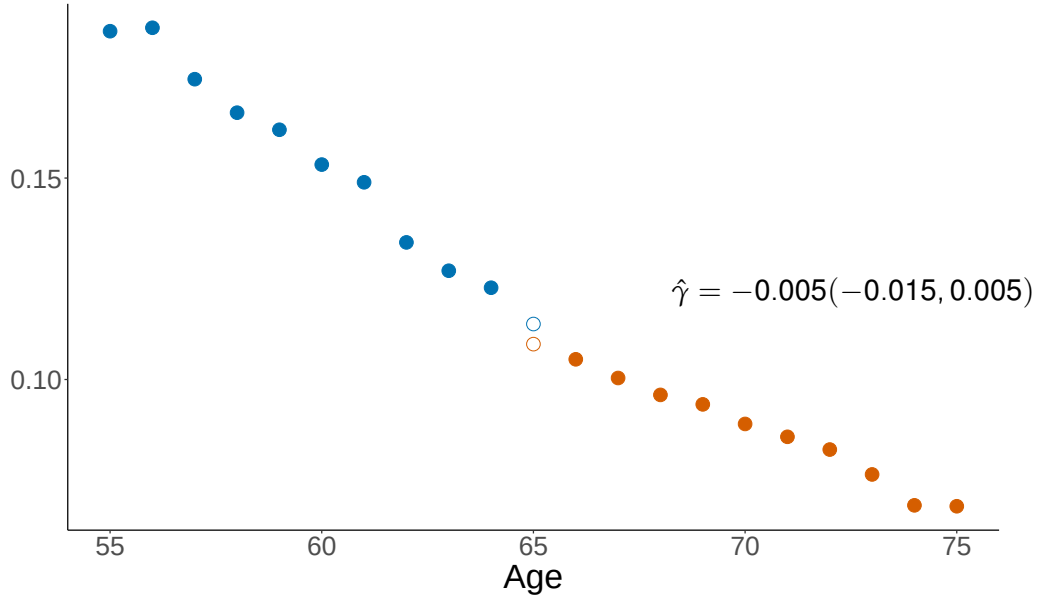
# Credit market outcomes: total delinquency



