The Effect of the Affordable Care Act on the Labor Supply, Savings, and Social Security of Older Americans

Eric French  Hans-Martin von Gaudecker  John Jones

17th Annual RRC Conference
August 2015
Questions

- How will the Affordable Care Act (ACA) affect:
  - out of pocket medical spending?
  - labor supply?
  - savings?
  - welfare?

and why does it affect medical spending, labor supply, savings, and welfare?
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- Build upon French and Jones (Econometrica 2011)
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- We estimate a retirement model that accounts for:
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  - multiple insurance possibilities (uninsured, private non-group insurance, employer-provided, Medicaid, Medicare)

Then use the model to predict the effects of the ACA
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Some workers delay retirement to maintain employer-provided coverage.
Why health insurance affects labor supply

- Some workers delay retirement to maintain employer-provided coverage
  - Many people will lose the insurance if they leave their job.
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- Many people will lose the insurance if they leave their job.
- Private insurance: Difficult to obtain, not tax advantaged, and expensive
Why health insurance affects labor supply

![Job Exit Rates by Health Insurance Type, Data](image)

Legend:
- Data, no H.I.
- Data, retiree H.I.
- Data, tied H.I.
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Why the ACA affects labor supply

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The Affordable Care Act
August 2015 6 / 20
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Income-based subsidies are an implicit tax (Mulligan, 2013)

Those with very low income get bigger insurance subsidies

Medicaid expansion

⇒ those with very low income receive (largely free) insurance

These are the aspects of the law we focus on

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Life cycle model

**Choice variables:** consumption; work hours; Social Security benefit application; health insurance
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  - \( expenditures_t \) includes: consumption; out of pocket medical expenses and insurance premia.
  - Government/hospital \( transfers_t \) provide a “consumption floor” (Hubbard Skinner, Zeldes, 1995), which captures insurance provided via non-payment medical expenses (6% of total)
Data: households with a man aged 50+

- HRS (from 1992-2012)

Detailed information on labor supply, wages, health, and assets. Contains confidential data on pensions and Social Security earnings.

MEPS (from 2000-2012).

Includes total billable medical spending and detailed information on who paid for the care.
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August 2015
Household medical spending, sample means

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Out-of-pocket expenditures on insurance premia

| Private insurance           | 350       | 5,910             | 2,900             | 450      | 130      |
| Medicare                   | 80        | 60                | 50                | 1130     | 60       |

Labor market variables

| Employment rate            | 0.73      | 0.78              | 0.89              | 0.07     | 0.26     |
| Labor income               | 22,930    | 42,380            | 51,080            | 2,430    | 5,860    |

Observations

| 3,955                      | 1,125     | 16,242            | 814               | 2,022    |

MEPS data, 2000-2012. Households with a man aged 50-64. All amounts in 2014 dollars
Medicaid includes those with Medicare and Medicaid
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Solution and estimation

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Method of Simulated Moments estimation is computationally intensive
  - We solve the model on GPUs (using Python and Numba)
  - About 100 times faster than a conventional CPU microchip and C or FORTRAN
Reforms we model: Private, non-group insurance

- Insurance policy restrictions
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Reforms we model: Private, non-group insurance (cont.)

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- Individual mandate
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  - rises to greater of { $695, 2.5% of income }
Reforms we model: Medicaid

- Pre-ACA

Households without dependents qualify for Medicaid only via disability Income and (financial) wealth tests.

Post-ACA

Any household with income \( \leq 138\% \) of FPL qualifies No wealth test

Currently, 30 states + DC participate
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Uninsured: many receive health insurance benefits from other sources (VA, workman’s comp) and married to people with insurance