

Disability Insurance in the Great Recession: Ease of Access, Program Enrollment, and Local Hysteresis

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Disclosure

The views expressed in this paper are those of the authors and do not necessarily represent the views or policies of the Social Security Administration or those of the Board of Governors of the Federal Reserve System or its staff. All errors are ours.

Main Goal of Paper

Investigate whether there are interaction effects between labor supply and labor demand factors that impact subsequent employment incentives and employment rates

- ▶ Most papers consider factors in isolation
 - ▶ e.g., Abraham & Kearney (2020) conclude that demand side factors primarily responsible for 1989-2018 decline in EPOP, but supply side factors (including SSDI) matter too.
- ▶ This paper looks at interaction of labor supply (SSDI)* labor demand (cyclical shock)
 - ▶ Context matters

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Specific Application/Question: Does ease of access to SSDI - as experienced through appeal wait times - amplify or dampen the SSDI enrollment effects and subsequent pace of employment recovery following the Great Recession?

Builds on Multiple Strands of Research

1. Labor market disincentives of the SSDI program

- ▶ Bound, 1989; Chen and van der Klaauw, 2008; Von Wachter, Song, and Manchester, 2011; Maestas, Mullen, and Strand, 2013; French and Song, 2014; and Gelber, Moore, and Strand, 2017
- ▶ Consensus: Easier access/more generous benefits → reduced employment

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2. Link between economic downturns and SSDI enrollment

- ▶ Autor & Duggan, 2003 - local shocks increase SSDI applications
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3. SSDI ordeal mechanisms and hassle costs

- ▶ Nichols & Zechauser (1982)
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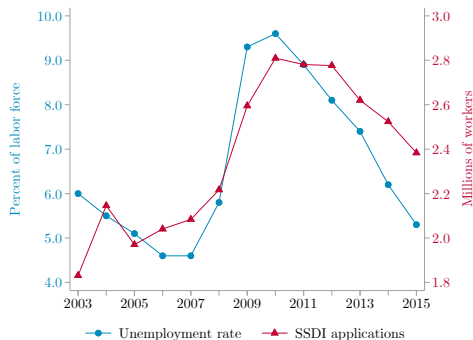
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4. Hysteresis

- ▶ Yagan (2019)- during GR 1 pp inc in local u-rate → 0.3 pp reduction in 2015 local EPOP

SSDI Access During the Great Recession

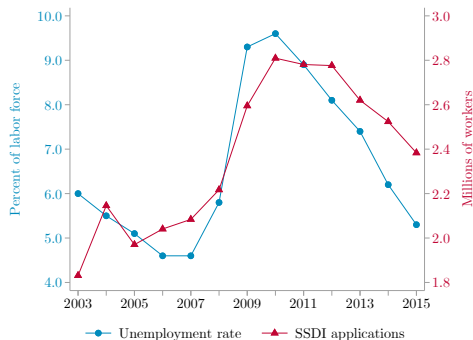


- ▶ Maestas et al., (2015,2018) document rise in SSDI enrollment in GR
- ▶ Yagan (2019) documents emp hysteresis in GR

Our Innovation:

- ▶ Exploit variation across place in SSDI hassle costs to see if GR effect on SSDI enrollment/emp varies with SSDI access

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****The interaction effect is the key novelty of our paper****