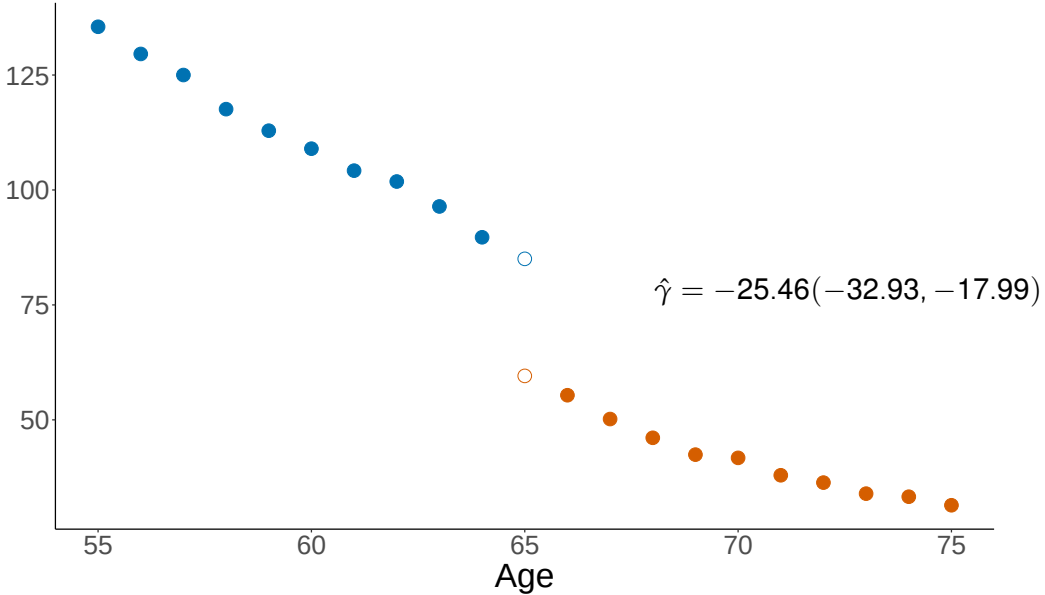
# Credit market outcomes: credit score



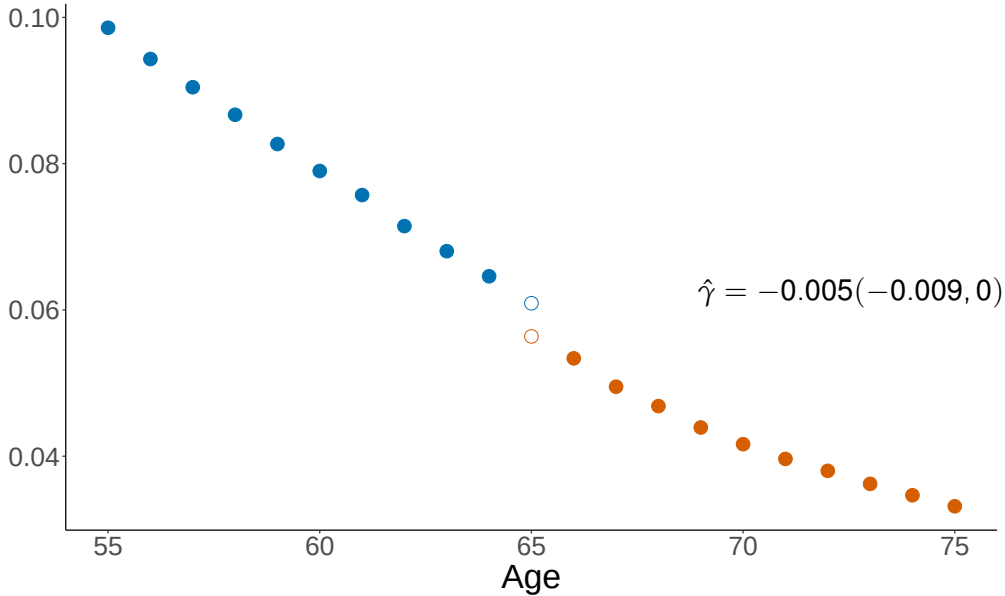
# Credit market outcomes: new bankruptcies (percentage points)



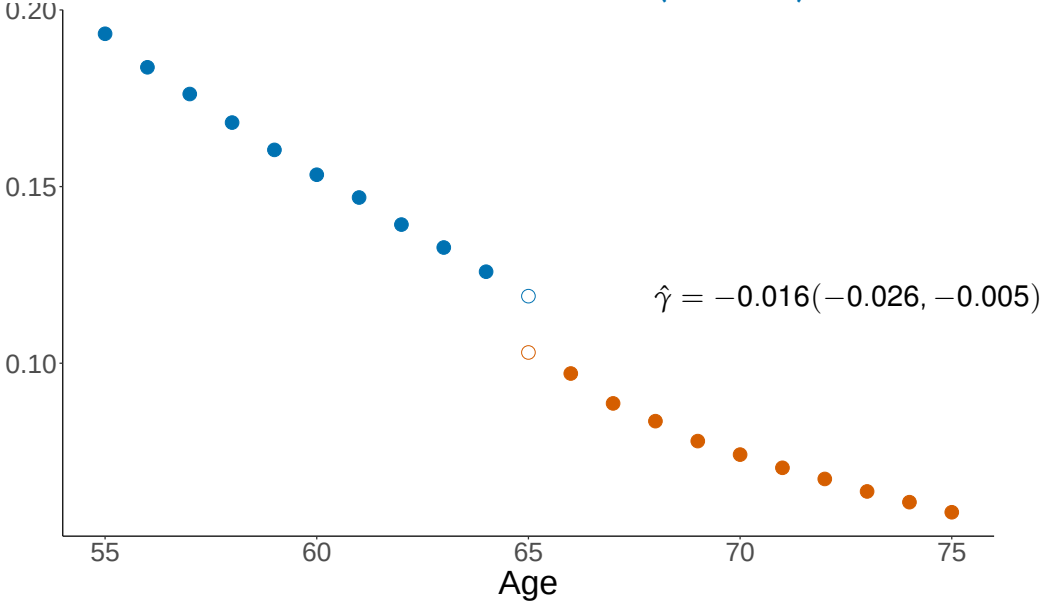
# Credit market outcomes: collections debt (balance)



# Credit market outcomes: any collections debt

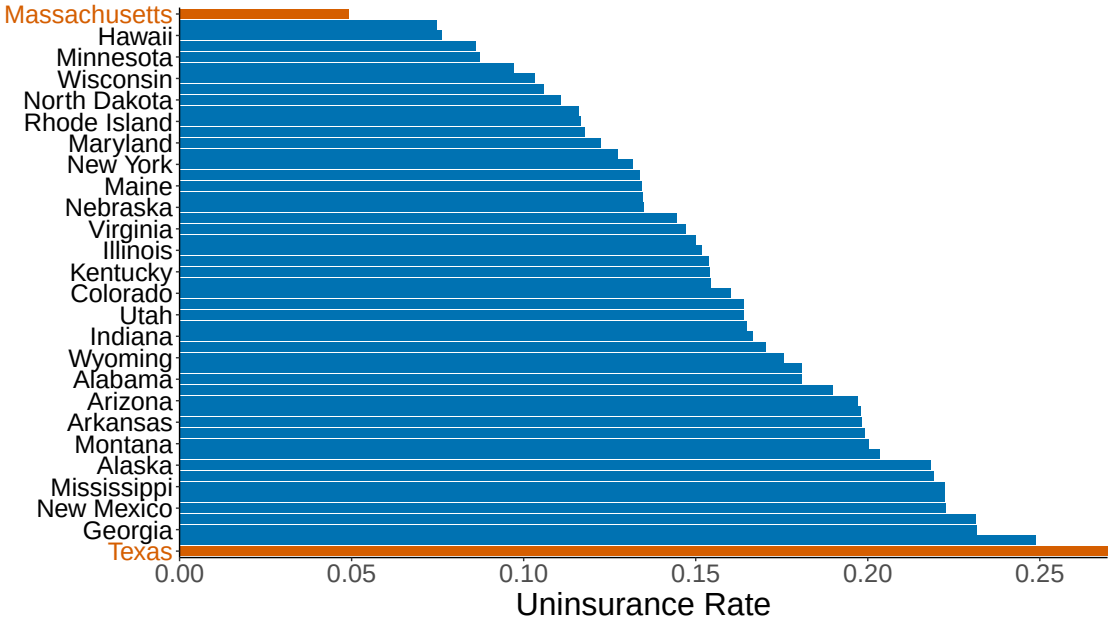


# Credit market outcomes: collections debt (number)



# Reduced form impact of Medicare on financial strain

- No statistically (or economically) effects on most financial outcomes
- **Except** debts in collections
  - Given small share with debts, large impacts
- Implication: shocks are not affecting many traditional measures of distress (credit score, delinquency) in short-run
- Alternative: heterogeneity or concentrated effects?


Massachusetts
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Arizona
Arkansas
Montana
Alaska
Mississippi
New Mexico
Georgia
Texas
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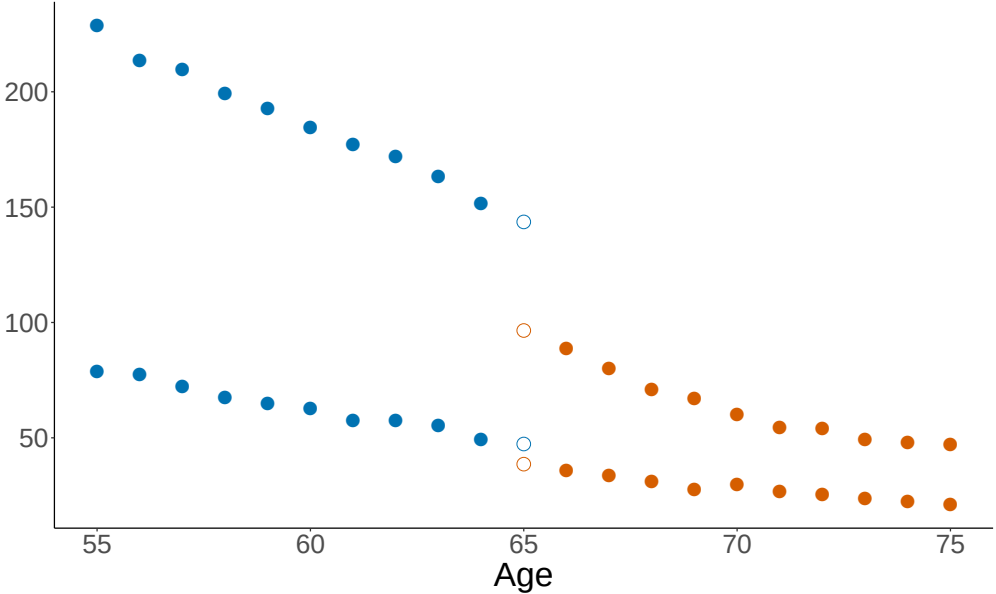
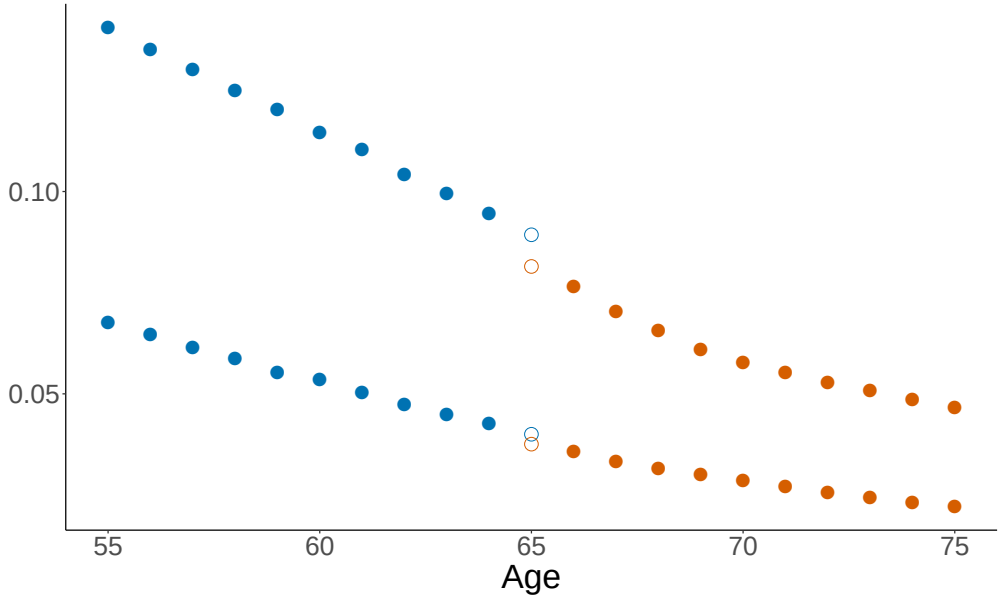
Uninsurance Rate