Quick Disability Insurance Background

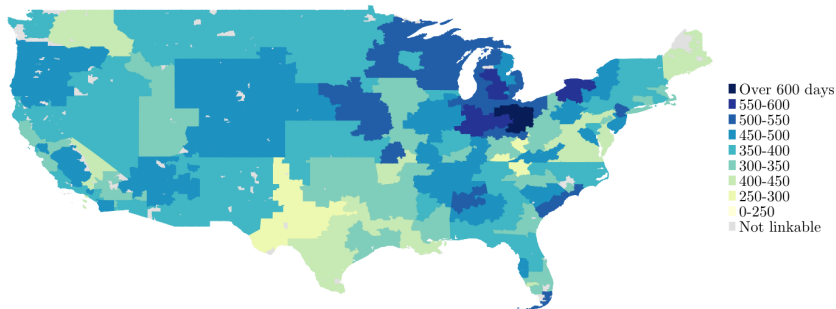
- ▶ Insures against risk you become disabled, cannot work
- ▶ To qualify need
 1. sufficient work history
 2. sufficiently severe disability
- ▶ Most applicants that meet work history rejected (64.6%), many appeal
 - ▶ First reconsideration (only 5.7% of awards)
 - ▶ Next ALJ, nearly 1/3rd of SSDI awards are given on appeal to ALJ/court
- ▶ If SSDI recipients earn above threshold (SGA), lose benefits → little incentive to leave the program
 - ▶ only 9% of recipients that leave SSDI leave due to high earnings/recovery (1% enrollees exit due to recovery)

Identification Strategy

- ▶ SSDI federal program, little geographic variation

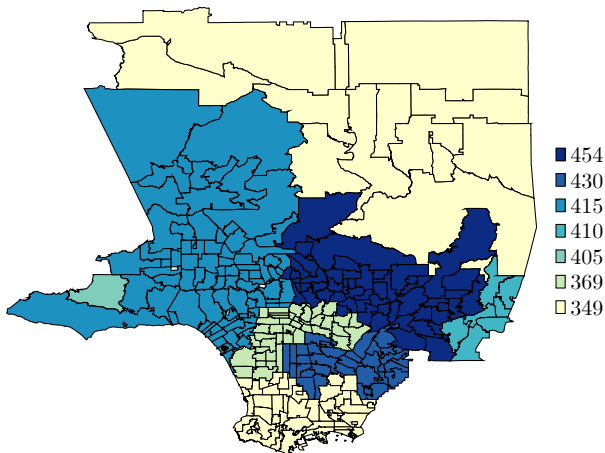
Identification Strategy

- ▶ SSDI federal program, little geographic variation
- ▶ There is variation across geography in where/when ALJ appeals heard
 - ▶ Workers who appeal reconsideration have case assigned to Hearing Office **based on zip code of residence**
 - ▶ Across Hearing Offices processing time varies

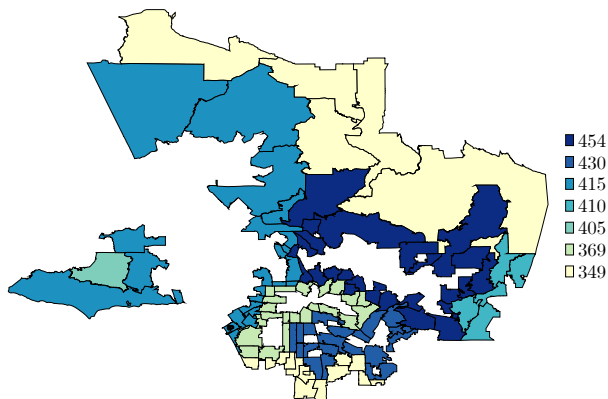


Identification Strategy

- ▶ Focus on neighboring zip codes in the same county that are assigned to different Hearing Offices (likely face same labor market, local conditions, but different SSDI processing time)



Identification Strategy



- **Identifying Assumption:** ZIPs on either side of border would evolve similarly through GR, if not for difference in processing time

Empirical Strategy

$$Y_{zpt} = \sum_{\tau=2003}^{2015} \beta_{\tau} \text{Ave. Process Months}_{o,2010}(t = \tau) + \gamma_{pt} + \delta_z + \varepsilon_{zpt}$$

- ▶ Outcomes: SSDI enrollment rate, Employment-to-Population, (30-64 year olds)
- ▶ β_{τ} : Effect of 2010 Average Processing Time before, during, after GR
 - ▶ 2008 omitted year
- ▶ γ_{pt} : pair-by-year effects, within-pair comparison
- ▶ δ_z : zip code fixed effects, fixed zip chars.
- ▶ ε_{zpt} : twoway clustering hearing office and zip code pair by year