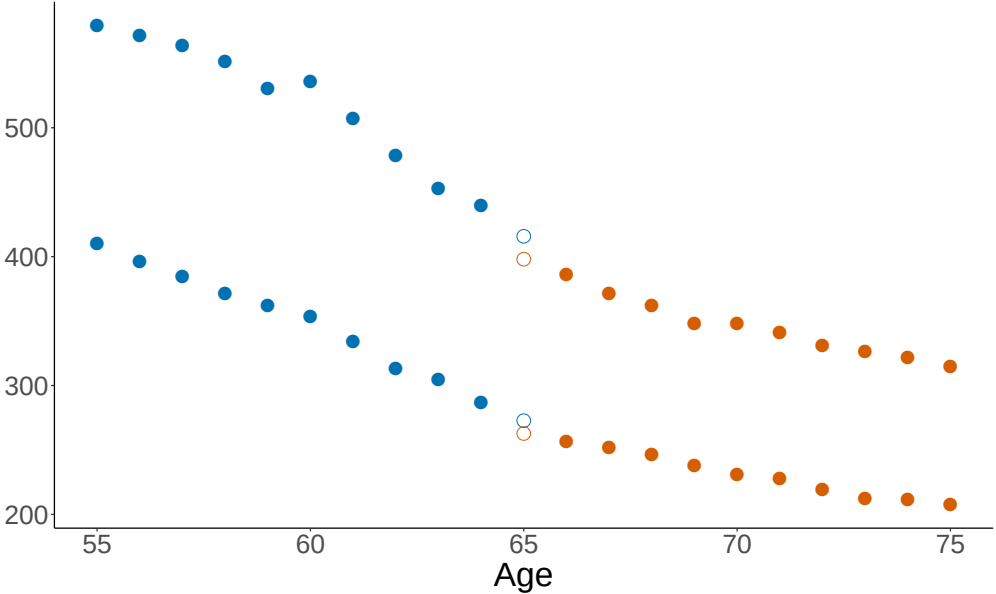
# Collections debt (balance) by near-elderly uninsurance



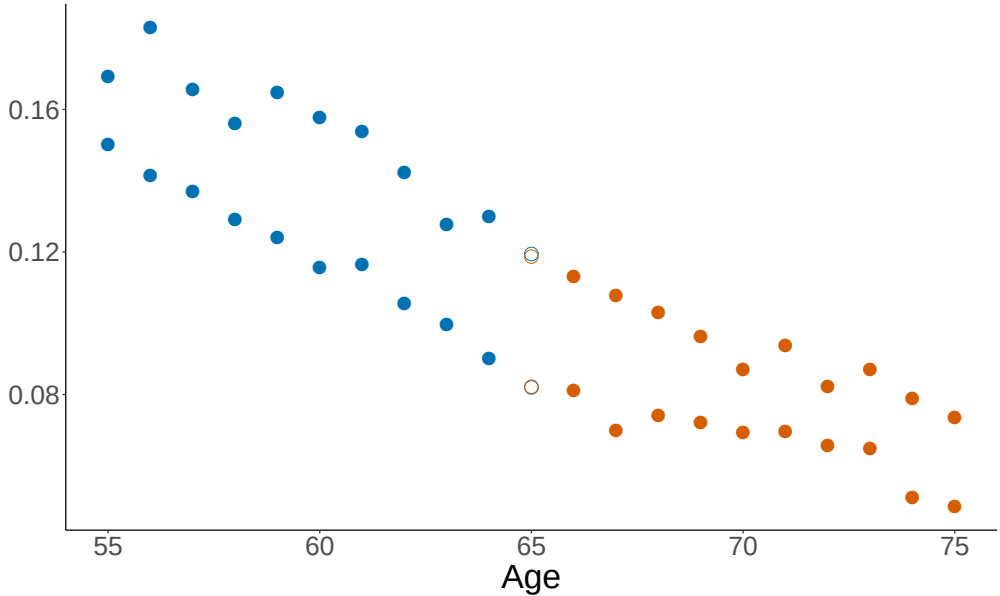
# Any collections debt by near-elderly uninsurance



# Credit card delinquency by near-elderly uninsurance



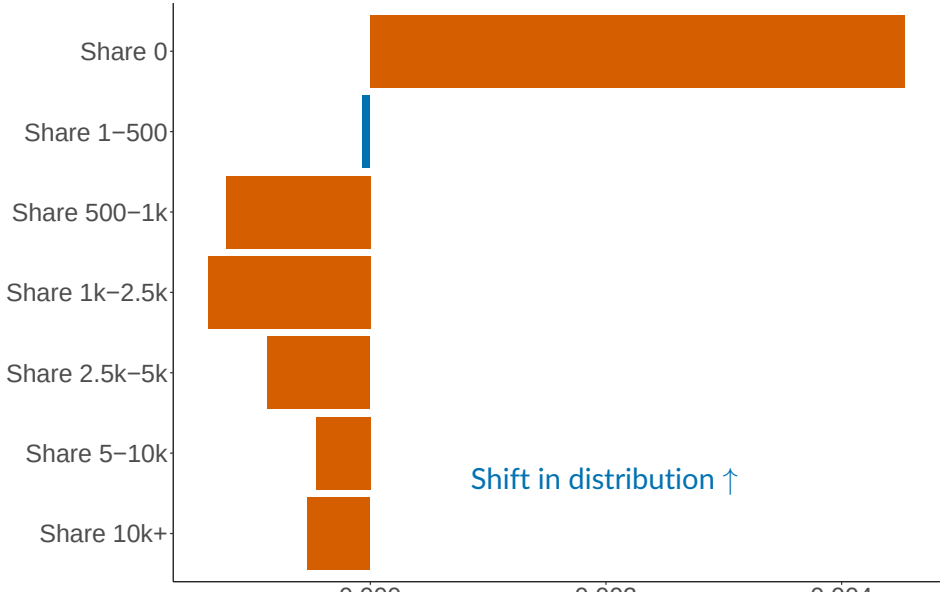
# New bankruptcy by near-elderly uninsurance



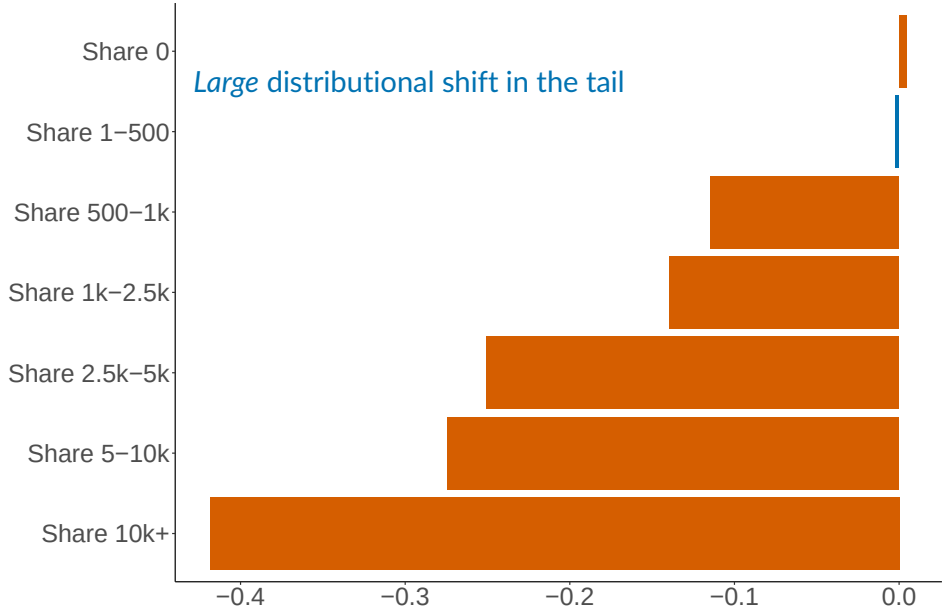
# Confirming that health insurance protects against right-tail “shocks”

- Impact is concentrated in debt collections, amongst a small share of pop.
  - However, does this actually move the “right tail”?
- Examine distribution of debt collections
  - Bin outcomes into “share of indiv” within collection amounts

# Distributional impact on debt collection



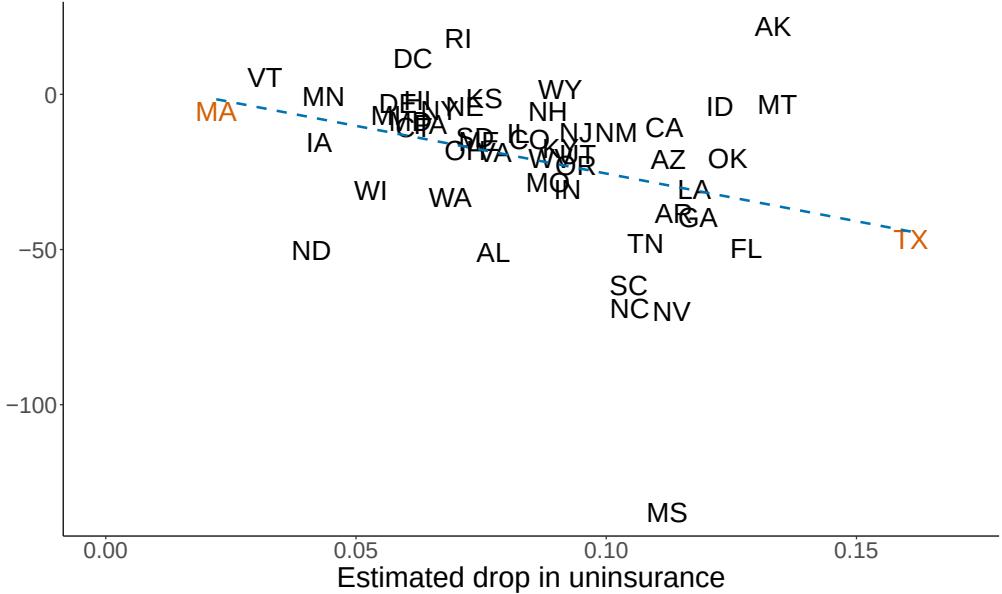
# Distributional impact on debt collection (as percent of 65- mean)