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- ▶ ε_{zpt} : twoway clustering hearing office and zip code pair by year
- ▶ Plot $\beta_{\tau} \rightarrow$ how one additional month of processing time affects SSDI enrollment/emp over time
 - ▶ Average differences \approx 2 months

Extensions

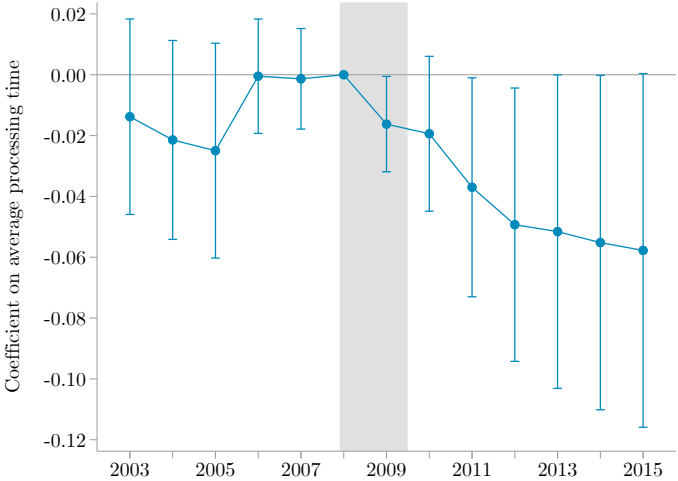
- ▶ Explore heterogeneity by severity of local labor market (CZ) shock
- ▶ Descriptively, what does pattern look like in SSDI hotspots?

Main Data

- ▶ Hearing Office measures and assignment, SSA
- ▶ Zip code SSDI annual enrollment, SSA
- ▶ Census Tract annual employment → zip code employment, LODES
- ▶ Census Tract population 30-64 → zip code population, 2010 Census

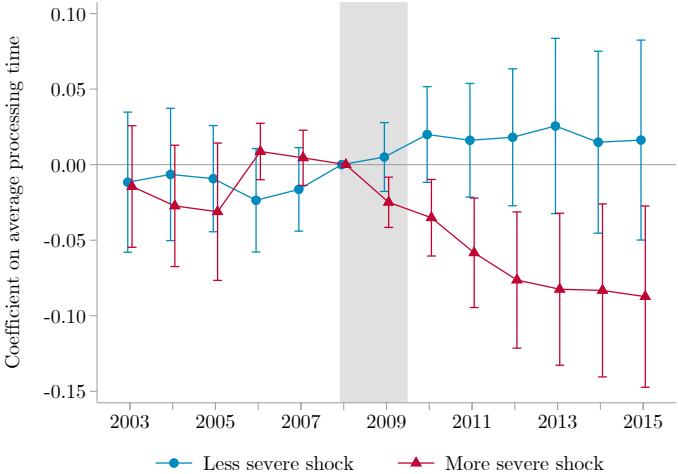
Impact of Average Processing Time on SSDI Enrollment (30-64)

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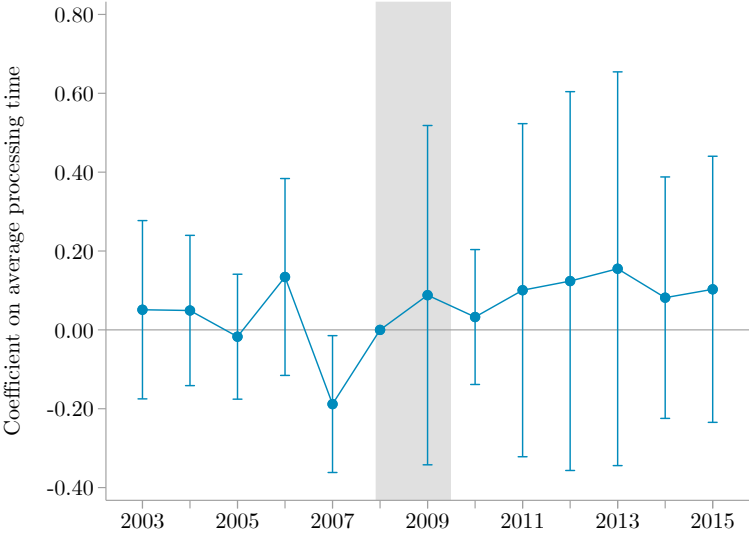
► Can also think of reverse: less SSDI hassle → more SSDI enrollment