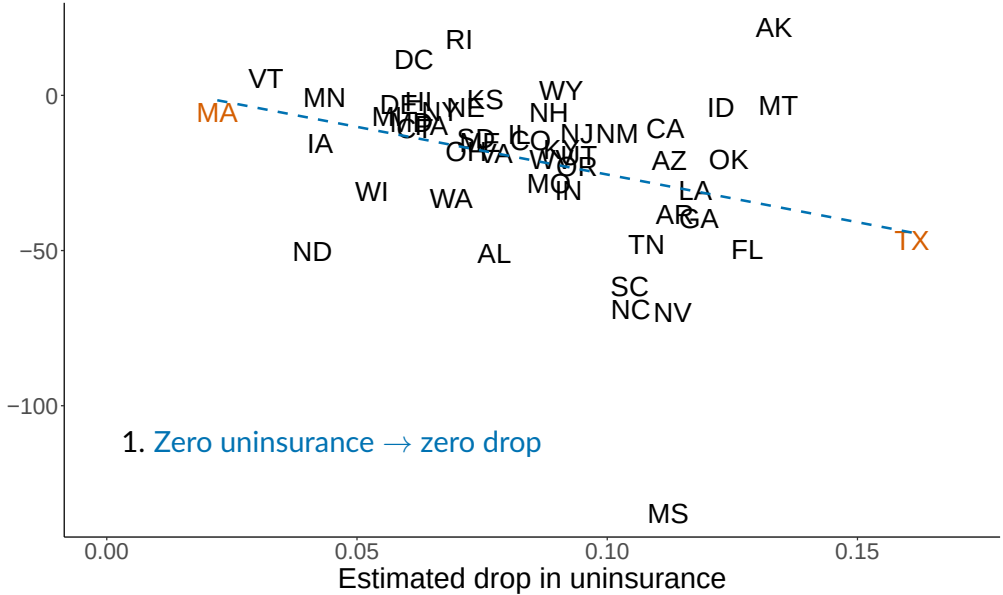
# Identifying the channels affecting financial health

- Positive effect of Medicare concentrated in collection debts
- Is it just through insurance coverage (extensive margin)?
- Estimate state-by-state RD for insurance coverage and collections debt
  - $\gamma_s^{\text{insurance}}$ vs. $\gamma_s^{\text{collection}}$
  - Dose-response figure

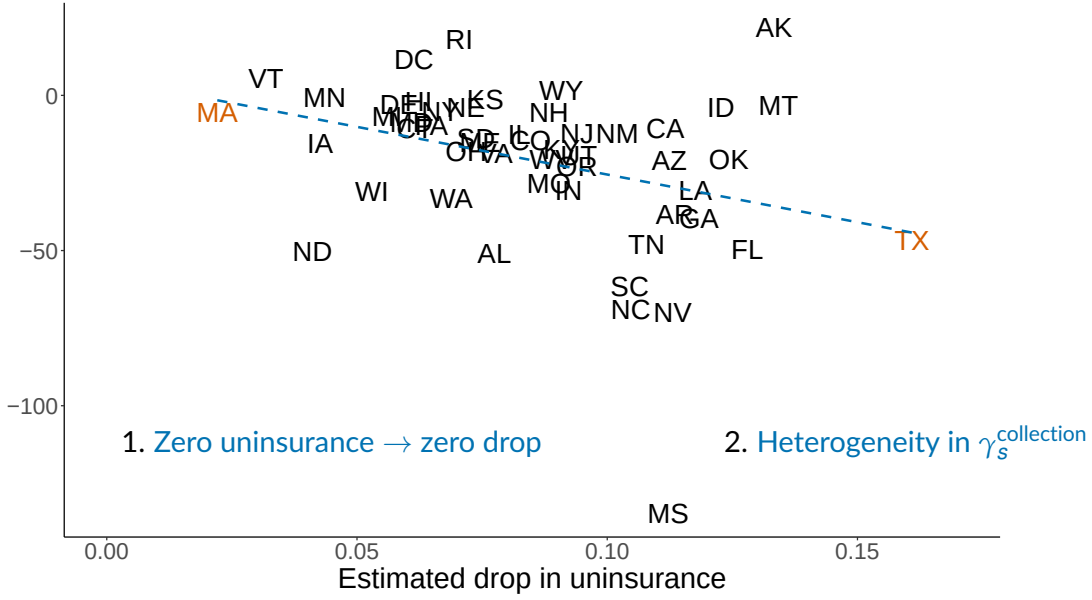
# Effect on collection debts vs. effect on uninsurance



# Effect on collection debts vs. effect on uninsurance



# Effect on collection debts vs. effect on uninsurance



# Calculating health insurance treatment effects

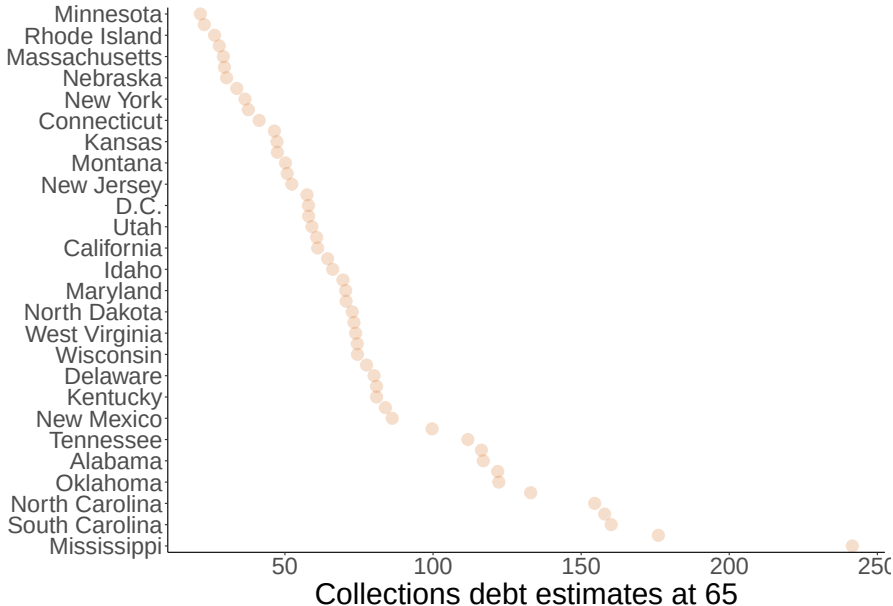
- We calculate the causal effect of health insurance on debt collections
  - Key assumption: *only* channel is through insurance coverage
- We estimate $\beta = -324$, the causal impact of insurance coverage
  - Smaller than estimates for Medicaid (Hu et al. 2018)
  - Our population is (much) older and nationwide (vs. Michigan)
- Note that there is wide range in $\beta$ across states

# What is the reduction in cross-state disparities with universal health coverage?

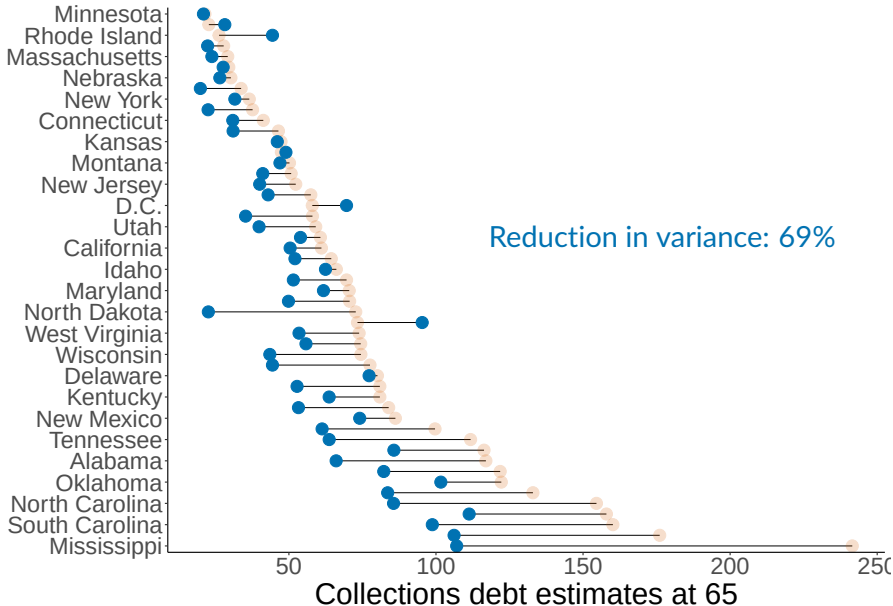
- Huge differences across states
  - Differences in *people* in states
  - Differences in *policies* in states

- How much can national policy alleviate this cross-state variance?