Impact of Average Processing Time on SSDI Enrollment (30-64), Heterogeneity by Severity of Local Shock

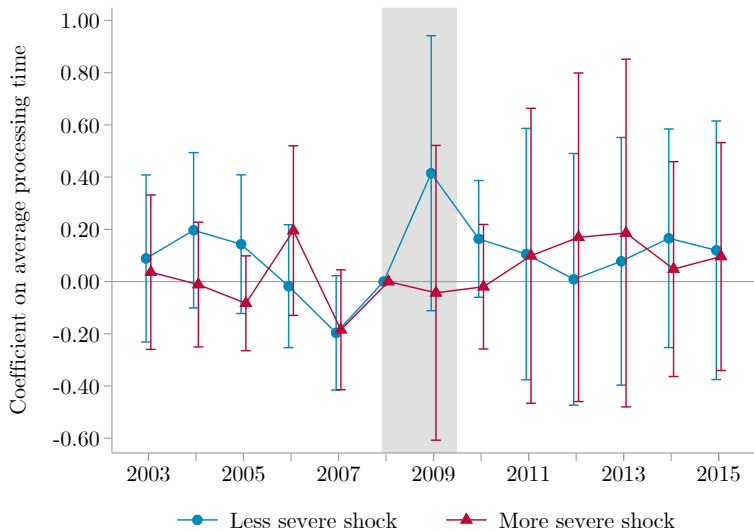


► Less SSDI hassle → more SSDI if severe demand shock

Impact of Average Processing Time on Employment-to-Population (30-64)



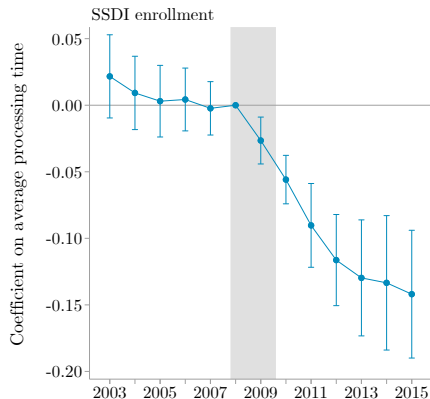
Impact of Average Processing Time on Employment-to-Population (30-64), by Shock Severity



Impacts in Pre-Shock SSDI Hotspots with Severe Local Shocks

- ▶ Substantial variation in pre-recession SSDI rates
 - ▶ 75th pct: 6.1
 - ▶ 25th pct: 3.2
 - ▶ Over 10 percent enrollment in some places in South, Midwest
- ▶ Interaction might play more important role in areas where more SSDI information/network

Impacts in Pre-Shock SSDI Hotspots with Severe Local Shocks



Conclusions

- ▶ Interaction between SSDI hassle and demand shock leads to persistent 2.5% reduction in SSDI enrollment

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- ▶ Interaction between SSDI hassle and demand shock leads to persistent 2.5% reduction in SSDI enrollment
- ▶ Possible increase in EPOP
 - ▶ apparent in certain areas
 - ▶ measurement error in LODES
 - ▶ with skill depreciation, theoretically ambiguous
- ▶ Role nationally unclear, in labor markets with traditionally high SSDI enrollment, might play an important role
- ▶ Demand and supply side interactions potentially important, needs further exploration.