# Reduction in cross-state variance due to national Medicare policy



# Effect on collection debts vs. effect on uninsurance



# Empirical conclusions so far...

- Medicare substantially reduces *right tail* of collection debts
  - But no impact on other credit outcomes
  - Suggestive that health shocks are not immediately passed into traditional consumer credit
  - Appears driven by extensive “coverage” margin

- Substantially reduces cross-state dispersion at age 65
  - But not completely

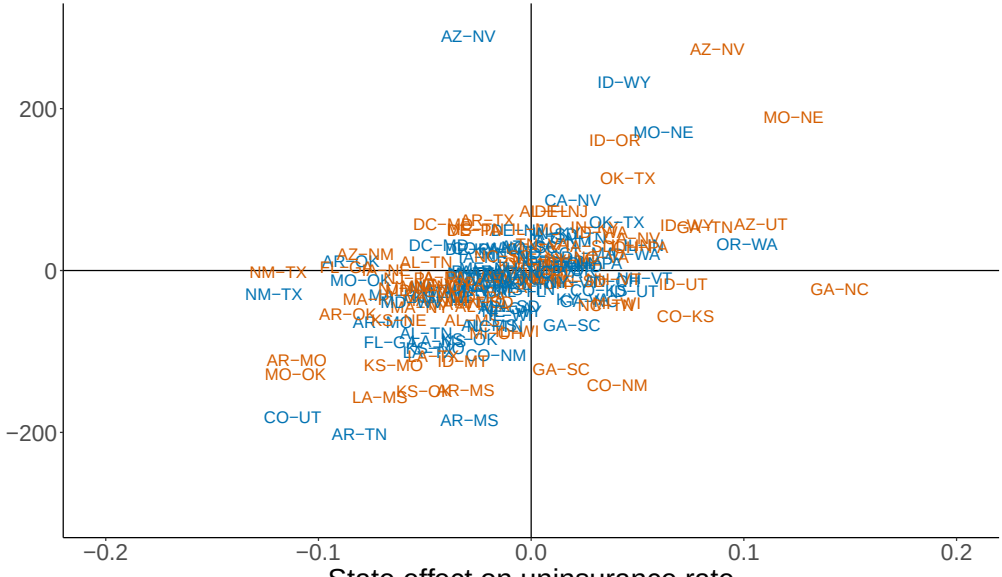
# Implications

- Two questions to pursue:
  1. How much of the remaining cross-state dispersion is due to difference in states' policies vs differences in states' people?
  2. Is this an age-specific effect? Would the effects differ by lifecycle?

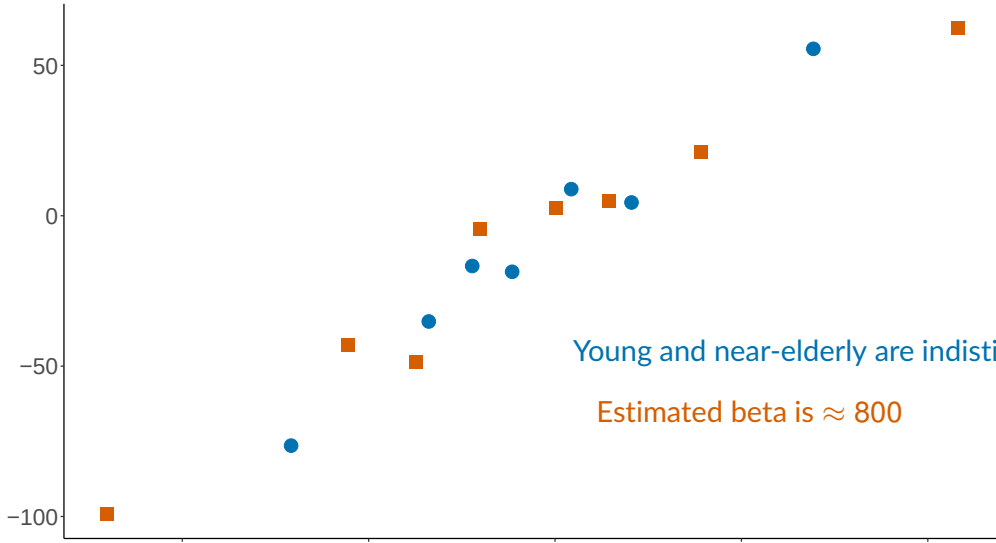
- We explore state-border discontinuities to address both

- Identification strategy: use distance to state-borders to estimate paired state effects:
  - E.g. treatment from moving from Connecticut to Massachusetts
  - Estimate for age 45-54 and 55-64 for uninsurance rate and debt collections

# State effect on UI vs. state effect on debt collections



# State effect on UI vs. state effect on debt collections - binned



# Conclusion

- Health insurance reduces consumer financial strain in the *right tail*
  - Average dollar reduction of $26, but 40% reduction of indiv. with 10k+ in collections
  - Driven by extensive margin of health insurance coverage
  - Estimated causal effect of health insurance coverage on debt collection $\beta = -324$
- No discernible impact across financial health spectrum on non-collection outcomes
- With full health coverage, variance across states $\downarrow$ 69%